

Our 2024 Scholars

Biography section

Please enjoy these biographies and thoughts by our 2024 scholars. They are listed in alphabetical order.

Pranav Abhyankar | Aviation and Technology

Silicon Valley Engineering Scholarship (SVES)

Efficient | Friendly | Organized

1. **Why did you choose your major?**

I chose my major because I was always interested in Cybersecurity and wanted to make it my mission to make the online world a safer space for all to enjoy. I faced many barriers while applying like financial constraints and complex immigration procedures but all along the way I had people who believed in me and that gave me the courage and determination to keep trying. Eventually I was accepted into the university and received several scholarships and grants such as this one which helped me greatly.

2. **Are you involved in any school or community activities?**

I am involved with an organization called Aspire Skill Development where I am currently doing a Project Management Internship. As a part of this, I will complete a Community Engagement Project which will help a specific target audience and help them develop much needed skills. I hope to accomplish something meaningful through this project and help as many people as I can. My project is about raising AI literacy in the community as I believe this is a very important subject that needs to be addressed in today's context.

3. **What is your dream job?**

My dream job is to run a Cybersecurity firm of my own. Oftentimes we see that corporations steal data from the public, people fall for phishing scams, privacy invasions and computer viruses are rampant. I plan to create web applications that are resilient to such attacks and consult corporations and small organizations alike for better safe guarding their data.

4. **What advice would you share with your freshman self?**

I would tell my freshman self to socialize more beyond the classroom and build a network as soon as possible. I would also tell him not to stress too much about everything as things have a way of working out in the end. I would have also advised him how to better apply for and get on campus jobs.

Landon Abrar | Aviation and Technology

Dale and Sue Missimer Engineering Scholarship

Diligent | Hardworking | Optimistic

1. Why did you choose your major?

I've always been interested in the aviation industry and travel which is why I decided to major in Aviation Management at San Jose State, however, my journey towards that decision was not very straightforward. In the latter stages of high school after COVID, I struggled immensely to submit work on time and lacked motivation to put much effort into the work I did complete. In my senior year of high school, I lost valedictorian status, which hurt a lot mentally because I knew my performance before COVID had been stellar and that if I had just tried I could have achieved it. When college applications came around, I hadn't gained any more sense of direction and felt as though I was aimlessly going into my future. My parents had rightfully lost a lot of faith in my capabilities to perform and thus didn't see much of a point in investing significantly into my college endeavors, especially given my family's current financial situation. My family and I had initially decided community college would be the best route for me, however, on May 1st, the last possible day to decide, I made the radical decision to not only commit to San Jose State University but put faith in myself to change my habits and become successful. A large amount of credit needs to go to my mother in this decision, who had enough faith to commit to paying for my first year of college when even I myself had no idea what direction life would take me. Just over a year later, I cannot be more proud of what I have been able to achieve in my first year of college and I look forward to taking advantage of more opportunities that present themselves in the future of my academic career.

2. Are you involved in any school or community activities?

In my pursuit of my dream to enter the airline industry, I have made numerous efforts to get more involved in the aviation community both on and off campus. I have recently been elected secretary of the Women in Aviation Chapter and historian of Alpha Eta Rho, an aviation fraternity, at San Jose State University, both of which have offered me amazing opportunities to get more involved in the field and improve my leadership skills. For example, I recently attended the Women in Aviation International Conference in Orlando, Florida, where I expanded my network, advocated for diversity, and built experience in the industry. Outside of school, I have become an academic member of the American Association of Airport Executives and its southwest chapter and the National Business in Aviation Association which will expose me to valuable connections with industry professionals and perspectives of experts in the field I wish to pursue. Just this summer I had the opportunity to attend the annual SWAAAE Summer Conference with the SJSU AAEE club, where I met and learned from numerous airport executives from cities across the American Southwest. I have also started attending aviation events for volunteering purposes, like Aviation Discovery Day at Reid-Hillview Airport, where I volunteered for the Aviation and Technology Department. Overall, in getting involved as much as I have, I hope to not only foster meaningful

connections in this tight-knit industry but also gain insight and hands-on experience in my field that will better prepare me for aviation-related internships and jobs.

3. What is your dream job?

My dream job is to work at a major airline in a route management or network planning position, reflecting my love for the ability of aviation to connect peoples and cultures. I have always been extremely interested in what goes on behind the scenes in the world of aviation, and combining that interest with my love for travel, I have always known aviation is where I belong. The airline industry is an incredibly complex, fast-paced, and unforgiving one, and that's partly what draws me to it. As I've matured, however, I have grown an immense appreciation and love for the intricacies of route development and establishment, which act as a mode to foster economic growth between cities and countries and connect people with their far-flung diasporas across the globe. I would love no more than to be a part of this incredible operation by learning more about the world of airline operations and acquiring a job in network planning.

4. What advice would you share with your freshman self?

To be completely honest, I am not fully sure what advice I would give my freshman self. Only being a sophomore, I don't feel as though I have changed too much or that enough time has passed to know what I did right or wrong my freshman year. I promised myself at the beginning of last year that I would take advantage of any and all opportunities that presented themselves, and I believe I accomplished that quite well. Maybe if I were to tell my very early freshman self something, it would be not to worry as much about the future because only one year later I have gained so much confidence in myself to succeed.

David Akomah | Aviation and Technology

Ichor Systems, Inc. Engineering Scholarship

Nice | Hardworking | Skilled

1. Why did you choose your major?

I chose my major, Engineering Technology, because I have a big interest in technology. When I was applying to schools, I went for computer science, but I got rejected from most schools I applied to. SJSU was one of a couple schools that accepted me and it was for my major that I'm in now. It was rough getting rejected like that, but I decided to make the best out of the situation and do some research on my major and what SJSU has to offer and I felt like this school could help me succeed. Fast forward a few years and now I'm about to graduate and I've learned so much in and out of the classroom and I thank God that I chose this school.

2. Are you involved in any school or community activities?

I'm involved in a few clubs and activities. One of them is Cru, which is a Christian club on campus. This club has helped me grow in my relationship with God and has given me an opportunity to go to El Salvador for a mission trip. I also got to meet some amazing people in that community. Another club is BASE (Black Alliance of Scientists and Engineers). I wanted to join this club because I wanted to find a space where I can relate to other black people in STEM majors and make

connections that will help me throughout my career. I'm also in NSA (Nigerian Student Association). This is a club where Nigerians and people from other African countries hang out and we have some really cool events. It's really cool because as a Nigerian, seeing others who are also Nigerian was amazing especially since there were barely any Nigerians at my school. I'm also a resident advisor (RA) for the dorms. This is a really cool job because I get to meet residents and be a resource for them. I tell residents about what we have here at SJSU and we put on events for them so they feel welcome. I chose this job because I wanted to challenge myself in a new position and I felt that being an RA would do that and I would be able to help and lead people in this position.

3. What is your dream job?

My dream job would be in IT or data science working at a tech company. I want to contribute to making technology more accessible to everyone. It would also be cool to contribute to AI and make it more useful and less detrimental to our society.

4. What advice would you share with your freshman self?

An advice I would give to my freshman self is to be more open minded and not be afraid to ask questions. I remember my freshman year, I wanted to just stick to what I know and not venture out and try new things. I eventually learned that I wouldn't gain anything from college if I did this, so I started meeting new people, going to events, and asking people in my major questions. This helped me to succeed as I progressed through college, and I had a lot of fun in the process! Another advice would be to not worry so much about what people think about me. This would've helped me to be more authentic and try things that I always wanted to try. I learned this later on in college, but knowing this freshman year would've made me accomplish more things.

Tosif Aliyev | Electrical Engineering

Harry Wong Scholarship

Disciplined | Persistent | Hard working

1. Why did you choose your major?

I always liked building, fixing, designing, and tinkering with things. I later opened an electronic repair business, but I had no idea what engineering was all about and had no STEM background. In fact, I could not even do basic arithmetic, but after six months of intense self-study, I was able to enroll in pre-calculus level math at a community college. I knew I enjoyed hands-on mechanical design, and therefore, I was aiming for a Mechanical Engineering degree. However, after taking the Electricity and Magnetism Physics course, I decided to change my major to Electrical Engineering. The course was extremely difficult for me, and I struggled a lot but I found electricity was magical and said to myself, "I want to learn this stuff"

2. Are you involved in any school or community activities?

I was involved in the Engineering Club at Foothill College for two years, and I was hoping to get more hands-on experience and learn from other students. It was a fantastic experience. Along with learning a lot about engineering design, I made new friends and connected with mentors that I still keep in touch with even after graduation

3. What is your dream job?

My dream job would be working on renewable energy, specifically improving solar and energy storage devices, which also includes designing electric cars, energy-efficient devices, and homes. I see that working towards cleaner energy is the best way to

4. What advice would you share with your freshman self?

I wish I had been involved earlier in student clubs, connected with more students, and used college resources to get help when I struggled.

Yan E. Banales-Garcia | Mechanical Engineering

Qualcomm Engineering Scholarship

Funny | Outgoing | Caring

1. Why did you choose your major?

I've always loved creating and finding solutions to complex problems. As a kid, I played with Legos, and I enjoyed creating structures and the challenge of creating intricate designs. When I got to middle school, I joined MESA and competed in robotics teams. I also joined the Digital Nest, where I took tech workshops and classes. Eventually, I found my way into engineering in community college, where I became fascinated by the profession and the possibilities of it. Engineers can design anything from bridges to cars to fishing rods, and more. As a Chicano, I feel empowered knowing that I am succeeding in a field where I am underrepresented. I look forward to being a role model for my Watsonville community and encouraging the youth to become STEM majors like me. I have faced many obstacles in my life, such as having ADHD/anxiety, being racially profiled by the police and wrongfully detained and humiliated, and the fear that my parent will be deported for being undocumented. But I continue to persevere and I never give up. I look forward to being the first engineer in my family someday.

2. Are you involved in any school or community activities?

I am in the process of joining SOLES at SJSU. The club supports Latino STEM students like me. I also submitted my application for MESA, and I hope I will be accepted. I also participated in the EXCEED program over the summer at SJSU, which was really helpful. I want to get as much support as I can because I know how challenging STEM classes can be. Back when I was at Cabrillo College, I was president of a Latino STEM club called LUCES. My family is always encouraging me to take advantage of campus opportunities. I am sad I didn't get campus housing, but hopefully next semester I can live on campus. As for now, I am commuting to school, which is challenging but not impossible. Lastly, I run a fishing Youtube channel where I help novice anglers become more experienced. My goal is to provide the youth with fun pastimes and promote getting out in nature. The channel is an educational outlet for those who are new to the sport.

3. What is your dream job?

My dream job is to work for a company like Shimano. They make fishing and cycling gear, two hobbies that I am passionate about. I would love to one day work as an engineer for Shimano, creating efficient fishing reels and aerodynamic cycling gear. I'd also like to team up with

organizations that work to preserve our fragile eco-systems and to fight climate crisis. That would be my dream job.

4. What advice would you share with your freshman self?

Advice that I'd give to my freshmen self is to join study groups or places to study such as the STEM center. You will be surrounded by people taking the same classes or majors as you and will have a smoother time completing homework and grasping important topics. I would also tell myself to join MESA and SOLES and to take advantage of all opportunities that come my way. I would tell myself to go to my teachers' office hours and don't be afraid to ask for help.

Jesus Barrita | Electrical Engineering

MEP

Persistent | Intelligent | Responsible

1. Why did you choose your major?

I decided to choose Electrical Engineering as my major because, ever since I was little, I loved mathematics and was passionate about fixing electrical devices. Although my knowledge was limited, I was fascinated by seeing what was inside and had a curiosity about how electronic systems work. Additionally, when I was in high school in Mexico, I took an electrician technician class where I enjoyed building electrical circuits and learning about electricity. These experiences led me to decide that I wanted to become an electrical engineer in the future. I have faced some academic and personal challenges that made me reconsider my major and change it to something not as challenging. However, my sister has always been my biggest supporter and told me that, "if you are struggling with a class or even if you don't pass it on your first try, it doesn't mean that engineering isn't for you."

2. Are you involved in any school or community activities?

Since I started my journey at Bakersfield College and now at San Jose State University, I have been part of the Mathematics, Engineering, Science Achievement (MESA) program and the Educational Opportunity Program (EOP). Both have encouraged me to get involved in extracurricular activities such as community service, joining school clubs, attending conferences, and take advantage of other learning opportunities. The most recent event I participated was the Science Extravaganza, where I volunteered as an assistant to a company. My role involved organizing different groups of kids and leading some of the activities. I chose to participate in this event because I believe it's important to support my community. Additionally, it was also a good opportunity to expand my professional network and learn about similar fields of study.

3. What is your dream job?

As an Electrical Engineering major with a concentration in Power Systems, my dream job is to work in the automotive industry, specifically within their Supercharger Network Development team. The existing challenge in the industry is the need for faster, more efficient, and widely accessible charging infrastructure to support the growing adoption of electric vehicles. I plan to make a difference by designing and optimizing charging stations to integrate seamlessly with renewable

energy sources, reducing the overall carbon footprint and increasing energy efficiency. My goal is to contribute to a more sustainable future by ensuring that charging infrastructure not only meets the current demand but is also scalable and resilient for the future. By doing so, I aim to help others transition smoothly to electric vehicles, ultimately accelerating the world's shift to sustainable energy.

4. What advice would you share with your freshman self?

My advice to my freshman self would be to apply for as many scholarships and internships as possible every year to reduce the financial burden. I would also tell myself to join student clubs and get involved in community activities. I used to think that all that mattered was having good grades. Getting out of my comfort zone was not easy. However, when started getting involved by joining clubs and volunteering, it helped me grow professionally and personally. Additionally, I would advise myself to participate in study groups, attend professors' office hours, and seek help when needed. In my first two years at community college, I used to study alone, which sometimes made it difficult to understand mathematical concepts. However, in my later years at community college, I started joining study groups and attending office hours, which resulted in better grades in my classes.

Joshua Bermea | Civil and Environmental Engineering

Future of Silicon Valley Scholarship

Curious | Analytical | Resourceful

1. Why did you choose your major?

As a young child, I did not have the best start to school and struggled to understand the material. I remember how this made me feel and it was not something I wanted to continue. Luckily, my grandfather took the time to dive into a packet of school material with me over a full summer. It was definitely not fun and I could feel the frustration continue to grow as the days passed. Eventually, as my grandfather likes to put it "The lightbulb turned on" and I was able to start grasping concepts. I learned to love learning and felt the utmost sense of accomplishment when leaving a class and being able to understand the material that was covered. This translated well to the world of civil engineering and what ultimately drew me to it. There is so much to learn and the sense of accomplishment never goes away with the job. Not only is civil engineering interesting but it helps make everyone's lives better for it.

2. Are you involved in any school or community activities?

After I was able to start grasping material in school, I always seemed to find my way as a tutor in some type of capacity. This is something I still continue with and usually do it for math concepts. I find this as my way of giving back to the community. I knew how it felt to struggle with material and it feels great to be able to pass down strategies that will help people with their learning adventure.

3. What is your dream job?

My dream job deals with managing projects in infrastructure. Whether it be buildings, water treatment plants, or highways I would like to help be part of the community that helps to bring these

vital infrastructures to life for everyone to enjoy. I hope to find this venture either through design or as a project manager so that I can help influence projects for the better.

4. What advice would you share with your freshman self?

My advice to my freshman self is to start networking and exploring fields earlier. More opportunities present themselves when you are not afraid to put yourself out there. Know that it is just fine to try out career fields and decide it is not for you. The more you explore and open yourself to opportunities, the more the opportunities will present themselves.

Elizabeth Bremberg | Mechanical Engineering

Kind Family Scholarship

Loyal | Passionate | Dedicated

1. Why did you choose your major?

My decision for my major was largely shaped by my experiences on my Girl Scout robotics troop, the Space Cookies VEX Team. I joined at the end of sixth grade and continued with the troop until graduating high school. Through Space Cookies, I gained hands-on experience with multiple aspects of engineering in a fun and supportive environment. These experiences helped open my eyes to more possibilities for my future. While growing up, I had considered pursuing science disciplines, but I desired a more practical and applied approach. When it came time to decide the path for my academic journey, I drew upon my time in Space Cookies. Thanks to the encouragement of two women engineers who were my Space Cookie mentors, I was convinced that I had the capabilities necessary to carry me through an engineering degree program. Ultimately, I decided to focus on Mechanical Engineering in order to have the best opportunity to explore the different elements of robotics and robotics applications and follow the passion that Space Cookies had inspired.

2. Are you involved in any school or community activities?

Although I graduated from Space Cookies VEX at the end of high school, I have remained in contact with the current members and have volunteered with the troop every season since I left. I hope to help all of them gain the same sort of experiences and knowledge that benefitted me when I was a member.

In my time at SJSU, I have joined and actively participated in other organizations to keep me involved in both STEM and the surrounding community. My first semester in Fall of 2020, I joined Circle K International, one of the largest collegiate service organizations in the world. Circle K connected me to students who share similar interests in serving our campus and local community. Together with other schools and our sponsoring Kiwanis club, we have helped community-based organizations across Santa Clara County, including the South University Neighborhood which lies just off campus. Currently, I am serving as our club's acting president, serving out a third and final term, helping to coordinate these events so that we can stay true to our organization's tenets of service, leadership, and fellowship.

In the Spring 2021 semester, I also joined the Beta Upsilon Chapter of Alpha Omega Epsilon, a

STEM-focused professional sorority. The sisters impressed me with their commitment and dedication to the sorority's objective of promoting women STEM professionals. I was inspired by how each sister felt that being part of the Alpha Omega Epsilon had positively impacted them in their engineering and technology paths. Their experiences and encouragement motivated me to pursue my candidacy. My first three semesters as a full active member I served as Recruitment Chair to help spread our message and encourage other like-minded women students to join our sisterhood. This past year, I finished my third semester as our chapter's Philanthropy Chair, creating and hosting events and fundraisers to benefit different charitable organizations, all while promoting the strength of underrepresented individuals as STEM professionals.

3. What is your dream job?

After graduation, I would relish an opportunity to help develop robotics tools to use in environmental conservation efforts. Since I was young, I have had a fascination with the natural world. Using my field of interest to help preserve and sustain the natural world would fulfill both passions.

Biomimicry is already being explored and tested in the world of robotics and other mechanical systems, and I would love to help develop, expand, and utilize these tools for the growth and betterment of our planet.

4. What advice would you share with your freshman self?

If I could talk with my freshman-year self, I would tell her to pursue connections with more peers and explore her options and possibilities as much as she could, as soon as she could. Working with others both in and out of classes helped broaden my perspectives and gave me a better sense of different options for the future. These interactions, coupled with finding and participating in my student organizations, helped me to grow into the student I am today. As I reach my final year, I understand the value of having a solid network for both scholastic and professional life. I also realize that charting multiple paths and routes for my college career helped prepare me for my upperclassmen years with San Jose State. Had I focused on these connections even sooner, I could have better worked towards my goals and gained an even better footing as I explore my concentration and started my senior project.

Tony Bui | Electrical Engineering

Jane G. Evans Scholarship

Manners Maketh Man

1. Why did you choose your major?

Former Naval Nuclear Propulsion Plant Electrical Supervisor on #1 Ranked Submarine in Pacific Fleet

2. Are you involved in any school or community activities?

MEP, VRC, SASE, IEEE

3. What is your dream job?

Professional Electric Engineer contracted by the government to serve my community. Invent better

batteries than Tesla and advocate AI led Nuclear fusion electrical generators. I plan to make a difference by helping one individual at a time and sharing my dreams starting with my colleagues.

4. What advice would you share with your freshman self?

Never say "IF" ever again. Say "WHEN". Private schools and companies are not worth your time.

Jennyfer Camacho | Chemical and Materials Engineering

Munson Engineering Scholarship

Ambitious | Reliable | Compassionate

1. Why did you choose your major?

Growing up, I wanted to do various things, from teaching others to designing and testing new things. I realized that the engineering field would allow me to do just that. From an early age, I took the initiative and joined organizations encouraging young girls to pursue STEM-related careers, like the American Association of University Women (AAUW) Tech Trek Program. I found my passion for chemistry during my last year of high school. Chemistry has been a fascinating subject for me because it allows us to understand theories at the molecular level. I am particularly interested in chemical engineering because of its wide range of fields, including nuclear power plants, manufacturing engineering materials, and producing pharmaceuticals.

2. Are you involved in any school or community activities?

As a first-generation college student, it has been vital for me to encourage young members of my community to continue their education. With this in mind, I joined the San Joaquin Delta College Youth Conference as a speaker, where I spoke to high school students about my experience as a first-generation college student. I informed them of the best resources our campus offers. I took this opportunity to motivate high school students to pursue higher education. I explained to them that although education can be challenging, it is also rewarding. There are numerous exciting paths for all of them, and pursuing their education will help better our community.

Additionally, my work as an organic chemistry tutor at San Joaquin Delta College has allowed me to help my campus. My work included preparing students by reviewing essential topics from the prerequisite courses. This position has meant a lot to me because I wanted to help students in the same position I once was in. During my tutoring session, I shared great resources and tips with my students to help them along the course. It feels great to have assisted individuals in avoiding the same difficulties I experienced and helping them succeed in one of their classes. Beyond that, I am proud to have taken part in growing the resources available to STEM students on my college campus.

3. What is your dream job?

After earning my chemical engineering degree, I intend to work towards producing advanced pharmaceuticals. I am ambitious to contribute to the ever-evolving engineering field. On top of that, I would like to influence kids from my community to strive for their goals and a brighter future. I also intend to return to AAUW Tech Trek as a speaker and introduce chemistry to middle school girls. I would love to demonstrate fun labs to the children and spark an interest in science.

4. **What advice would you share with your freshman self?**

I would advise my freshman self to change some study habits, work schedules, and personal affairs to create the best balance for ourselves. I also recommend that my younger self take advantage of campus's resources. These resources are provided to benefit students, so it's essential to accept help and support when needed. Furthermore, I suggest participating in extracurricular activities such as clubs and community service to work with others and expand our communication, collaboration, and leadership skills.

Vetania Carrasco Rodriguez | Civil and Environmental Engineering

MEP

Dependable | Diligent | Flexible

1. **Why did you choose your major?**

The decision to pursue civil engineering stems from a pivotal experience in high school when I encountered a challenging puzzle in my English teacher's classroom. The puzzle, a series of numbers grouped together with the phrase "You Have Been Challenged," immediately caught my attention. Despite the urge to focus on other priorities, I couldn't resist the challenge.

I spent hours trying different methods—pairing numbers with letters, rearranging them, and trying various decoding techniques, but nothing worked. Frustrated and on the verge of giving up, I took a break. It was only later, when I noticed that my phone's keypad had both letters and numbers, that everything clicked. Using this new insight, I quickly solved the puzzle, and the sense of accomplishment was profound.

This experience taught me the value of perseverance and creative problem-solving. It also made me realize that I thrive on turning frustration into fulfillment, which is why civil engineering appealed to me. Just like that puzzle, engineering projects require determination, innovative thinking, and the ability to find solutions where others might see obstacles. This is the path that excites me and where I know I can make a difference.

2. **Are you involved in any school or community activities?**

Outside of my academics, I actively participate in several civil engineering-related clubs, including ASCE (American Society of Civil Engineers), AGC (Associated General Contractors), ACI (American Concrete Institute), and GEOPaths. These organizations have been instrumental in expanding my understanding of the field and connecting with like-minded peers and industry professionals.

Being involved with ASCE, AGC, and ACI has allowed me to delve deeply into civil engineering concepts and practices. I've built relationships with my professors and gained valuable insights into their work, enriching my educational experience with practical knowledge.

My involvement in GEOPaths has been particularly rewarding. Although GEOPaths focuses on geology rather than civil engineering, it has significantly enhanced my engagement, especially with my professors. Additionally, we organize geology-related trips for high school students to introduce

them to a science often not covered in their standard curriculum. This outreach not only fosters a deeper understanding of geology but also highlights its relevance to civil engineering.

Through these clubs, I hope to gain practical experience, build a professional network, and contribute to projects that positively impact our community.

3. What is your dream job?

While I am still exploring the various possibilities within civil engineering, my current role with the United States Geological Survey (USGS) on the National Strong Motion Program has given me a glimpse into a field that aligns with my passion for making a tangible difference. This program, which contributes to Earthquake Early Warning (EEW), is focused on enhancing our ability to predict and respond to seismic events, ultimately protecting communities and saving lives.

My dream job would involve working in a role where I can continue to contribute to public safety and resilience, particularly in the context of natural disasters. One existing problem in the industry is the challenge of improving infrastructure to withstand increasingly frequent and severe events like earthquakes, floods, and storms. There is a critical need for innovative solutions that not only enhance the durability of buildings and infrastructure but also integrate early warning systems and real-time data to mitigate the impact of these disasters.

In my ideal position, I would aim to bridge the gap between cutting-edge research and practical application. By leveraging my experience with EEW systems and my background in civil engineering, I plan to work on designing and implementing infrastructure solutions that are both resilient and adaptive. This would involve collaborating with engineers, scientists, and policymakers to develop strategies that protect communities and reduce the risk of damage.

Ultimately, my goal is to create safer environments where people can live and work without the constant fear of disaster. By improving our understanding of how to design and build more resilient structures, and by contributing to early warning systems, I hope to make a meaningful impact on public safety and well-being. My experience with the USGS has shown me the importance of this work, and I am committed to pursuing a career that combines my technical skills with a strong commitment to helping others.

4. What advice would you share with your freshman self?

If I could give advice to my freshman self, it would be to embrace every opportunity for growth and exploration. Get involved in the student clubs and activities that genuinely interest you—don't be afraid to dive into new experiences, even if they seem outside your comfort zone. I discovered the value of this approach when I joined clubs like ASCE, AGC, and GEOPaths, which not only broadened my understanding of civil engineering but also introduced me to a range of perspectives, including geology. This was a pivotal experience that deeply influenced my academic and career path.

Take those elective classes that pique your curiosity, even if they don't directly relate to your major. For instance, my decision to explore geology was initially driven by curiosity, and it ended up being a transformative experience that reshaped my approach to civil engineering. You never know how a seemingly unrelated class or activity might inspire you or open doors to new opportunities.

Don't stress too much about the length of time it takes to complete your studies. The journey

through college is as important as the destination. Focus on the experiences you're gaining, the skills you're developing, and the connections you're making. Building a network of peers, professors, and professionals is invaluable and will support you throughout your career. In summary, be proactive in seeking out experiences that interest you, stay open to learning from unexpected sources, and remember that your educational journey is about growth and discovery. Embrace it fully and trust that each step will contribute to your personal and professional development.

Christian Catano | Biomedical Engineering

Benzing Fellowship

Compassionate | Just | Resilient

1. **Why did you choose your major?**

I chose biomedical engineering because I always wanted to help sick people. I thought I could only do that through being a doctor, but I wanted to do more building and problem solving like an engineer. I put these two passions together and found BME which has been my passion for the past 4 years now. I also came from a low income family and am first generation, so navigating the college application process without guidance was difficult. But it was worth it to follow my passions and dreams.

2. **Are you involved in any school or community activities?**

I am heavily involved in the Biomedical Engineering Society at SJSU. I was the VP of Conference last year and am President this year. It means a lot to be able to help younger students who were like me when I first came to college - alone, unaware of how to navigate such a big change, and no idea what to do to make the most out of an education in BME. I feel like I've left a strong impression on many people in this club, and I look forward to do even more for them.

3. **What is your dream job?**

My dream job is to become a BME professor at a university, contributing to the growth of BME through interesting and groundbreaking research. I love the idea of being able to teach students to love research like my PI taught me, and it would be great to help them grow as people and mentor them to achieve great things. I've had many professors in BME who don't really get me or where I come from. Being a professor who had his own struggles with finances and imposter-syndrome can offer hope to students in a similar boat. I hope to help create a system of education that is engaging and student-centered, along with making fun research happen.

4. **What advice would you share with your freshman self?**

I would tell myself to join BMES much sooner. I have grown so much because of this club and met the best friends I've ever had. I would also let myself know that I'm not going to get every internship I apply to, and that it's a tough market. I wish I knew I would want to pursue a PhD earlier so I could apply to REU programs instead of internships I never really felt I wanted. Lastly, I would tell myself to be more assertive and talk to more professors and professionals to build those connections, because they are everything.

Brian Chiang | Computer Engineering

Emma E. Legg Memorial Scholarship for Engineering

Curious | Thoughtful | Adaptable

1. Why did you choose your major?

In high school, I, like many others around me, wanted a powerful computer that could demolish any benchmark thrown at it. The thought of being able to render any simulation, 3D model, or game without any frame stutter or excessive pauses was a dream that was out of reach. Having saved up money from a part-time job, I decided to purchase the parts as a mix of new and second hand to assemble the computer at a discount. This is what I largely attribute as the first domino.

It wasn't just about the raw computation. The computer I assembled and debugged eventually worked and yet I wonder why? What goes into making hardware talk to software? How could sand, plastic and metal power our cars, phones, and the internet? This curious push drove me to investigate further how computers work. How they think, what makes them more efficient, and how we can best leverage them. This investigation was what led me towards Computer Engineering as a field to pursue, where I could explore computers on a fundamental level, from Silicon to Software. However, college isn't free. Financial struggles were always present making it hard to afford various equipment resources. To add to that, my parents were often busy or tired, which made transportation in the suburbs a constant roadblock. Getting to class, events, or even just hanging out with friends with limited mobility fueled my interest in technology that could help people with similar issues, particularly autonomous vehicles.

2. Are you involved in any school or community activities?

In the previous two years, I've been actively involved in the school's Formula Electric Race Car team, where a new electric formula car built every year from the ground up. At the time, I knew this aligned well with the job market I wanted to go into but the biggest reason I decided to join specifically the Formula Electric team was the ample amount of hands on projects that you could participate in. As a lot of the systems are manufactured in house to save funds or customize, students are given a lot of opportunity to get closer to the development cycle and truly understand designing systems from a practical perspective. If you design a system that ends up failing, it could be a minor inconvenience or it could cost the team the competition. That kind of pressure became a real motivator to commit to projects and I believe gave me the foundation and capacity to learn even complex topics that I have no experience in.

My continued hope thus far is that I can leverage my time and experience on the team to become a fulfilling engineer in the autonomous vehicles sphere, where I can fully leverage a skillset utilizing both hardware and software.

3. What is your dream job?

My dream job is to become an embedded engineer in the autonomous vehicles industry. I've always loved working with computers and cars, and I want to apply that passion to help make self-driving cars both safe and practical. Growing up, I experienced the frustrations of not always having reliable transportation. I want to help people in similar situations to me, who may struggle to get

around, by developing autonomous vehicles that can make transportation more accessible.

In addition to giving access to mobility, I also want to address broader issues like traffic congestion and road safety. By making self-driving vehicles more reliable and widely available, we can reduce accidents caused by human error and ease the strain on our transportation systems. My goal is to leverage the power of computers and embedded systems to create technology that makes a real difference in people's daily lives, helping them move around more freely and safely.

4. What advice would you share with your freshman self?

Internships can be very intimidating to apply for, especially for freshman. However, you have nothing to lose by applying. Same with clubs, which is one of the best ways to gain experience at university without needing an internship.

Janet Chiem | Software Engineering

Ching Family Scholarship

Positive | Ambitious | Resilient

1. Why did you choose your major?

Technology has always been unknown to me. Growing up in a world where I'd use a landline phone with wires to call a friend, then speeding all the way to artificial intelligence in the span of a mere 17 years feels unreal. I still remember being so enamored by a cheap little flip phone that my father had when I was still in elementary school, staring at the little glowing letters that popped up when I simply snapped it open. How did such a thing even work? How did batteries sustain this? What kind of energy is trapped in this small object? Then, touchscreen electronics and the internet made itself known to me. Online games opened up a whole new world. How was that even possible? At that moment, I thought: Wow. That's magic. We, as humans, have harnessed Earth's magic and made it ours!

As the years passed, the increasing surge in advancement made me terrified at how easy it was to drown in the currents and be swept away. Just look at Artificial Intelligence (AI)! There is nothing that scares me more than something I don't know anything about. Its very capabilities is astounding. What can't we do? I found myself fascinated yet horrified once more. There is no point in living in ignorance, though; I want to know more. I want to know everything. Although I have my interests in the mechanics, I'm more intrigued by the software engineering side, especially now with the rise of AI. How is it that we came from simple binary code to full on commands? Coding, programming, websites-- there is so much to explore, and Software Engineering as a major will teach me what I still don't know. Learn the unknown, and you need not be afraid.

2. Are you involved in any school or community activities?

There is one essential skill that I think everyone should know, and that is writing. To be able to use words to create stories, to speak with others, or even just convey ideas is a very important skill to have. As the vice president-turned-president of a writing club, I started off not knowing what writing brought to the world, but the more I oversaw others in the club, the more I realized that it was so much more than just essays or schoolwork. This is where ideas come to life, where people let their

imaginations run and create things not previously thought was possible. Writing is where it all starts, getting thoughts onto paper before finally, pulling it off the pages and into reality. This goes for projects involving coding, science, and even more! It also allows for peer feedback, where everything gets combined into a finished product. I found myself wanting to create the kind of community that helped those budding ideas evolve under the light of not just yourself, but others, too. Writing is not just a hobby, it brings people together.

3. What is your dream job?

My dream is to become someone who creates for others, especially for those in need. As I've grown up around limited resources and even mental disabilities such as Attention Deficit Hyperactivity Disorder (ADHD), I've seen struggles that could be lessened if there were just more resources available. We live in the age of technology, and just getting a phone gives you access to so many things, but most importantly, the internet and applications. I want a job where I can create apps that people can use to get more information, to regulate themselves, or even just to make life a little easier. I know that there is an attention crisis happening all over the world. What if I could change that? Create something that would remind people effectively to get off their phones, take their medicine, do the things that they've forgotten to do, and more? Yes, there are things out there like that already, but what is innovation, if not taking current ideas and products, then making them better? Becoming a Software Engineer will start me on that journey.

4. What advice would you share with your freshman self?

As a freshman myself, I'd say the best advice I would give is just go for it. If there's something you think you want and can do, you should try it just for the memories, or for the chance that you can succeed in whatever it is that you try. There are plenty of things that I've learned to love and look back fondly that made me glad to have tried out something I was hesitant in. If something ends up in a failure, it might bother you for a long time, but so does the regret of not even trying. "Forever" doesn't last long for humans, so why not make the most of it?

Brandon Clay | Aviation and Technology

Silicon Valley Engineering Scholarship (SVES) & KLA Scholarship

Highly principled | Ambitious | Persistent

1. Why did you choose your major?

I chose my major because I wanted to engineer hardware and software. As a kid I frequently got in trouble because I would take apart electronics out of curiosity of their inner workings. I figured to put that curiosity into something productive I should go into engineering.

2. Are you involved in any school or community activities?

At my local church I organize events, lead the young adult and music ministries, and support outreach efforts. I volunteer at my local African American Agency, participating in food drives and other community empowerment initiatives. I am a part of a student-led startup which networks and platforms creatives from the Bay Area to express their personality and talents. All of these things

help me to not only give back to my community, but learn from different people and grow my skills by being in leadership positions.

3. What is your dream job?

I hope to use my degree to pursue a career working in cybersecurity, developing software, selling software, or working with alumni at a tech startup

4. What advice would you share with your freshman self?

A piece of advice that I would give to my freshman self would be to start getting comfortable being uncomfortable. The only way I have achieved the goals that I wanted to achieve and become the person that I want to become, was by going against what I knew—which was what was safe and comfortable for me. Growth occurs when we are challenged and so recognizing that there is an opportunity to grow in every aspect of your life, and being intentional about taking that risk is an important way to set yourself up for success.

Michelle Dao | Aviation and Technology

SJSU Alumni Association Dean's Scholarship

Silly | Determined | Thoughtful

1. Why did you choose your major?

My family has a history of facing layoffs in engineering. Both my father and uncle were originally Electrical Engineers but experienced layoffs in the early 2000s. As a result, they often urged me to pursue a career in the medical or teaching fields for job security. In high school, I took biology courses to prepare for the medical field, driven by the idea of job stability. However, by the spring semester of my senior year of high school, I realized that medicine wasn't the right path for me. Instead, I developed an interest in engineering and programming, which led me to have a conversation with my parents about changing my intended major from Molecular Biology to Engineering.

In my first year of college, I was determined to pursue Computer Engineering, taking all the necessary courses for that major. Unfortunately, due to not being on track with my original major, I was automatically switched to Undeclared by Spring 2022. Due to the impact in the Computer Engineering department, I wasn't able to get into the program. After consulting with my change-of-major advisor, I decided to switch to Engineering Technology in Fall 2022. Initially, I wasn't excited about the major, as I associated it with Information Technology. However, after joining NETS, I discovered a range of exciting career pathways, from Cybersecurity to Network Management and even Data Analytics.

2. Are you involved in any school or community activities?

A sacrifice I had to make for the family is not being able to work an internship or job because of concerns about my family's income. Instead of studying and attending classes, I want to be able to develop leadership skills along with other soft skills when I join clubs and programs on campus. My leadership abilities have certainly improved during my time as Outreach Director for the Society of Women Engineers (SWE), but the most significant challenge I faced was when I became Treasurer

for the Network Engineering Technology Society (NETS) and had to find ways to raise funds for the club.

When I took on the role, I quickly realized that despite the club being founded in 2017, there were no records or references for past fundraising events. Last semester, our only fundraising activity involved charging a \$5 fee for a company tour at Verkada, which helped contribute to our club's budget. We also applied for Associated Student Services funding grants to help support club equipment and activities. With limited funds, I spent my winter break planning new fundraising opportunities.

In officer meetings, we decided to participate in the Engineering Video Contest for prize money and organize restaurant fundraisers. I also suggested reopening the club store and working with the Secretary to pursue company sponsorships, though other ideas, such as volunteering for money, were not feasible due to time commitments. By the end of the year, our efforts paid off—we raised approximately \$400. To ensure future success, I created a spreadsheet of potential Network Engineering companies to contact for sponsorships, as requested by the club Secretary, to assist in communicating with SJSU's University Team.

While some members criticized my fundraising efforts, making me doubt my contributions to NETS, a conversation with last year's Treasurer, Laura Weisbrich, in mid-March reassured me. Laura recognized the hard work I had done, pointing out that I had accomplished more than the club had in previous years. I've documented all of our efforts in the club's Gmail account and Google Drive folder, providing a valuable resource for future Treasurers.

Being NETS Treasurer during the 2023-2024 school year has taught me valuable skills in research, planning, and executing fundraising initiatives—skills that I believe will be invaluable if I take on a leadership role within a company one day.

3. What is your dream job?

My goal is to become a Site Reliability Engineer, specializing in leveraging automation tools to enhance software reliability within network environments. Once I've mastered my role, I aspire to innovate, whether by developing new concepts, protocols, or strategies, that can significantly make a difference to the field of computer networking.

I've come to realize that extended network downtimes are a key challenge, as manual troubleshooting often proves inefficient. As I gain more experience, my aim is to devise solutions that streamline these processes and reduce downtime.

4. What advice would you share with your freshman self?

The advice I would give to my freshman self is to be patient when finding “your place” on campus. At the same time, I need to also remind myself to step outside the comfort zone of my old friends, like Sal Flores and Justin Araujo. While they mean a lot to me, it's important to take opportunities to meet new people and explore new environments, after all, you only live once.

It takes time to figure out which clubs or friendships are worth your energy, and sometimes you'll get hurt in the process, but meaningful relationships don't develop overnight. “Your place” doesn't have to be tied to a club on campus — it can be the friends or mentors you meet along the way who make you feel valued and happy.

After three years at SJSU, I've finally found friends like Laura Weisbrich, Bao Nguyen, and Anh (Ray) Vu, along with mentors such as Stacy Feng and Lupe Díaz. These are the people who truly understand my challenges and have supported me both academically and emotionally throughout my time here at SJSU.

John Dillard | Civil and Environmental Engineering

Benzing Fellowship

Helpful | Knowledgeable | Reliable

1. **Why did you choose your major?**

Choosing my major wasn't a straightforward journey. My passion for water resources engineering began when I witnessed the devastating impact of flooding in my community. It was a wake-up call, seeing how something as essential as water could also be so destructive. I wanted to understand why these events happened and how to prevent them.

Initially, I faced challenges in the form of self-doubt and the rigorous demands of engineering courses. I struggled with advanced math and science classes, and there were moments when I questioned if I was on the right path. However, I turned these challenges into motivation. I sought help from professors, joined study groups, and spent countless hours in the library to ensure I fully understood the material.

A turning point came during a summer internship, where I was involved in a project that focused on flood risk management. This experience solidified my passion and gave me a sense of purpose. It wasn't just about solving equations or designing systems; it was about making a tangible difference in people's lives. The experience transformed my initial struggles into a drive to excel in my field and contribute to sustainable water management solutions.

2. **Are you involved in any school or community activities?**

I'm also involved with the American Society of Civil Engineers (ASCE) at my university. Joining ASCE was a natural choice for me, as it's a cornerstone organization in the field of civil engineering. It offers a broad perspective on the various disciplines within civil engineering, including water resources, transportation, and structural engineering.

ASCE means a lot to me because it provides opportunities to engage in activities that extend beyond the classroom. Through ASCE, I've been able to participate in technical workshops, networking events, and community service projects. These experiences not only help me develop my engineering skills but also allow me to give back to the community, which is something I'm passionate about.

Being part of both the ACI and ASCE clubs has been instrumental in my growth as a future water resources engineer. These organizations help me build a strong foundation in civil engineering, while also focusing on my specific interest in sustainable water management. By participating in these activities, I hope to contribute to innovative projects that promote resilient infrastructure and support environmental sustainability.

3. What is your dream job?

My dream job is to become a leading Water Resources Engineer, specializing in sustainable water management solutions. I envision working for an organization that focuses on designing and implementing infrastructure projects that address water scarcity, enhance water quality, and mitigate flood risks.

One existing problem in the industry is the outdated and insufficient water infrastructure that many communities rely on. These systems are often not equipped to handle the increasing challenges posed by climate change, such as more frequent and severe flooding, prolonged droughts, and contamination of water sources. The consequences of these issues are far-reaching, impacting public health, the environment, and the economy.

In my role, I plan to make a difference by developing innovative, sustainable designs that not only meet today's needs but also anticipate future challenges. I want to work on projects that incorporate green infrastructure, advanced water treatment technologies, and efficient water use practices. By integrating these elements, I aim to create solutions that are both resilient and adaptable, reducing the vulnerability of communities to water-related hazards.

Helping others is a core part of my vision. I want to advocate for policies and practices that prioritize environmental sustainability and equitable access to clean water. Additionally, I hope to mentor young engineers and collaborate with diverse teams, fostering a culture of innovation and shared responsibility. My ultimate goal is to contribute to creating resilient water infrastructure that supports both communities and ecosystems, ensuring a sustainable future for generations to come.

4. What advice would you share with your freshman self?

If I could go back and give advice to my freshman self, I'd say, "Don't be afraid to dive in and get involved from the start. Joining student clubs like ACI and ASCE, participating in community activities, and seeking out internships are more than just résumé builders—they're opportunities to explore your passions, develop your skills, and connect with people who share your interests."

I'd remind myself that stepping out of my comfort zone and engaging with these opportunities is key to personal and professional growth. Getting involved early on not only enhances your understanding of your field but also helps you build a support network of peers, mentors, and professionals who can guide you along the way.

I'd also encourage myself to embrace the challenges and not shy away from asking for help, whether it's forming study groups or attending office hours. Everyone struggles at some point, and there's strength in seeking out resources and leaning on others.

Most importantly, I'd tell myself to be authentic and trust the process. It's easy to get caught up in what others are doing or to feel like you need to have everything figured out. But the truth is, everyone's journey is different, and it's okay to take time to discover what truly excites you. Stay true to your interests and values, and don't be afraid to pursue what makes you happy, even if it means taking an unconventional path.

By being yourself and fully engaging with the opportunities around you, you'll not only gain valuable experiences but also develop a sense of purpose that will guide you throughout your college years and beyond.

Aniya Dogra | Civil and Environmental Engineering

Benzing Fellowship

Adaptable | Kind | Trustworthy

1. Why did you choose your major?

Originally, I had wanted to go into Architecture, but I realized that I also wanted a career with an environmental aspect. I wanted to work on sustainability project and transform future infrastructure. I chose Civil Engineering because of the diversity of the major, there are so many different disciplines. One challenge that I faced was failure, I came into college knowing it would be harder than High School, but no one ever told me that you could in fact fail a midterm even if you studied. I remember feeling like my world was crashing down around me, like I wasn't going to make it past my freshman year, contemplating if I should have chosen Engineering. However, someone told me always keep pushing forward, that persistence is what matters, and I decided to keep going and stay motivated. Throughout life there will always be hurdles, but as Dory from Finding Nemo once said; just keep swimming.

2. Are you involved in any school or community activities?

I am the Vice Chair of the Student Union Board of Directors at San Jose State, through which I hope to continue to be a voice for students, ensuring all voices are heard and valued. I am an officer for two student organizations. I enjoy volunteering in my community in my free time. I also conduct research surrounding cascading hazards and water resources.

3. What is your dream job?

My dream job is to work in a position where I can have an impact on my own community but those surrounding my community as well. I would like to be a Civil Engineer, working in water resources to mitigate the impacts caused by droughts, floods, and other climate hazards.

4. What advice would you share with your freshman self?

I would tell my freshman self to take breaks and enjoy the present. Not to focus on the future so much and take because everything works out eventually. I would like to tell myself to not stress about the small things and to look not only at my failures but accomplishments as well.

Aryan Gaur | Computer Engineering

Jane G. Evans Scholarship

Enthusiastic | Outgoing | Hard-Working

1. Why did you choose your major?

Seeing first hand the terrible quality of life and lack of technological advancement for majority of people in my parent's home country of India made me extremely unsettled. Innocent kids unable to have access to basic medical care, public schools being having little to no resources and technology, and a lack of other basic necessities that we take for granted in the USA made me start to wonder what could possibly be done to fix this issue. After seeing the company "Zipline" and their revolutionary work in African countries and the use of efficient drones to deliver medical supplies, I

realized that the answer was in technology. I plan on leveraging the skills I gain studying Computer Engineering at SJSU to hopefully contribute to a cause that will better the quality of life for individuals in developing countries.

2. Are you involved in any school or community activities?

Currently I play lacrosse for the school team. It is a sport that I find to be extremely enjoyable and unpredictable, and a great way to connect with the fantastic group of guys that are on the team. Competing against other schools and working hard towards the goal of winning the championship is an extremely fulfilling experience, and it compliments school and university life very well.

3. What is your dream job?

My dream job is one where I will have the resources and ability to work on a product that will better the life of individuals in developing countries, specifically with regards to providing widespread access to medical care, basic technology, and other necessities.

4. What advice would you share with your freshman self?

I would advise my freshman self to try as hard as possible to network with people that I both give guidance to, and also receive guidance from. It is important to meet and talk with people who have gone through your path in order to learn from their experience. I would also tell my freshman self that the silicon valley is a fantastic place to be, but only if you make it a point to leverage and find every opportunity available.

Javier Gomez | Mechanical Engineering

Jabil Scholarship

Hard Working Individual

1. Why did you choose your major?

I wanted to do something related to math/physics so I decided to major in engineering. After deciding on engineering, choosing between electrical and mechanical was hard because I was interested in both but in the end I decided to major in ME because it was more broad and it incorporated some EE classes.

2. Are you involved in any school or community activities?

I'm involved in SOLES because it not only helps me develop my professional career but it also gives me the opportunity to help people who come from the same background as me.

3. What is your dream job?

My dream job is to work at a tech company working on new and innovative technology. As for a specific company I hope to return to Nvidia where I currently intern.

4. What advice would you share with your freshman self?

Join clubs early on and work on personal projects outside of class.

Emmanuel Gomez | Civil and Environmental Engineering

Harry Wong Scholarship

Passionate | Driven | Determined

1. Why did you choose your major?

I chose Civil Engineering because I've always been passionate about structures. Not being the greatest in academics, I knew the road was going to be difficult. However, three full years complete and I have been able to maintain a good standing GPA.

2. Are you involved in any school or community activities?

I am an active member of the Delta Sigma Phi Fraternity, where I was academic chairman. In this position I would help members develop strategies for academic success by providing educational resources, establish connections with honorary societies and aid in their studies. Besides being academic chairman, we also do community service events. These events include cleaning up parts of the city at least twice a semester.

3. What is your dream job?

My dream job is to work in the Capital Improvements Program in my hometown of Pittsburg, California. Growing up, there was not any major city upgrades or improvements for citizens. Many roads were left unfixed, rundown and nothing added to make the citizens want to stay, making citizens have to go to neighboring cities to do anything for entertainment. I want to help improve the city's roads and infrastructure to create the city that I wish I had growing up.

4. What advice would you share with your freshman self?

I would say to get involved in a club with like minded people. Make connections with them and build study groups. Trying to do everything by yourself is difficult, however, having a group just as driven as you can inspire you to do better. Not only that but to make sure to make time for yourself. College is demanding and can be draining most times, making sure to set aside sometime to focus on mental or physical health is very important. Especially as a freshman when you are new to all of the experiences that come with college.

Sofia Goodwin | Aviation and Technology

Dale and Sue Missimer Engineering Scholarship

Determined | Hardworking | Adventurous

1. Why did you choose your major?

I have always dreamed of becoming an airline pilot and have been inspired by many others to chase this dream. Whenever I see a woman pilot, I feel inspired, especially because there is such a small percent of women in aviation. I have overcome many obstacles to get as far as I have such as the high financial costs for the training and personal struggles. I was hit by a car my freshman year and had to work very hard to get back on track in both school and flight training, even sleeping in my car in order to finish one of my pilot ratings in San Jose after the school year ended. I do everything I can to help lead myself to a successful path, I work at San Martin airport as a fueler to make connections with other pilots, I aim for high grades in all my classes, and this year I am working as a Resident Advisor for the school to enhance my leadership skills and to get the benefits along with the job. I am also on track to graduate early from school so that I can begin my flying career as soon as I can!

2. Are you involved in any school or community activities?

I am involved with the Women in Aviation club at San Jose State, where I am currently the Historian. I choose to be in this club because of how kind everyone in the club is and the amazing connections that one can make through the club. Last semester we worked hard to fundraise a trip to the Women in Aviation International conference in Orlando, and we were able to raise enough money to take multiple members of our club! It was so important because of the networking we could do at the conference and how much we can learn about the industry. We are going to begin our fundraising this semester to go to the conference next year! We also have hosted events such as girls in aviation day, where we had a booth set up at Reid-Hillview airport and discussed with young people about their dreams in the aviation industry. By participating in this club, I hope to accomplish growing my leadership skills and grow my network of connections in the aviation industry.

3. What is your dream job?

My dream job is to work for a major airline. I hope to get a job with Delta or American Airlines! One problem with the aviation industry is that only about 6% of all pilots are women. I plan to make a difference by being a part of the change and becoming a pilot myself, along with inspiring other women who want to be pilots to follow their dream. I can do that by being a resource for those with questions through social media, or possibly doing talks at schools about how I got to become a pilot myself.

4. What advice would you share with your freshman self?

I would tell my freshman self to get involved in the Women in Aviation club sooner. I waited until Sophomore year to become really involved in the club. My freshman year I did attend some meetings, but I didn't participate as much as I wish I could have. I also could have had the opportunity to attend the conference freshman year. But I am making up for it now by being more involved and working as the Historian. I also would also tell myself to branch out more because I could have grown my connections at the school.

Juan Hernandez | Aviation and Technology

Marvin and Anna Jean Sheets Scholarship

Driven | Leader | Caring

1. Why did you choose your major?

I was bitten by the so-called "aviation bug" at a fairly young age. As far as I can remember, airplanes and flight have always fascinated me. As I continued learning about the aviation field, I knew that I wanted to work around airplanes, and there was no better way of doing that than becoming a pilot. Eventually, I began flight training and working towards my Private Pilot's Certificate, which I earned before beginning college in Fall of 2023. Since then, I've achieved my Instrument Rating, and I'm currently working on becoming a Commercial Pilot. As I've continued my flight training and studies, I've only been reaffirmed that I made the right career decision, and I can't wait to see what the future has in store.

2. Are you involved in any school or community activities?

Some of my best college memories thus far have come from my extracurriculars. Currently, I serve as the Safety Officer for SJSU's Precision Flight Team. Our team competes at the regional and national level in events related to navigation, pilotage skill, and knowledge, amongst others. I had the amazing opportunity of getting to fly three of our small, single-engine competition airplanes across the country for our national competition in Wisconsin this past May. The trip helped me apply much of my learning in school to real-world situations we encountered while traversing many different environments. Additionally, I serve as the Treasurer for the Flying 20, a not-for-profit flying club for SJSU students and alumni. This organization helps provide affordable aircraft rental and flight training at the Reid-Hillview Airport, and I've personally benefitted from the connections made within the club as well as used the club's aircraft extensively.

3. What is your dream job?

My career goal is to eventually become a professional airline pilot. Aviation has inspired me for years, and I greatly enjoy the learning opportunities within the field and the ability to constantly better my flying abilities. Currently, the aviation industry faces an unprecedented shortage of pilots. The extensive amount of training required makes it a difficult field to enter, but the supportive environment offered by SJSU's aviation department has greatly helped me throughout my studies. I hope to continue earning my ratings and becoming a part of such a wonderful industry.

4. What advice would you share with your freshman self?

If I could give any advice to my freshman self, it would be to get as involved as possible on campus. Aviation is often regarded as a small industry where connections are essential to advancement. I've personally experienced this firsthand, as many of the opportunities I've had in the industry have been through the people I've met thus far. School clubs and organizations are wonderful in helping new students form bonds with their peers, as they serve as a gathering place for many people with the same interest. Similarly, the people I've met through these clubs have been essential in giving me mentoring and advice relating to the aviation program itself and how to achieve my ratings. In essence, meeting as many people as possible and getting involved on campus are two things I'd consider extremely beneficial to any new students at SJSU.

Bryan Ibanez | Mechanical Engineering

Benzing Fellowship & MEP

Organized | Caring | Hardworking

1. Why did you choose your major?

I chose my major, Mechanical Engineering, because it combined the best of both worlds for me, cars and math. Math has always been my favorite subject in school since the third grade when we would have pop quizzes or a worksheet saying to fill out the most multiplication questions in the matter of a min. It allowed my brain to flow freely and comprehend the concepts that I was learning. Although I have struggled with math at SJSU I have never given up on the class because I knew that I would eventually understand the class and pass the class, and it didn't matter that it took me

a few tries. It just proves that I am always willing to go back and work harder to get a better end result than the previous one. Moving on, I also chose my major for the way it relates to cars. My dream car is a 1968 GT Ford Mustang, because my grandfather, from my father side, used to have one when my father was a kid. My grandfather passed away when my father was 10 years old, but the best memory my father has about my grandfather is taking that car out for a drive. Which is why I fell in love with that car and hope to own it one day or build it from scratch.

2. Are you involved in any school or community activities?

I am involved in the MESA Program. This program spoke to me because I was able to find resources, and support within other engineers, but as well as engineers just like me, Latinos. This meant that in this journey of becoming an engineer I wasn't alone and I had friends and family by my side to help me get through this journey. What I hope to accomplish by participating is having a community I can rely on to help me navigate through life. I am also a part of the Nu Alpha Kappa Fraternity (NAK). I chose to be a part of this fraternity because I wanted to surround myself with a brotherhood that can help me through school and life. This fraternity means the most to me because I have been able to network with many different people on campus across all majors, networked with alumni's from the fraternity and I've just been able to build long-lasting relationships. I hope to continue having this brotherhood with me no matter where life takes me, I know my brothers will have my back.

3. What is your dream job?

My dream job is to be able to 3D-print car parts with either an alternative material that is suitable for the car to help the community of San Jose keep their "Classic Cars Community" alive. I want to be that person to help car lovers find and/or make parts necessary for their car. I believe it will help people within the car community worry less about finding a specific part for their car and going on a wild goose chase of where to get it. I also want to be able to help my family members whenever their cars break down and be that person that they can call for any inconvenience. All in all, I would love to get experience working at a car company such as, Tesla, Honda, Toyota, Ford, etc. to be able to grasp the idea on how we make a difference in people's lives by bettering our work.

4. What advice would you share with your freshman self?

Networking on campus is very important. The more real connections you have the more you are able to ask people for help, and it's never a bad time to ask questions. Seek out Greek life, clubs, and activities on campus to experience different opportunities on campus and be able to destress. Distressing is a HUGE must because classes can be a little much sometimes. Lastly, use peer connections to help you advance your knowledge in any classes that you may need extra support in.

Romina Iranmanesh | Biomedical Engineering

Future of Silicon Valley Scholarship

Dedicated | Nerd | Inspiring

1. Why did you choose your major?

I am a refugee from Iran, fleeing from religious discrimination. My parents sacrificed everything to bring me to this country and I wanted their sacrifice to be worthwhile. I also believe I have a purpose in this world to help others in a big way. That's my main drive for studying biomedical engineering, as it allows me to research and create devices that can help millions of people in their lives.

2. Are you involved in any school or community activities?

I participate in BMES, because I wanted to be involved with like-minded individuals and I've made many precious memories and friends along the way. I also am part of Tau Beta Pi honors society.

3. What is your dream job?

My dream job would involve working on the creation and creative contribution to prosthetic organs. To be able to replace a weak heart or liver would be an entirely incredible achievement that can save so many lives.

4. What advice would you share with your freshman self?

I would tell my younger self not to get so caught up in work and focus on my studies. Although I've had straight As in the past 2 years, I believe my academic experience and knowledge would be greatly enhanced with the free time that would open up.

Alec Jaculina | Human Factors

Dean's Student Scholarship

Empathetic | Innovative | Ambitious

1. Why did you choose your major?

I chose human factors as my major because at the age of 6 I struggled to keep up with traditional learning methods, and it often felt overwhelmed. Being pulled out of class three times a day was challenging as I fell behind in other subjects. However, with technology offering tools and resources that helped me overcome these barriers in reading, writing and mathematics. As I grew older, my appreciation on how technology can transform lives, deepened my passion for wanting to research the interaction between technology and humans.

2. Are you involved in any school or community activities?

A community activity that I am involved in is at Second Harvest Food Bank. I believe in the importance of giving back to the community, especially when it comes to addressing food security. This activity resonates deeply with me and my family, as we've always valued the idea of helping others in times of need. Volunteering here is more than just a charitable act, it is a way to connect with people, understand their struggles, and contribute to something bigger than myself. By participating I hope to make a tangible difference in the lives of those who are facing difficult times.

3. What is your dream job?

My dream job is to work within the healthcare industry, focusing on creating innovative solutions that address the challenges faced by individuals who struggle to live independent lives. One of the existing problems in the industry is the lack of accessible, user-friendly devices tailored to those

with unique needs. I plan to make a difference by designing and developing devices that are not only effective but also affordable and easy to use. My goal is to help other by providing people with better tools that empower them to overcome their challenges to lead a more fulfilled life!

4. What advice would you share with your freshman self?

I would say to get involved early and make most of every opportunity. Coming out of high school and jumping into a new environment can feel isolating. Student clubs helped me find people that helped me feel at home. The student clubs helped prepare me to find internships. The experience that I gained is so valuable especially being in Silicon Valley. Study groups will not only helped me study, but it also resulted in building lasting friendships. Your network is your net worth! Building relationships with your classmates, professors, and industry professionals can lead to mentorships, internships, and future job opportunities. Don't be afraid to step out of the comfort zone, college is a perfect place and time to explore, learn, and grow.

Samuel Thomas Joseph | Aerospace Engineering

Silicon Valley Engineering Scholarship (SVES)

Thinker | Analytical | Driven

1. Why did you choose your major?

Throughout my life, my academic aspirations have naturally geared towards the field of Aerospace. As a young child, I loved going to planetariums, watching space shows, and even orbiting planets around the sun using a scaled model of the solar system I have to this day. All I wanted to be was either an astronaut or pilot. As time passed this fond passion for space and the universe gravitated towards space exploration and rockets. The notion that we have the ability to reach the depths of outer space and traverse it using large moving vessels was sensational. My fascination gripped me and I was certain I wanted to be involved in creating these 'space vessels'. In high school, I took advanced Calculus, Physics, and Astronomy. Aerospace is the epitome that combines the best of all three worlds. These courses broadened my knowledge further solidifying my purpose for this field. In a couple years I can confidently say that I know rocket science!

2. Are you involved in any school or community activities?

As it is my first year, I am not part of any school activities as of right now; however, I plan to join the AIAA (American Institute of Aeronautics and Astronautics) and participate as a member. In this organization I will have the opportunity to go on company tours, participate in national competitions, and build industry connections. Apart from academic societies and clubs at SJSU, I also plan on being involved in Christian groups on campus. I was brought up in a Christian home and joining these clubs would be an incredible opportunity to connect with other Christians on campus.

3. What is your dream job?

I aspire to become a SpaceX Propulsion Engineer. Although rockets have existed for over a century, its instability and high explosion rates pose a huge risk to the lives of astronauts and future space explorers. As rockets get larger and heavier like the Starship, an advanced propulsion system is needed to safely launch and remain stable as it escapes Earth's gravitational pull. Over

80% of a rocket is its fuel which explains why many rockets explode. As a propulsion engineer I want to work on designing, building, and testing systems to change rocket hardware like the nozzle shape or improving the structural integrity to safely hold the fuel as it carries immense payloads. Space exploration to the final frontier is the future of Aerospace and to reach there we need safer rocket structures and propulsion systems.

4. What advice would you share with your freshman self?

If anything the last four years in high school has taught me, it is to value time and make use of every opportunity as early as possible. I am a freshman this year and I am really looking forward to getting involved in clubs where I get real hands-on experience in impactful projects. Two clubs that really interest me are the rocket club and propulsion club. As a first year I have limited knowledge on rocketry but I would still love to work with the upperclassmen to build level 3 rockets to gain understanding and familiarity with the inner mechanics even before I take an aerodynamics or structures class. I hope this early industry experience will light new opportunities for internships and research.

Michael Korens | Aerospace Engineering

Qualcomm Engineering Scholarship

Ambitious | Approachable | Determined

1. Why did you choose your major?

The biggest motivation for me choosing my major was out of a passion for stem. I didn't have a set place to live growing up, and my childhood consisted of moving place to place trying to find the most affordable apartment to live in. The cost of living in Silicon Valley is known to be unforgiving, and it had been very taxing for my parents. My childhood dream, in verbatim, was to become a "super smart scientist" and make enough money to support my family and not go through the risk of becoming homeless every so often. None of my family members went through college so I became determined to become the first to break that stereotype and become something greater. That passion to support my family and to excel academically is what drove me to where I am today. I want to make them proud by going into a STEM related field and be able to support my family for generations to come.

2. Are you involved in any school or community activities?

I am very active in club activities at San Jose State University. I'm currently a member of the KESA club and the Treasurer of Spartan Gaming, which also happens to be one of the largest clubs at SJSU. I chose to be a part of these clubs since they resonate with my personal interests, and the communities that come with these clubs are incredibly welcoming and fun to interact with. As a Treasurer of Spartan Gaming, my goal has been to create an inclusive, safe, and fun environment by giving our members several opportunities to socialize, play games together, and hang out together during our events.

3. What is your dream job?

My dream job is to work on a project that'll either have a profound effect on our planet, or work

towards making a groundbreaking discovery that'll benefit mankind. One specific example of this is through research in Upper Class E airspace (60,000 feet above the mean sea level). Currently there is no implemented framework or system that'll allow civil operations to use that space! I believe that through research, we can provide enough data to help the FAA, NASA, and industry to allow civil operations to go even higher than they currently are allowed to. This could potentially open up several new possibilities for future research, data collection, and transport options that could benefit humanity as a whole. My dream job is to do research to help break barriers and open up new possibilities for innovation and technology.

4. What advice would you share with your freshman self?

I would tell my freshman self to start getting involved with the college experience as soon as possible, and that does involve getting involved with student clubs, participating in community activities, making new friends, getting involved in specialized programs that can assist you with college, and most importantly, connecting with professors. You should utilize as many resources as possible and make the most out of your tuition, the faculty there want you to seek help and make you succeed.

Chiawei Lin | Electrical Engineering

Future of Silicon Valley Scholarship

Sporty | Optimistic | Friendly

1. Why did you choose your major?

I was planning to be a doctor without borders when I was young because I saw a lot of reports talking about rural areas in different countries, and I saw a lot of resources that it is really common seen in where I live but they needed so desperately, such as medications, affordable technology for learning, etc. But then when I really dig into this, I found out that I feel sick when I see blood, and that time I was really sad that I knew I cannot help the world by this job. But then, I saw my dad building softwares and hardwares which can really create things in life, that inspires me to try other ways to help them by making more things to make knowledge more accessible to them.

2. Are you involved in any school or community activities?

I was in part of the dragon boat team and badminton team for SJSU, joining these activities let me be work-life balanced, I hope to participate in more races with SJDB and make more memories for my college life.

3. What is your dream job?

My dream job is to become an engineer, helping out people who live in areas that are not accessible to lots of resources such as internet and try to make technology more accessible and affordable for more people.

4. What advice would you share with your freshman self?

Getting involved in clubs especially with sports, where you can make friends quickly and bring your life more colorful. Joining study groups helps to understand the concepts in class more when brainstorming with others.

Frank Lin | Electrical Engineering

Collaborative | Adaptable | Curious

1. **Why did you choose your major?**

I chose to major in electrical engineering because I am passionate about creating technology and working with tangible products. Initially, I considered computer science as my first option. However, the more I engaged with programming the more I realized my desire to work on physical products. I enjoy creating things from scratch—planning, designing, testing, and building the final product. Electrical engineering lets me be involved in all these steps and see the results of my work, which is what I'm really excited about.

2. **Are you involved in any school or community activities?**

Currently, I am not involved in any school or community activities due to work commitments.

3. **What is your dream job?**

My dream job is to work as an EV charger engineer, focusing on designing the most efficient and eco-friendly charging solutions possible. As the world transitions toward electric vehicles, one of the key challenges is creating chargers that not only speed up charging times but also minimize energy waste and environmental impact. My goal is to solve this by developing innovative technologies that maximize energy efficiency while integrating renewable energy sources.

4. **What advice would you share with your freshman self?**

Try everything you're interested in, get involved in different activities and organizations to expand your social network, and be prepared for your field as well.

John Lu | Software Engineering

Benzing Fellowship

Hardworking | Funny | Compassionate

1. **Why did you choose your major?**

I chose to pursue a Master's of Science in Software Engineering because I love building software that helps people. It's so easy to create in software—all you need is a computer; the possibilities are endless. In 2022, I completed a summer internship in a medical device company where I built a desktop interface for a microscope. The interface allowed you to control the stage, adjust the focus, and snap pictures with a camera. Learning a new frontend library while figuring out how to connect my program to the microscope's hardware components pushed me out of my comfort zone, but I embraced the challenge. At the end of the internship, I was very proud of the functional and well-designed interface I had created. In addition to this desire to push myself, my main reason for going into graduate school is to learn from professors who are acquainted with the industry and to deepen my understanding of AI. I am especially interested in the fields of computer vision and generative AI.

2. **Are you involved in any school or community activities?**

I am a member of Tau Beta Pi, an engineering honor society that celebrates academic excellence

and exemplary character. I was initiated last semester. I plan to use the industry events, socials, and networking opportunities to improve my professional skills and expand my network.

I have also been involved in an organization called Resilience Inc for over a year. Their mission is to promote social emotional learning for K-12 kids, working on skills such as more responsible decision-making, better emotional self-awareness, and socializing/relationship skills. I myself am passionate about mental health. Within the organization, I am working on an app development team. The team is working on an app called AIMEE that helps teach users of all ages how to recognize and manage their emotions. I lead the AI team working on the speech emotion recognition feature. This opportunity is important to me because it has helped hone my leadership skills and my technical skills for a cause I care a lot about. I also get the chance to work with a wide variety of people across the nation and learn from them.

3. What is your dream job?

My dream job is to work in the field of robotics. The “Aha!” moment for me was when I attended the Nvidia GTC conference at San Jose Convention Center in March. I went to the exhibit hall and was immediately enamored by all of the amazing technology. What truly captured my attention were the wide array of robotics on display, from Boston Dynamic's robot dogs to coffee-making robots. I was awestruck by how smoothly and lithely the robot dogs moved around and how intelligently they were able to navigate. Therefore, I am interested in diving more into the fields of SLAM (simultaneous localization and mapping) and sensor fusion. There is still a lot of work to be done in generalizing to different weather environments or lighting conditions, making the algorithms more efficient in real-time, and dealing with noise in the environment. I hope to help others by making robots more safe and more user-friendly, especially for robots helping with domestic tasks like cooking or cleaning.

4. What advice would you share with your freshman self?

I would advise my freshman self to be more bold and put myself out there. Try new things and don't be afraid to fail. I'll admit, those first steps you take into college are scary. Daunting. After all, it's the first time in your life you're given the reins. Full independence. You will inevitably stumble along the way. But what's more important than the destination is the journey you're taking. Go join that club and meet new people. Apply boldly for internships. In order to find out who you truly are, you need to fully embrace the new environment you are in.

Looking back at my time in undergrad, I found I grew the most when I surrounded myself with amazing people who challenged me and buoyed me when times were rough. I cannot emphasize enough how important it is to have a strong support system to fall back onto. Lastly, do not be afraid to ask for help. I understand that sometimes it is the hardest thing to do. You may feel embarrassed, even frustrated at yourself for not being able to figure something out. However, everyone has their limits, and community is there to help each other grow. It is important to recognize when you are stuck and seek the help of those around you. Only then will you grow and break out of your comfort zone to reach the next step.

Wendy Macias-Torres | Aviation and Technology

Passionate | Creative | Dedicated

1. **Why did you choose your major?**

I chose my major in aviation after a memorable experience as a passenger on Aeromexico during a turbulent flight. While others around me were anxious, I was captivated by the flight crew's calmness and skill in ensuring our safety. Initially, I faced challenges with the rigorous math and physics coursework, often doubting my abilities and considering a change in path. However, I realized that my dedication transformed into motivation; I sought information and dedicated extra time to mastering the material. This experience taught me resilience and the importance of perseverance, fueling my passion for aviation and inspiring me to contribute to the field I admire.

2. **Are you involved in any school or community activities?**

During 2023 at San Jose State University, I became actively involved in the Alpha Omicron Epsilon (AoE) sorority, which has profoundly shaped my college experience. As ambassadors for the Silicon Valley Women in Engineering (SV WiE) Conference, we assisted female technical leaders in discussing emerging technologies and career success, allowing me to connect with industry professionals and understand the unique challenges women face in tech. Taking on leadership roles as a coordinator helped me develop my organizational and teamwork skills while planning initiatives that strengthened our sisterhood and raised awareness for important causes. Through AoE, I've learned the value of collaboration and gained lifelong friendships, all while embodying the principles of leadership, scholarship, and service that have significantly influenced my personal and academic growth at SJSU.

3. **What is your dream job?**

My dream job is to become an air traffic controller, a role I believe is crucial for ensuring the safety and efficiency of air travel. One existing problem in the industry is the increasing congestion in airspace, leading to delays and heightened stress for both pilots and passengers. I plan to address this issue by advocating for and implementing advanced technology solutions, such as AI-driven traffic management systems, which can optimize flight paths and reduce bottlenecks. Additionally, I aim to promote a culture of collaboration and communication among air traffic controllers, pilots, and airlines to enhance situational awareness. By improving operational efficiency and safety protocols, I hope to create a more seamless travel experience for everyone involved, ultimately making air travel safer and more enjoyable for passengers.

4. **What advice would you share with your freshman self?**

If I could give advice to my freshman self, it would be to prioritize making connections and getting involved in student clubs and activities. Joining clubs related to my interests, like aviation, would not only enhance my skills but also help me meet like-minded peers. I'd encourage myself to seek out internships early on to gain practical experience and start networking with professionals in the field. I'd remind myself that building friendships and a support network can make the challenges of college much easier and more rewarding.

Garrett Miller | Computer Engineering

Jane G. Evans Scholarship

Efficient | Conversational | Driven

1. Why did you choose your major?

I chose computer engineering as my major because I enjoy working with computers but coming to that decision was a long and difficult process. As the only person in my immediate family that had any inclination to do anything in the engineering field I didn't really have anyone to guide me to choosing a specific engineering major and discipline.

2. Are you involved in any school or community activities?

On campus I work for the Men's soccer team and I am also a part of the Society of Computer and Software Engineers and off campus I also coach soccer. All of these activities are ways in which I can have an affect on my community and help other people which is why I choose to participate in these activities.

3. What is your dream job?

My dream job would be to work on the hardware side of computers and work on making computers more efficient and require less power so they can be used in underdeveloped regions where electricity is more expensive.

4. What advice would you share with your freshman self?

I would tell my freshman self to get involved in everything and talk to everyone because being involved and meeting people is extremely important to grow your network.

Hasnain Mucklai | Software Engineering

Dale and Sue Missimer Engineering Scholarship

Curious | Friendly | Ambitious

1. Why did you choose your major?

From a young age, I was fascinated by computers and the inner workings of applications. In my senior year of high school, I took a computer science class and did well, but I still wasn't sure if it was something I wanted to pursue as a career. Despite my uncertainty, I decided to major in software engineering to "test the waters."

I vividly recall my experience in my "Data Structures and Algorithms" class, where I performed poorly on the first midterm. This setback filled me with self-doubt, and I seriously considered changing my major. However, after speaking with professionals in the industry and finding a sense of self-belief, I was able to turn things around and succeed in the class. That experience became a turning point for me, giving me the confidence and determination to overcome any challenges I might face in the future.

2. Are you involved in any school or community activities?

I volunteer regularly at my local mosque, which has been a rewarding experience for me. This involvement keeps me connected to my faith and provides a wonderful opportunity to meet and

build relationships with people who share similar values and beliefs. The mosque holds a special place in my heart and is an important part of my family's life; it's a place we visit regularly for both spiritual fulfillment and community engagement. < br /> By volunteering, I hope to strengthen our community bonds and contribute positively to our shared environment. Additionally, I aim to develop my leadership and organizational skills through this service, which will help me grow personally and professionally. My goal is to make a meaningful impact, not just within the mosque, but also in the broader community by fostering a sense of unity and mutual support.

3. What is your dream job?

My dream job is to be a full-stack software engineer at a company whose primary focus is to help others. I want to work on innovative projects that solve real-world problems and make a meaningful impact. One existing challenge in the industry is the lack of accessible and user-friendly digital tools for underserved communities. My goal is to develop software solutions that bridge this gap, making technology more inclusive and accessible for everyone, regardless of their background or technical skills.

By leveraging my skills in both front-end and back-end development, I plan to create applications that are not only functional but also intuitive and easy to use. I am passionate about building software that improves people's lives, whether it's through healthcare solutions or educational platforms. Ultimately, I want to use my role to mentor and support others, fostering a culture of continuous learning and growth.

4. What advice would you share with your freshman self?

I wish I had joined more clubs during my time in college, especially those directly related to my major. These clubs provide a great foundation for networking and allow you to connect with like-minded individuals who share your interests and career goals. I would also emphasize the importance of securing summer internships. Internships offer valuable insights into what it's really like to work full-time in your chosen field and help you build practical skills and professional connections.

Additionally, forming friendships early on with classmates in your major can be incredibly beneficial. By having a support network, you can take classes together in future semesters, and really help each other out.

Tida Ngov | Biomedical Engineering

Silicon Valley Engineering Scholarship (SVES)

Passionate | Determined | Caring

1. Why did you choose your major?

I choose my major because I am passionate about building and creating things, but also wanted to work in the medical field. This major combines several of my passions, and therefore was the best option for me.

2. Are you involved in any school or community activities?

I'm not particularly involved in any school or community activities, as much of my time outside of my

studies is dedicated to helping take care of family members.

3. What is your dream job?

My dream job is to work in the medical field one day. I hope to be able to apply everything that I've learned into medicine, and being able to care for patients.

4. What advice would you share with your freshman self?

I would advise my freshman self to look out for myself more, and take the time to enjoy my life and what I am experiencing. I would tell myself to take more advantage of opportunities as well.

Bao Nguyen | Aviation and Technology

Dean's Student Scholarship

Dedicated | Supportive | Adaptable

1. Why did you choose your major?

Choosing to major in Engineering Technology, with a concentration in Computer Network System Management, was deeply influenced by my early interactions with computers during my time as an immigrant in Vietnam. Moving to the United States at a young age, I faced significant cultural and linguistic barriers, but my determination to succeed helped me overcome them. This resilience and self-belief were further solidified as I led and found a variety of clubs at SJSU, making it more inclusive and supportive for future Engineering Technology students.

2. Are you involved in any school or community activities?

Yes, I am actively involved in the NETS as mentioned previously, the Epsilon Pi Tau (EPT) Honor Society, and the Association of Technology, Management, and Applied Engineering (ATMAE) at SJSU. I chose these activities because they align with my desire to create an inclusive community for students in various engineering technology fields. While NETS is specialized in computer networking, EPT and ATMAE cater to a broader range of engineering technology students, including those in manufacturing and networking. Leading NETS, EPT, and ATMAE has allowed me to support and mentor fellow students, fostering a collaborative and encouraging environment. By participating, I hope to inspire others, promote diversity in technology, and help shape a supportive network for future engineers.

3. What is your dream job?

My dream job is to become a computer networking instructor, teaching Cisco-related courses like the Cisco Certified Network Associate (CCNA) at a community college or here at SJSU. Currently, there is a shortage of qualified network professionals to teach future network engineering students in fields such as cloud computing, cybersecurity, and network administration. By creating an engaging learning environment and incorporating real-world scenarios, I aim to inspire and equip students with the skills they need to excel. I also plan to promote diversity in the field by encouraging women and underrepresented minorities to pursue network engineering careers, as the industry currently lacks their representation.

4. What advice would you share with your freshman self?

I would advise my freshman self to get involved in student clubs and community activities right from

the start. Join organizations in your career field, like NETS, as these will help guide you to the right career path and provide connections that your advisor might not cover. Participating in internships and attending industry events to deepen your understanding of coursework and develop practical skills is also a plus.

Khien Nguyen | Aerospace Engineering

Future of Silicon Valley Scholarship

Grit | Thorough | Intelligent

1. **Why did you choose your major?**

I want to expand the human's frontier in our universe

2. **Are you involved in any school or community activities?**

AIAA

3. **What is your dream job?**

SpaceX Engineer Starlink

4. **What advice would you share with your freshman self?**

Work 10x as hard as your peers

Juliette Noyer | Biomedical Engineering

Future of Silicon Valley Scholarship

Motivated | Adventurous | Dependable

1. **Why did you choose your major?**

Growing up in France in a family of doctors, I was immersed in the world of medicine from an early age, and it was clear to me that I wanted to make a difference in this field. My decision to pursue engineering stemmed from a desire to impact the lives of patients and their families in a meaningful way. The sudden loss of my grandfather to cancer, compounded by his struggles with Parkinson's disease and cardiac issues, deeply affected me. Experiencing such a loss at a young age ignited a passion within me to work towards creating better opportunities for survival and care for those in need.

2. **Are you involved in any school or community activities?**

Since 2021, I have volunteered in one of my professor's labs focused on cardiovascular innovations. My involvement in various projects has allowed me to contribute to a field that is particularly important to me, given my family's medical history. Additionally, I was recruited by the track and field team to represent our university at the Division 1 level and have been a dedicated student-athlete for five years. During this time, I set records, competed in numerous high-level competitions, and served as a team captain in my final years, where I had the opportunity to mentor younger athletes. This year, I am also serving as the Outreach Chair for our BME Idea Club, where we provide students with the chance to design and develop devices as they would in the industry.

3. What is your dream job?

My dream job is to work at the intersection of cell therapy, regenerative medicine, and biomedical engineering, with a specific focus on cardiovascular health. Over the past few years, I've become deeply involved in cardiovascular research, and I'm particularly passionate about advancing treatments for heart conditions through understanding the behaviors of cells and creating cell-based therapies. However, my interests extend beyond just one field, as every aspect of the Biomedical Engineering industry is interesting to me. I have had the chance to intern for a stealth mode startup in the past, and this experience increased my curiosity and interest in the design and development process of medical devices. I would particularly love to have the chance to work in a company that aids neonatal patients or addresses the problem of healthcare access for underserved populations.

4. What advice would you share with your freshman self?

If I could give advice to my freshman self, I would encourage her to be open-minded, curious, and attentive to the rapidly changing world around her, especially in the fields of engineering and biomedical sciences. The pace of innovation in these areas is incredibly fast, and it's crucial to stay adaptable and engaged. I would emphasize the importance of surrounding yourself with people who inspire you and help you grow into the best version of yourself. It's also essential not to be afraid to reach out to those whose journeys and careers you admire. These individuals hold valuable insights and experiences that can guide you in understanding what it truly takes to succeed.

Edric Khai Jieh Ong | Electrical Engineering

Dale and Sue Missimer Engineering Scholarship

Driven | Passionate | Goal Oriented

1. Why did you choose your major?

Choosing electrical engineering was a natural fit for me, especially after I built my first autonomous sumo robot. That project was challenging—there were moments when things didn't work, and I had to troubleshoot endlessly. But each obstacle taught me something valuable. The satisfaction of seeing the robot finally move and respond the way I intended was incredible. It turned what could have been a frustrating experience into a deep passion for problem-solving and innovation. This experience solidified my interest in electrical engineering, pushing me to explore more complex projects and understand the intricate workings of electronics and automation.

2. Are you involved in any school or community activities?

I'm actively involved in research teams at my school, where I work with professors on studying the photoluminescence of semiconductors and developing open-source design tools in electrical engineering. These activities resonate deeply with me because they combine my passion for innovation with the potential to contribute to groundbreaking advancements. Working on these projects has shown me the real-world impact that research can have, and it motivates me to push

the boundaries of what's possible in technology. By participating, I hope to contribute to the broader engineering community and create solutions that make a significant difference globally.

3. What is your dream job?

My dream job is to work in the semiconductor industry, focusing specifically on optoelectronics. I envision using these technologies to build innovative devices that can solve real-world problems, such as more efficient solar cells or advanced medical imaging tools. There's a growing need for devices that can operate faster, consume less power, and perform more complex tasks, and I see optoelectronics as the key to achieving this.

By working in this field, I aim to push the boundaries of what's possible in technology, contributing to the development of devices that not only improve people's lives but also help address global challenges like energy efficiency and healthcare. I want to create tools that empower others—whether it's by providing better diagnostic equipment for doctors or more sustainable energy solutions for communities around the world.

4. What advice would you share with your freshman self?

If I could give advice to my freshman self, it would be to join and socialize with more people. Building connections with peers, professors, and professionals opens doors to opportunities you might never have considered. I'd also encourage myself to work on projects I'm genuinely passionate about—those are the ones that will keep you motivated, even when things get tough. And most importantly, be persistent. Challenges and setbacks are inevitable, but staying committed to your goals will make all the difference in achieving them.

Dan Orteza | Aerospace Engineering

Future of Silicon Valley Scholarship

Reliable | Hardworking | Stubborn

1. Why did you choose your major?

My decision to pursue a major in Aerospace Engineering, with a focus on Unmanned Aerial Vehicles (UAVs), is deeply rooted in my military experience as a UAV operator. During my service, I witnessed firsthand the critical role that UAVs play in modern military operations, particularly in ensuring the safety and security of our troops.

However, I also saw the limitations of existing technologies, and this motivated me to delve deeper into the field. I wanted to be part of the solution—developing advanced UAV technologies that could better protect those on the front lines. My military experience was not without its challenges, but it shaped my determination to turn those challenges into opportunities for innovation and improvement. This is what drives my passion for aerospace engineering and my commitment to making a meaningful impact through the development of new UAV technologies.

2. Are you involved in any school or community activities?

At San José State University, I have actively participated in projects like the CubeSat initiative, where I contributed to creating, testing, and fielding sensors for drones. I also served as the manufacturing lead for the Mach 1 project, where our team built a high-speed RC plane exceeding

170 mph.

In addition to these technical projects, I served as vice president of the Veteran Student Organization, where I supported fellow veterans in their transition to academic life and advocated for their needs.

These experiences reflect my commitment to advancing aerospace technology and supporting the veteran community. Through these activities, I aim to contribute to innovative UAV solutions and ensure that veterans have the resources needed to thrive.

3. What is your dream job?

My ultimate goal is to work at NASA, specializing in autonomous drone technology. The aerospace industry is currently facing significant challenges in developing drones that can operate autonomously in complex environments, such as space exploration or disaster response scenarios on Earth. These challenges include enhancing the reliability, adaptability, and safety of drones in unpredictable conditions.

At NASA, I aspire to contribute to overcoming these challenges by advancing autonomous systems that can operate with minimal human intervention, ensuring mission success in critical situations. I plan to leverage my experience and knowledge to develop cutting-edge technologies that push the boundaries of what drones can achieve, whether in exploring distant planets or assisting in emergency situations on Earth.

Moreover, I am committed to using my expertise to mentor and collaborate with others in the field, fostering innovation and ensuring that the next generation of engineers is equipped to continue advancing this vital technology. By working at NASA, I hope to make a meaningful impact on both the aerospace industry and the broader global community.

4. What advice would you share with your freshman self?

If I could go back and give advice to my freshman self, I would say: ""Get involved early and don't hesitate to step outside your comfort zone."" Joining student clubs, particularly those related to aerospace and engineering, is crucial. These organizations not only provide hands-on experience but also offer a network of peers and mentors who can guide you through your academic journey. I would also emphasize the importance of seeking out internships and research opportunities as soon as possible. These experiences are invaluable in applying classroom knowledge to real-world problems and will set you apart when pursuing future opportunities.

Another key piece of advice is to engage in study groups and build strong connections with your classmates. Collaboration is at the heart of engineering, and learning to work effectively with others will not only help you academically but also prepare you for the teamwork essential in the industry. Finally, never underestimate the power of networking. Attend events, reach out to professors, and connect with professionals in your field. The relationships you build now can open doors to opportunities you never imagined.

Andrew Ou | Mechanical Engineering

Jabil Scholarship

Honest | Hard-working | Persistent

1. **Why did you choose your major?**

How things worked always intrigued me. During my high school experience, I've taken classes and joined clubs that piqued my interests in engineering and design, such as a Computer Integrated Manufacturing course and my high school's robotics club. These were outlets where I could meet people with similar interests, learn new skills, and do cool things in general. I learned how to 3D model and print on a 3D printer, and helped build a robot. Going to college, I wanted to expand these skills and do tangible work, so I chose Mechanical Engineering.

2. **Are you involved in any school or community activities?**

I have been involved in my community, notably summer camps back in my hometown and the College Corps program here at SJSU. I think participation in these activities is very important, as children are the future. Right now, I understand how programs centered around getting kids interested in STEM help create engineers because I have lived that same experience. Children are the next generation of engineers, doctors, etc., and we need these programs to spark interest.

3. **What is your dream job?**

My dream job would be working somewhere in mechatronics, sending people to space. I think that the time is right for people to leave this planet and start to colonize other planets. It would be cool that in my lifetime, I would have the ability to see other people on other planets. I believe that generally, humanity is making progress, and I hope to further that progress one day as well.

4. **What advice would you share with your freshman self?**

I would tell my freshman self to hit the ground running. A lot of opportunities have been closed off for me due to my not learning about them fast enough. I would tell myself to do a lot more research, and choose my classes more carefully. Additionally, I would tell him to make a LinkedIn account earlier, for better networking. I feel like I also gave up a lot of opportunities due to not connecting with people on LinkedIn.

Cody Ourique | Computer Engineering

Benzing Fellowship

Driven | Tenacious | Compassionate

1. **Why did you choose your major?**

I chose my major because I wanted to be part of something bigger than myself. I knew A.I. would help solve many problems in our society. I wanted to go back to school at a later age which was tough decision. This is because I did not have the financial resources to pursue a STEM degree as a full-time student. I knew this would mean working part-time job and taking out student loans so that I could support myself and pay for tuition. Moreover, this would mean sacrificing my way of life in hope that I can make an impact and be rewarded for my effort. I had to extinguish any doubt that I carried in order to move forward. For me, there was no plan B. Fast forward 6 years, I'm half way through my graduate program and have been provided with many opportunities with a lot of opportunities. I'm relieved because I know I made the right decision. Also, I have developed a

confidence in myself that can be applied to many areas of my life. Overall I knew I could trust myself to accomplish my goals as long as I believed I could do it.

2. Are you involved in any school or community activities?

Yes, I am heavily involved in research with a couple of professors at SJSU and a undergraduate student from Washington University in St. Louis. I chose to immerse myself in a few areas of research because I wanted to discover novel solutions to current scientific challenges. In addition, I volunteer in the community by offering mentorship to people who struggle with chemical dependency. Having the ability to work towards my goals and give back to others is a privilege that I'm extremely grateful for.

3. What is your dream job?

My dream job is to work as a robotics engineer for NASA or some other space company. I want to help build intelligent autonomous systems. One of my goals is to help make black box models more transparent. This will allow others to gain insight in the decision making of some A.I. models. In addition, it will help keep A.I. systems more accountable. By accomplishing these goals, I hope that scientists, researchers and engineers will be able to build better models which adhere to our societies ethical principals.

4. What advice would you share with your freshman self?

I know your freshman year is exciting and it may seem like you have a lot of time to figure things out but the reality is that you don't. The time you spend at SJSU will fly by so fast. Don't wait to get involved with clubs and community programs. Start building your network now and make sure to be selective of the people you surround yourself with. One last thing, start applying for internships in your freshman year. Having internships on your resume greatly increase your chances of getting hired and succeeding.

Jonathan Park | Aerospace Engineering

KLA Scholarship

Humble | Kind | Strong

1. Why did you choose your major?

I grew up with a fascination in aircraft and aviation. I am also fascinated with astronomy but I also like the technical aspect of STEM, so Aerospace Engineering seemed like a good fit for me.

2. Are you involved in any school or community activities?

I was part of the engineering club when I was in community college and gathered valuable experience. I participated in a couple of competitions, such as the Shell Eco Marathon and the SMUD Solar Boat Regatta. Additionally, I served as Treasurer and Secretary for the club. I hope I get to do something similar during my time at SJSU.

3. What is your dream job?

I am still trying to figure out the specifics of what I want to do, but I think I want to work in the space exploration field. I'm sure we all heard of space being the final frontier, and that is true because there are many things to discover and learn beyond Earth.

4. **What advice would you share with your freshman self?**

I would say try to socialize with others because having people to talk to and hang out with can make a difference. Socializing can be a daunting task (I still have a hard time doing it), but joining a club or organization, whether it's STEM related or just for fun, can help overcome that fear.

Khoi Pham | Computer Engineering

Jabil Scholarship

Funny | Accommodating | Studious

1. **Why did you choose your major?**

I chose computer engineering because I was always passionate about machines and technology. I feel like it is the only area I can actually find my self enjoying the thought of pursuing a career in. I have studied many different areas during my time in high school, from literature to psychology to even business, but none of them felt like it was suitable for me. Physics, math and computer classes were ones I felt like I did the best in and enjoyed the most.

2. **Are you involved in any school or community activities?**

I used to be a scoutmaster for the boys scout back when I was still in Vietnam. I enjoyed teaching kids life/survival skills as well as soft skills, going on camping trips. I wish the kids I helped raise and teach turn out to be fine citizens contributing positively to society.

Currently I am part of SJSU VR club where we create VR projects such as tools or games. I joined this club to explore new areas of technology I was not familiar with before. I think the VR industry is a new industry with untapped potential which I am excited to be a part of.

3. **What is your dream job?**

My dream job would be in a position that helps engineer and develop renewable energy as replacement for sources such as gasoline and fossil fuel. Global warming is becoming more and more of a pressing matter and a big part of it lies in our over extraction of oil and fossil fuels. By finding cleaner alternatives for vehicles and generators such as electricity, solar, or other renewable sources, I hope to help reduce the harm that is being done to our planet.

4. **What advice would you share with your freshman self?**

Do not stress too much but do not be too inactive, try your best to network and connect with peers even if you are not good at it or are not a social person.

Deema Saddik | Industrial & Systems Engineering

Dale and Sue Missimer Engineering Scholarship

Dedicated | Responsible | Sociable

1. **Why did you choose your major?**

I have been drawn to finding more efficient ways to complete tasks and run organizations I was involved in for as long as I can remember, so when I found out there was a whole field dedicated to optimizing processes and systems, I was intrigued and decided to change my major. I enjoy

coordinating the logistics of events and programs through organizations outside of school. I also really enjoy analyzing data and trends and forecasting potential future behavior. Despite having taken some time to find this major, I am beyond grateful to have been exposed to this major, which is all about process and system improvements, and am excited for the opportunities to come.

2. Are you involved in any school or community activities?

For the past seven years, I've been teaching and volunteering at a local Sunday School. I believe everyone has the potential to positively influence those around us, and I've been fortunate to have teachers who have inspired me to strive for more. As Muslims, we view ourselves as part of one family, one Umma, and I aim to reflect this in my classroom. I strive to create an environment where every class feels like an open discussion, encouraging students to ask questions, explore their identities, and connect with one another as we engage with the material. I deeply value community and collective growth, and I hope that my students will develop into empowered individuals who contribute positively to the world.

3. What is your dream job?

My dream job would be to use my critical and analytical skills and knowledge to improve the lives of people who are often overlooked. I would love to work for non-profits and work towards maximizing housing for the homeless, access to healthcare and rehabilitation services for those who can't afford it, and education and services for children in need. Businesses use data analytics in virtually every aspect of their services and operations. The same should be done in non-profits where people are valued over profit. By collaborating with cross-functional teams within non-profit organizations, we could work to analyze existing processes, workflows, and systems and identify areas for improvement, just as we would in a manufacturing plant or service-providing business.

4. What advice would you share with your freshman self?

I would tell myself that you don't need to have every last detail figured out to get started on the things you want to do, whether it's in school or in life. Perfectionism is detrimental when it comes to taking action. Just start, learn, and improve. Setbacks and failures are a very essential part of the learning process and no one has all the answers. Sometimes, there aren't even straightforward answers to many of the questions you may have. What works for others may not be what works for you and the opposite is true. Set goals, develop plans, seek advice from those who have done it before, and just start. Go with your gut and do your best; the rest will work itself out.

Caden Sanchez | Computer Engineering

The Ditmore Family Scholarship

Kind | Ambitious | Passionate

1. Why did you choose your major?

I chose my major because of my interest in tech.

2. Are you involved in any school or community activities?

I've recently joined the software and computer engineering club. I chose this specific activity to get experience.

3. What is your dream job?

A job in which i know i am making a positive impact on the industry is my dream job. The field of tech had serious problems of electronic waste and engineering is important in minimizing it.

4. What advice would you share with your freshman self?

Stay on track with grades, stay involved, stay on top of grades, you are doing well!

Fernando Sánchez López | Computer Engineering

Harry Wong Scholarship

Resilient | Selfless | Kind

1. Why did you choose your major?

I've always been drawn to challenges and brain teaser games, igniting a fascination with problem-solving. My journey into technology began with a gift from my grandfather: my first laptop. I recall typing on the keyboard and watching the words appear on the screen in real-time and being fascinated by what was happening. From that moment on, I was hooked on unraveling the mysteries of how devices function.

This feeling kept growing. I am constantly immersing myself in the latest advancements and potential applications. What truly drives me towards a career in STEM is the profound impact that technology can have on people's lives. It's been instrumental in bridging the distance between me and my family in Mexico, allowing us to stay connected despite the miles apart. This fuels my desire to leverage technology to improve lives on a broader scale.

I firmly believe that technology holds the key to addressing some of society's most pressing challenges. Whether it's bolstering cybersecurity defenses or revolutionizing education, I aspire to utilize my skills to develop innovative solutions that make a difference. My passion for social justice intertwines with my STEM pursuits, guiding me towards endeavors that contribute to the betterment of our world.

I am committed to fostering diversity and inclusion in STEM. As someone from an underrepresented background, I recognize the importance of empowering future generations. I've been dedicated to inspiring and supporting individuals from underserved communities to pursue careers in STEM. By doing so, I aim to break down barriers and empower others to realize their potential in shaping the future through technology.

So, when asked why I'm pursuing my major, it's because it's not just about acquiring knowledge; it's about harnessing the power of technology to drive positive change and uplift communities, all while championing diversity and inclusion in STEM.

2. Are you involved in any school or community activities?

Participation in leadership activities has been integral to my personal and academic growth, shaping my understanding of leadership and its impact on both myself and my community. For me, leadership transcends from just being a guide; it embodies a commitment to being the catalyst for change, setting an example through action, and embracing challenges with resilience and determination.

Through my involvement in various organizations and initiatives, including Science Extravaganza (SE), the Conference for Engineering Diversity, the Society of Latino Engineers and Scientists (SOLES), the Chicanx/Latinx center, and the UndocuScholar Network for Inclusive and Transformative Education (UNITE), among other opportunities, I've had the privilege to apply these principles in real-world contexts, aiming to push for positive change while fostering inclusivity. As a member of SE and SOLES, I've been deeply involved in outreach programs aimed at empowering students from marginalized communities to pursue careers in STEM. Through workshops, mentoring sessions, and hands-on activities, I've sought to instill in them the belief that their dreams are attainable, regardless of their backgrounds. By actively engaging with these students and sharing my own journey, I've been able to cultivate a sense of hope and possibility, demonstrating that with perseverance and dedication, anything is achievable. Currently, I am the Co-Chair for SE, and along with my E-board, we are excited to keep inspiring the next generation of STEM leaders to pursue a career in STEM, by providing workshops primarily to Title I institutions in the East Side of San Jose free of costs.

Moreover, my involvement within the Chicanx/Latinx center has provided me with a platform to share my personal experiences and my journey with prospective students, I've endeavored to create a more welcoming and supportive environment for individuals from underrepresented backgrounds. Through participation in panels, one-on-one interactions, and outreach efforts, I've aimed to work to dismantle barriers to access and promote greater equity within academic spaces. Furthermore, my former executive board member responsibilities within UNITE have allowed me to advocate for equitable opportunities for undocuscholars, a cause that is deeply personal to me. By amplifying the voices of UndocuSpartans and starting to advocate for policy changes, I've strived to create a more inclusive and equitable campus environment where all students feel valued and supported. Now, as a general member, I am committed to continue advocating and supporting my community and continue with the efforts I have worked on.

In addition to my campus involvement, I've also been committed to promoting diversity, equity, and inclusion beyond the confines of the university. Through participation in initiatives such as the Conference for Engineering Diversity, aimed at high school and college students, I've sought to bridge the gap between academia and industry, advocating for greater representation and opportunities for underrepresented groups. This initiative put on by MESA is key in the development of a more inclusive environment and workforce in Silicon Valley and the Engineering industry as a whole. I am honored to be considered to be part of the team that has put together this event for the 9th and current 10th edition. By actively engaging with industry leaders and advocating for diversity initiatives, I've worked to foster a culture of inclusivity and innovation that benefits all members of society.

All of my involvement, has been guided by a deep-seated commitment to academic excellence, community engagement, and the values of inclusivity and equity. Through my actions and advocacy, I've sought to create a more equitable and inclusive society where all individuals have the opportunity to thrive and succeed. By leading by example and always having present my lived experiences, I have kept embracing challenges with resilience, and championing the voices of

underrepresented communities, I've endeavored to make a meaningful impact both on campus and beyond.

3. What is your dream job?

My dream job has two key components. First, I aim to hold a position of influence where I can actively support students from underserved and underrepresented backgrounds in pursuing and excelling in STEM. Once I've built the necessary connections and gained experience, my goal is to create a nonprofit organization that merges social justice and equity with STEM education. This organization would empower K-12 and higher education students by transforming education from a barrier into a catalyst for their careers and personal growth.

4. What advice would you share with your freshman self?

If I could offer advice to my freshman self, I would emphasize how life-changing getting involved in student organizations can be. It's through these organizations that you will find your communities and meet people who will shape your journey. Spaces like CENTRO, MOSAIC, PRIDE, NAISSC, and MESA are more than just places on campus, they were created by students for students and will become vital for your personal and academic growth. In these spaces, you will have the privilege to connect with incredible people, from directors and program coordinators to fellow students, who will have a lasting impact on you.

Being involved in student organizations will shape your career, allowing the opportunity to meet others who share similar passions. Although nerve-racking at first, this involvement will help you grow, explore your interests, and clarify what you want to study and pursue in life. It'll also remind you of the importance of giving back. I can't imagine my college experience without the people I've met and the opportunities I've had through these organizations.

Lastly, I would tell myself to embrace failure, to not be afraid of it but rather learn from each obstacle, learn from each mistake, and learn from every time things do not go the right way or as expected, because it is in that moment where growth and learning happened. The worst thing is that nothing happens, so as long as something comes out of anything that you try or you do, is a learning experience and is a stepping stone on the path towards reaching your goals and objectives.

Tanish Shah | Software Engineering

Qualcomm Engineering Scholarship

Ambitious | Adventurous | Driven

1. Why did you choose your major?

Since childhood I was a kid who always had questions in their head so when saw a computer it sparked my interest. I have always been pulled towards technology by my mind, I have started coding since I was in 5th Grade and have been expanding my knowledge since then. This major lets me dive deep into the world of coding and gives me the opportunity to gain experience in software engineering. I hope to develop a program that will maybe change the world one day and this major will help me gain those skills to write it.

2. **Are you involved in any school or community activities?**

I am a Resident Advisor (RA) in the CV2 building. Being an RA gives me the platform to help incoming/returning students as a support. I am there for the students for all of their issues, be it academic, be it their living space issues, or if they just want to talk about something. This position gives me the opportunity to fulfill my goal of helping others in any way possible and not letting them feel like they are far from home.

3. **What is your dream job?**

I want to be a CEO of a multi-billion dollar company. I see that the AI has an exponential growth in the industry but at the same time AI needs people to give it tasks, I would like to establish a company that will work with different companies and do their work by hiring students who are experts in using AI rather than full time employees who know how to write code from scratch.

4. **What advice would you share with your freshman self?**

Go and grab every opportunity where you can either meet new people, learn new skill, or gain a new experience

Ishan Sikka | Computer Engineering

Jabil Scholarship

Driven | Analytical | Collaborative

1. **Are you involved in any school or community activities?**

I was actively involved in several school activities that were meaningful to me. As a Board Member of the Student Union, I contributed to decisions that impacted the student body, which helped me develop my leadership skills. In my role as the Chief Coordinator of Finance for the Indian Student Organization, I stayed connected to my culture by managing finances and fostering a welcoming community. Additionally, as an IBM Student Ambassador, I engaged with cutting-edge technology and shared opportunities with my peers, preparing myself for a future in computer engineering. Through these roles, I grew as a leader and made a positive impact on campus.

2. **What is your dream job?**

My dream job is to start my own tech company, focused on solving real-world problems through innovative technology. One issue I've noticed is the gap between emerging technologies and their practical applications in everyday life. Many cutting-edge solutions remain underutilized or inaccessible to the general public, especially in areas like sustainable energy, automation, and healthcare.

Sofia Silva | Interdisciplinary Engineering

Future of Silicon Valley Scholarship

Ambitious | Optimistic | Curious

1. **Why did you choose your major?**

Initially I chose Interdisciplinary Engineering because I thought I could learn from other disciplines

and become a well rounded engineer. During my internship with NASA this Summer, I worked with machine learning techniques in my project. I realized an MS in Software Engineering would be more aligned with my goals and interests. I was recently accepted for the MS Software Engineering program at SJSU for Spring 2025 and I am so excited. I get to explore AI and machine learning topics and become a stronger Software Engineer.

Some barriers I had was being a First Generation College Student as both of my parents are immigrants with a high school education and did not have the knowledge about applying to grad schools. I had no guidance and researched as much as I could but I loved my parents' support for me to pursue a higher education. I had some financial barriers since I work as a student assistant and my father is a landscaper who is willing to help finance my graduate degree as much as he can. I knew I would need to take out more expensive student loans but this scholarship helps me with this financial hurdle. Unfortunately, my father was diagnosed with Prostate Cancer on the day on my undergraduate graduation and it worries me that his health can worsen. All I can do is hope and pray that the cancer does not advance and for me and my family to support him.

2. Are you involved in any school or community activities?

I was involved in SJSU's Society of Women Engineers from 2021-2023 and I was a mentor in their Big/Little Program where I helped underclassmen with career preparation and STEM classes throughout the semester. I was happy to spread my knowledge and gave advice to my lived experiences as a First Generation College Student and a woman in STEM.

3. What is your dream job?

My dream job is becoming an AI developer. AI has been evolving rapidly and many industries are incorporating AI into their product and their systems. A project in particular I have been working on is Project FireWatch which consists of creating wildfire trajectories from thermal footage gathered by drones and other factors. This was my undergraduate senior design project and I recently made an LLC to pursue this development further. The goal of Project FireWatch is to assist firefighters in allocating their resources by determining the predicted path of the fire and warning residents of the potential fire in their path. My role in Project FireWatch is to utilize computer vision and machine learning to make the fire trajectories.

4. What advice would you share with your freshman self?

I would say to my younger self to not miss opportunities from being shy. Go join that club and meet people with shared interests. Imposter syndrome has been something I dealt with since your freshmen year but you got this. You will have family and friends that support you in this academic journey.

Gunraj Singh | Software Engineering

Silicon Valley Engineering Scholarship (SVES)

Passionate | Positive | Grateful

1. Why did you choose your major?

It has always been my grandfather's and my dream to come to the States to pursue higher

education. And with my current academic achievements, I am honored to be one of the Spartan Engineers. Extremely grateful to have been raised by a very hardworking and supportive family. I have been taught that "No matter how hard life may be, always look for the light at the end of the tunnel." My decision to major in Software Engineering was to support and inspire dreamers like me that "WE CAN BE THE CHANGE WE WANT TO SEE!" I am continually striving to create a healthy balance between my social, academic, and work life while working hard in my classes. Appreciative of all the application-based courses that encourage me to always learn and grow from my mistakes. I plan to use these extensive technical skills to continue to find solutions to real-world problems like climate change, financial insecurities, and educational access for communities of color, all while thinking outside the box.

2. Are you involved in any school or community activities?

Being involved on campus has been one of the best experiences of being an SJSU Spartan. The diverse and supportive Spartan community pushes me to put my best foot forward, be it through the uplifting spirit of success through my SI sessions for CS 146 and advocacy initiatives for increased diversity and inclusion as the Student Chair of the DEI Committee is unparalleled. I am eternally grateful for all the opportunities I have had - be it being selected as an Apple Pathways Alliance Scholar for the class of 2024 or being invited by the White House to meet Vice President Kamala Harris representing SJSU and the city of San Jose. Performing at homecoming with Spartan Bhangra to showcase my culture and talent or running as a Vice Presidential Candidate in the Associated Students Elections to advocate for student needs, I have seen myself grow and develop as an individual through all these activities. I like stating that I moved from 20,000 miles away, knowing nothing about living alone, managing finances, or even the education system, and landed with a bag full of bare necessities and a mind full of dreams.

3. What is your dream job?

Working day and night ever since I set foot in the bay. I strive to succeed at work and school, always eager to learn and develop new skills. It is key to understand that setbacks and rejections are opportunities for growth and development, which is a quality I deem to be extremely essential to being a successful Engineer at SJSU. In the future, I hope to work as a Product Manager or as a Technical Program Manager at Apple to lead its world-class products and expand the realms of technological development.

4. What advice would you share with your freshman self?

It is okay to take breaks and take a step back when needed. Just believe in yourself - You got this! Everything happens for a reason, and if you feel lost, keep looking for the light at the end of the tunnel; it is WORTH it.

Arjun Sudheer | Software Engineering

Jane G. Evans Scholarship

Hardworking | Passionate | Respectful

1. Why did you choose your major?

I choose Software Engineering as my major because I really enjoyed the problem-solving aspect of it. My first exposure to Software Engineering was in my freshman year of high school. Initially, it was tough to find a solution to the coding challenge at hand, but I chose to stick with it and eventually it became easier for me to understand. I remember making my own golf game and my own version of Atari breakout, which was rewarding to see successfully work.

I was also a part of my high school's robotics team, where I wrote software to control the robot mechanism. I worked on the code that allowed the robot to pick up rings off the ground and launch them into goals. Before, software development just meant moving a sprite on a screen, but this experience showed me that software can also bring robots to life. I became fascinated with trying to optimize my code so the robot could complete the missions efficiently.

So far, I have thoroughly enjoyed taking Software Engineering courses at SJSU. I enjoy getting the chance to apply the Software Engineering skills I have learned in class projects. Overall, I am very happy that I chose to major in Software Engineering.

2. Are you involved in any school or community activities?

I am involved in the Software and Computer Engineering Society (SCE) at SJSU. I recently completed a summer internship at SCE, where I implemented QR Code generation for their URL shortening service. I joined SCE to meet other students and learn new skills in the Software Engineering field. This school year, I hope to connect with more students who are also a part of SCE and learn new programming skills like developing the backend and database systems for an application.

3. What is your dream job?

My dream job is to work in the cybersecurity industry, specifically in identifying threats like zero-day malware. As our world becomes more digital, ensuring privacy and security online will continue to be an important issue. I would like to incorporate generative AI with cybersecurity to develop more efficient and accurate threat detection models. Using cutting-edge technology in the cybersecurity domain can allow for better threat detection which can help increase safety for many users online.

4. What advice would you share with your freshman self?

I would tell my younger self to not be afraid of trying new things. A lot of learning can happen through hands-on experiences, so many times it is worth it to put yourself out there and learn as you go. In the beginning, it may be tough and there may be some setbacks but keep persevering and eventually good things will follow.

Nathan Sun | Aviation and Technology

Qualcomm Engineering Scholarship

Disciplined | Kind-hearted | Humorous

1. Why did you choose your major?

To me, aviation is not merely a means of transportation, but a whole new channel for appreciating the world we live in. The beauty of aviation instills a special sense of freedom that is unattainable

elsewhere. Additionally, it has been an aspiration of mine to be able to serve people from a position of leadership on a large scale. I believe that as a pilot, I am able to serve in a unique way, either by using my skills to serve passengers traveling across the world, or by passing down my knowledge to the raise up the next generation of aviation enthusiasts, who can use their abilities to serve others. My aspiration of serving people across the globe and showing them world starts with my education in aviation.

2. Are you involved in any school or community activities?

The main community activities I'm involved in is volunteering at my church on both the tech team and the worship music team. Additionally, we participate in community service events to help the community in any measure we can.

3. What is your dream job?

My ultimate goal in aviation is to become an airline pilot at a major airline. Pilots are in a unique position of service, hospitality, and inspiration to the people around them. Working at a major airline gives me the largest platform to demonstrate and exercise these qualities. Being a pilot can mean inspiring the next generation of aviation lovers. It can mean being someone else's role model for what they want to be when they grow up. It can mean bringing families together to be united on a holiday. It means taking traveling passengers to new destinations, showing them the world, and giving them opportunities to create once in a lifetime experiences. Everyone dreams of being successful, but I want to be successful by inspiring others, making memorable experiences for my passengers, and giving them the opportunity to make the most of every moment.

4. What advice would you share with your freshman self?

Put yourself out there and network at every available opportunity. The aviation community is small but expansive. Take time to build connections whether at school or at the flight school.

Kayla Szulc | Aviation and Technology

Dale and Sue Missimer Engineering Scholarship

Strong | Outgoing | Resilient

1. Why did you choose your major?

I've always been passionate about the complexities of flight and was deeply involved in the aviation community. My desire for adventure and the challenge of becoming a pilot, combined with my love for learning about weather, math, physics, and how engines work, drove me to this path. The wide range of subjects covered in flight training—such as navigation, aircraft systems, propulsion theory, flight maneuvers, communication, emergency operations, weather, and safety—captivates me. After taking a discovery flight two years ago, I became hooked. I thrive on demanding tasks that challenge my mind and prefer staying active and working towards greater achievements.

2. Are you involved in any school or community activities?

I am deeply involved in the aviation sector at SJSU, where our school is affiliated with Reid-Hillview Airport. This airport serves as the hub for many of our aviation activities, classes, and flight lessons. It's also a central meeting place for various clubs I participate in, such as the SJSU Precision Flight

Team (PFT) and Women in Aviation (WIA). I spend a significant amount of time at the airport learning to fly and have earned my Private Pilot License while continuing my training. Additionally, I frequently collaborate with professors in aviation courses and serve as an officer for Women in Aviation. I also competed regionally with PFT, traveling to Bakersfield to compete against other flight schools. Outside of aviation, I work as a Resident Assistant (R.A.) for the CVB apartments. Although this role is not directly related to my major, it keeps me connected with the campus community, creating a strong overlap between on-campus life and the aviation sector at our school.

3. What is your dream job?

My dream job is to become an airline pilot for Delta. However, I recognize that reaching this position involves several steps. My initial goal is to become a Certified Flight Instructor (CFI). As a CFI, I would help new students navigate the industry, much like my Private Pilot instructor guided me through my own training challenges. I aim to embody the qualities of my instructor, providing future pilots with the same support and inspiration that helped me succeed. In this role, I would be a vital resource for students, playing a key part in shaping the future of the aviation community. The safety of air travel relies heavily on CFIs, and I've observed that misinformation can often mislead students. I hope to offer accurate guidance and motivation, to those students who feel overwhelmed or confused.

4. What advice would you share with your freshman self?

The biggest piece of advice I'd give to incoming freshmen is to get involved. While it can be intimidating at first, participating in student clubs, community activities, and study groups significantly contributed to my success in this program. Navigating college can be challenging, especially for those who have never lived alone or managed such a high degree of freedom and responsibility. Balancing the demands of being a college student with those of a student pilot can feel like juggling two different majors due to the extensive content and potential confusion. However, through peer groups formed in class and programs like AFROTC, the SJSU Flight Team, and SJSU Women in Aviation, I was able to navigate this new environment more effectively. These clubs provided valuable advice, exposed me to new resources, and offered support during difficult times. Their mentorship was extensively helpful.

Fernanda Tapia Marin | Mechanical Engineering

Silicon Valley Engineering Scholarship (SVES) & KLA Scholarship

Organized | Hardworking | Genuine

1. Why did you choose your major?

I grew up in a low-income, minority community where engineering was not a word I knew existed until I saw a commercial for Walt Disney Imagineering on Disney Channel when I was in fourth grade. I did not think too much about what an Imagineer did or even what it took to get there. I just knew that I wanted to build something fascinating like roller coasters for Disneyland. My father was the first engineer I met and is one of my biggest inspirations. He worked in construction for many years and is now a handyman, but in my eyes, my dad is an engineer. Despite not having attended

college or even high school, my dad's work experience, beginning as a carpenter at the age of 12, and quick math skills taught him how to create realistic solutions. Growing up, I saw my dad fix things up around the house, and every solution fascinated me, especially since they were created using items we already had at home. Because of this, I started to develop my own solutions. I would make drawings of inventions I wanted to make in the future and started to see myself in a job where I could build things to help people. I was always interested in math and science, so once I was accepted into and graduated from the Space and Engineering Academy at Merrill F. West High School, I knew I wanted to pursue a career in engineering, but life had other plans.

Once I entered community college during the pandemic, I switched my major a few times, completely unsure of what I wanted to commit to studying. Luckily, I came across a program called Puente that helps disadvantaged students transfer into universities. A requirement for the program was taking career counseling courses and, through one of the courses, I had to do research on a variety of professions and majors that I was interested in, one of them being mechanical engineering. I saw that the job growth rate for that major was increasing and that it was very broad, so I decided to major in mechanical engineering because I want to get a job in what I am studying as well as have the flexibility to work on different projects since my interests run from prosthetics to roller coasters.

2. Are you involved in any school or community activities?

Ever since I transferred to San José State University last fall, I made it my goal to be a part of organizations that will not only support me in my journey through SJSU but will also help me give back. I am involved in MESA, the Society of Latino Engineers and Scientists (SOLES), the Society of Women Engineers (SWE), BMEidea, Science Extravaganza, and I am a Student Success Leader for the Chicanx/Latinx Student Success Center. Being in a major where I am underrepresented can be discouraging, but there are organizations that exist with the purpose of supporting underrepresented students. That is why I joined SOLES and SWE, two clubs that I enjoy being a part of because of how they support students like me, not only in school but also in career development. Through SOLES, I learned about Science Extravaganza which is an SJSU organization that works primarily with Title I middle schools around San José to teach underrepresented students about STEAM. As a student who grew up in a low-income, minority neighborhood and attended Title I schools, I understand the importance of supporting kids with big dreams for their future in a field that does not typically represent them. I was a curious child interested in going into STEAM, but my opportunities to go above and beyond my curiosity were limited, especially because of our financial situation. I've heard many stories about students that wanted to major in engineering, but once they got to university, dropped out because they felt out of place. As someone who has shared this feeling, I want to help kids feel secure in their decisions to study what they want, regardless of the makeup of the major and field. At my community college, there were few project-based clubs I could attend, none of which related so closely to my career interests, so once I heard about BMEidea at SJSU and the variety of projects I could contribute to, I knew that I wanted to be a member. I hope to one day work in the field of prosthetics, so being able

to work on a team where we did research and developed a model for a partial foot prosthesis that we later presented at the Bay Area Biomedical Device Conference was an experience like no other.

3. What is your dream job?

My dream job is to work in the research and development of prosthetic devices. I interned for Capstone Prosthetics and Orthotics in Tracy for two summers, and directly interacting with the patients inspired me to look more into the R&D side of engineering where I can take immediate feedback from the users. My goal as an engineer is to help people, and I believe that working directly with the patients that benefit from these devices is the best way for me to do that in the field I want to contribute to. Eventually, I would like to either start or work for a non-profit organization that provides affordable or free options for patients that cannot afford a prosthesis.

4. What advice would you share with your freshman self?

I would tell my freshman self to make at least one friend in all of her classes and step out of her comfort zone to start study groups as soon as possible. It will be more helpful in the long run than it is scary to initially reach out. We choose how we want to get through a class, and we should try to get through it with others. It may be difficult to reach out to your professors for help, so asking peers first may be easier. I would also tell her to not be too critical of herself because we learn from our mistakes. We cannot change the past, but we can use it to prepare us for the future.

Steven Tinoco Calvillo | Software Engineering

SJSU Alumni Association Dean's Scholarship

Mentor | Brother | Resilient

1. Why did you choose your major?

Growing up, I always knew that I was going to be an engineer. Did I know what an engineer was or what they did? No. Yet, the idea kept growing in my mind. It wasn't until I attended an engineering camp hosted by Sonoma State University that I truly understood what an engineer does. Beyond the technical aspects, engineers help people and work to solve the world's problems. I, too, want to help, especially those in my underrepresented Latino community. Although I always knew I was destined to be an engineer, I didn't know how to achieve it, and I lacked the necessary support. Despite still being in school, I hope to be the support that others need when overcoming barriers.

2. Are you involved in any school or community activities?

First and foremost, I'm a scholar. Yet, I have still found ways to be involved in other aspects of SJSU. In my first semester of college, I took a leap of faith and joined the brotherhood of Pi Kappa Phi fraternity. Coming into college, I was terrified of the academic intensity and making friends. Joining the fraternity was an avenue for me to get out of my shell, be more social, and build a network of people who would guide me through my engineering journey. This step also signaled to my family that we were moving up in the world. Finally, my parents were able to provide new opportunities for their children and give them a true college experience.

The fraternity plays a significant role in my life, but the Chicano Latino Youth Leadership Project

holds a special place in my heart. For the past two years, I have dedicated countless hours to mentoring and fostering Latino youth and their leadership skills—something I wish I had growing up

3. What is your dream job?

At the moment, I don't have a dream job. Working for a big tech company interests me, but I'm also intrigued by the idea of starting my own company. There are many options I need to explore.

4. What advice would you share with your freshman self?

I wouldn't share any advice with my freshman self. I believe that I was able to grow as a person because I was forced to be on my own. I would rather guide myself and be there for myself

Oryza Tirtawijata | Mechanical Engineering

John W. Akin Engineering Scholarship

Ambitious | Diligent | Dedicated

1. Why did you choose your major?

Early on in my life, I was fascinated by how everything worked. Whether it was my grandma's blood pressure monitor or my PlayStation 2 controller, my curiosity would urge me to disassemble and explore how every part works in tandem - from how the cuff inflates or how the controller's joystick recenters itself. Above all, I recognized the power of the ability to understand, design, and solve issues that can improve the quality of life. As a result, I chose mechanical engineering due to its versatility in exploring every aspect of modern life, from medical devices to defense technologies.

2. Are you involved in any school or community activities?

Currently, I am a member of the engineering honor society, Tau Beta Pi where I can network with like-minded individuals. Additionally, I'm involved in the Formula SAE Spartan Racing as this year's SR-16's Hub Designer. I predominantly joined to gain practical experience in working with a half-sized Formula car and compete against other universities.

3. What is your dream job?

My ultimate goal is to work in the automation industry, specifically on projects like space-traveling rovers or self-learning robotics. An alternative path I'm considering is working in the defense sector. I'm drawn to both of these industries due to the impact it has on shaping, enabling, and protecting the future.

4. What advice would you share with your freshman self?

Get involved early - dive into academic and extracurricular activities immediately, and grow alongside your community. Embrace challenges - even when they feel overwhelming and giving up seems easier. Remember, there's a reason you're in this situation, and it's an opportunity for growth. Balance is key; while it's important to prioritize your work, it's equally vital to care for your well-being. Stay curious and innovative. Keep asking questions, and never stop learning.

Dhruv Varshney | Computer Engineering

Dale and Sue Missimer Engineering Scholarship

Passionate | Hard-Working | Perseverer

1. **Why did you choose your major?**

My decision to study computer Engineering came from my long fascination of finding out how they work. I'd always look at a Motherboard and wonder how such small piece of can be capable of so many complex tasks. My hobby grew up breaking apart toys to see the computers Inside to developing my own Embedded System Projects.

2. **Are you involved in any school or community activities?**

Yes, I'm actively involved in several school and community activities that align with my interests and goals.

I served as the CFO of Associated Students, where I was responsible for managing the financial aspects of student activities. I chose this role because I have a keen interest in financial management and wanted to apply these skills in a practical way that benefits my peers. Being CFO allowed me to ensure that student programs were well-funded and that resources were used effectively to enhance the student experience. This experience not only improved my financial acumen but also taught me the importance of transparency and strategic planning in leadership. Additionally, I served as the Vice President of IEEE (Institute of Electrical and Electronics Engineers). I chose this position because of my deep passion for technology and innovation. In this role, I was responsible for organizing events, workshops, and seminars that connected students with industry professionals and provided opportunities for skill development. Being Vice President allowed me to lead a community of like-minded individuals who are dedicated to advancing technology, and it provided me with the opportunity to contribute to the professional growth of my peers while expanding my own knowledge in the field.

These roles have been instrumental in my personal and professional development, as they allowed me to lead, learn, and make a positive impact within my school and community.

3. **What is your dream job?**

My dream job is to become a Chief Technology Officer (CTO) at a leading tech company, focusing on solving complex problems in AI and machine learning. The industry faces challenges in making AI systems more reliable, ethical, and accessible. As CTO, I aim to drive innovation that ensures AI technologies are safe, fair, and beneficial to society. I plan to make a difference by advancing the ethical use of AI, improving accessibility, fostering a culture of learning and diversity, and mentoring the next generation of tech leaders to create a positive impact on the world.

4. **What advice would you share with your freshman self?**

Take every opportunity that comes your way.

Bhavagyna Vegunta | Mechanical Engineering

Benzing Fellowship

Attentive | Persistent | Hard Working

1. **Why did you choose your major?**

I chose Mechanical Engineering because I am fascinated by the mechanics of how things work and driven by the challenge of solving complex, real-world problems. I was especially drawn to the field

for its blend of physics, mathematics, and innovation. Through my undergraduate academic years and various opportunities, I've seen how Mechanical Engineering can be used to create practical, impactful solutions that improve our world. It's this combination of curiosity, analytical thinking, and creativity that makes MechE the perfect fit for me.

2. Are you involved in any school or community activities?

Throughout the school year, I have been involved in various electromechanical / materials engineering research projects and currently also work as an aerothermal intern, both of which have been instrumental in my academic and professional development. I chose to pursue these activities because they allow me to apply theoretical knowledge to real-world problems. Being part of these groups means a lot to me as they provide an environment of collaboration and innovation, pushing me to grow both technically and personally. It's also a chance to build connections with like-minded peers and mentors who inspire me to push my boundaries.

3. What is your dream job?

My dream job is to work in mechanical analysis, focusing on areas such as structural mechanics and computational fluid dynamics (CFD), with a particular emphasis on thermal management in electromechanical systems. I'm passionate about understanding the intricate interactions between materials, structures, and thermal environments to develop innovative solutions that enhance performance and efficiency. Whether it's optimizing heat dissipation in high-performance electronics or designing advanced cooling systems for machinery, I'm excited by the opportunity to apply my analytical skills to real-world challenges.

4. What advice would you share with your freshman self?

I'd tell my freshman self to dive into everything early—join research groups, take on internships, apply to scholarships, and start networking from day one. These experiences are crucial for figuring out your passions and gaining the practical skills that aren't always taught in class. I'd also emphasize the importance of forming study groups and building relationships with professors, as they can offer guidance and open doors to opportunities. Another key piece of advice would be to embrace challenges, even when they seem intimidating; these are the moments that lead to the most growth.

Matthew Vu | Biomedical Engineering

Future of Silicon Valley Scholarship

Driven | Innovative | Resilient

1. Why did you choose your major?

I chose Biomedical Engineering because it allows me to see the tangible impact of my work on people's lives. From a young age, I was drawn to engineering, but it was a personal experience with a family member's medical condition that solidified my decision to enter this field. Seeing how medical devices can significantly improve a person's quality of life inspired me to contribute to advancements in healthcare. Despite facing challenges such as balancing rigorous coursework

with part-time jobs, I remained committed to my goal. These experiences have only strengthened my passion for making a difference in the medical field.

2. Are you involved in any school or community activities?

I am active in the Biomedical Engineering Society (BMES) organization at San Jose State University. I chose to participate in BMES because it offers a platform to connect with like-minded peers and professionals who share a passion for advancing healthcare through engineering. This organization has been instrumental in expanding my knowledge beyond the classroom, providing opportunities to attend workshops, seminars, and networking events. Through this involvement, I hope to continue growing both personally and professionally while making meaningful contributions to the field of biomedical engineering.

3. What is your dream job?

My dream job is to work in design quality for the manufacturing of medical devices. A critical issue in the industry is ensuring that devices are not only innovative but also consistently manufactured to the highest standards of safety and effectiveness. I want to play a key role in bridging the gap between design and production, ensuring that every device is manufactured reliably. By focusing on design quality, I aim to help streamline these devices to market faster and more efficiently, ultimately improving patient outcomes and making a lasting impact on the healthcare industry.

4. What advice would you share with your freshman self?

If I could advise my freshman self, I'd stress the importance of getting involved early in student clubs like BMES. These groups offer invaluable networking and hands-on learning experiences. I'd also encourage seeking internships and volunteer opportunities right away to gain real-world experience. Forming connections and professional relationships with professors are the key to success. Lastly, I'd remind myself to take advantage of networking opportunities, as they can open doors to future career paths and professional growth.

Justin Wang | Mechanical Engineering

Silicon Valley Engineering Scholarship (SVES)

Pragmatic | Athletic | Introspective

1. Why did you choose your major?

I chose mechanical engineering because I have always had a interest in engineering since my high school's engineering technology class. I mainly choose mechanical engineering because of the major's versatility and opportunities for hands-on experiences.

2. Are you involved in any school or community activities?

While in community college, I was the vice president of both the STEM club and the Manufacturing Technology club. I designed and produced a product from a teacher request that saved the school \$300 in teaching supplies. This experience helped to deepen my knowledge of both CAD and manufacturing. I hope to gain similar experience and knowledge through both Theta Tau and the American Society of Mechanical Engineers.

3. What is your dream job?

My dream job is to work as a professional engineer at Anduril, working on systems and technologies that serve to protect my fellow service members from a variety of threats.

4. What advice would you share with your freshman self?

To get involved with student life as much as possible, and to prioritize the university's bachelors program over the community college's associate's degree.

Thomas Woneis | Aviation and Technology

Ching Family Scholarship

Dedicated | Stoic | Compassionate

1. Why did you choose your major?

While I would like to say that aviation has been a childhood dream of mine and that choosing to major in it was a no-brainer, I think it is more reasonable to say that aviation chose me. I always planned to take after my grandfather who was an aerospace engineer at Lockheed Martin. However, as I got older and took increasingly difficult math and science classes, and started immersing myself in STEM clubs and projects, I realized that the field was not right for me. I was left clueless about what I would do in the future when one day a friend suggested to me that I play Microsoft Flight Simulator with him. We would soon spend hours on end cruising around in the game, perfecting our skills to see who could beat each other in landing competitions, and flying real-life routes as if we were airline pilots. Flying was pure fun, which made getting my private pilot license the following year extremely easy. Now with over 100 flight hours, SJSU's aviation program was the perfect choice because of all the resources (cheap plane rentals, flying clubs, and aviation courses) that I will have to efficiently get the rest of my pilot licenses.

2. Are you involved in any school or community activities?

I believe that climate change and pollution pose an existential threat to our species. To me, doing everything I can to reverse these critical issues and bring awareness to them is very important. As of right now I have volunteered for many park cleanups in San Jose and many recycling efforts at my high school and middle school. I also put up posters at my school to demonstrate the harms landfill pollution brings to our waterways since we have a landfill in close proximity to our school. I want people to be aware of the issues that not only directly affect their local area but in the world as a whole and take every step they can to change their habits and behaviors to deter this urgent environmental crisis.

3. What is your dream job?

My dream job is to be an airline pilot. Reconnecting loved ones and allowing people to experience the world fulfill my desire to help others. With the extensive flying experience I will have as an airline pilot, I plan to work on solving some of the major problems in the industry. By providing free flights for children through the Young Eagles program, I hope to make aviation more accessible for all. In this effort, I also want to work in programs that support increased access to aviation for

underrepresented groups. Charity work, for example by flying adopted pets to their new owners in the Pilots N Paws organization is also part of my plans.

4. What advice would you share with your freshman self?

As a freshman in college, I would suggest to my younger high school freshman self to try as many things as possible. Try new foods, try new clubs, try new sports, try new study techniques, and try everything possible until you find what works best for you. The worst thing that a person can do is be afraid of changing something because they might fail.

Wilson Wu | Mechanical Engineering

Munson Engineering Scholarship

Hardworking | Dedicated | Leadership

1. Why did you choose your major?

I chose mechanical engineering as my major because I wanted to work with my hands. Since I was a little boy, I have loved to build things. From assembling small toys like Legos to manufacturing big complicated parts of robots, I have enjoyed every single step along this journey. Not only did I grow older, but my passion and skillset for making things also grew.

However, acquiring my skills in building things did not come so easily. Both my immigrant parents had to work day and night in restaurants and never had time to nurture my desire to create things. I had to learn everything from scratch without any help or aid from anyone. At first glance, my childhood may seem terrible, but in reality, this independence aided me in the future. In high school, I joined a newly formed robotics team and showed them my dedication to building ultimately landing me the role of the team's lead machinist. I had to figure out everything the team needed, from small power tools to heavy machinery such as a metal lathe. The learning curve to understand how to use these items was extremely tough, but I was resilient enough to keep trying even if I failed. After two years of hard work, I have obtained knowledge in the world of manufacturing, and I would love to continue expanding it with a degree in mechanical engineering.

2. Are you involved in any school or community activities?

In high school, I did community service by teaching free classes to elementary students. I taught beginners how to play the saxophone and an introductory course to Spanish classes in middle school.

When I was an elementary school student, I had always wanted to learn something new, but because my family was not well off then, I never received those opportunities. I decided that I wanted to provide these free opportunities to elementary students because of this. After teaching them these classes, I do hope that my students enjoyed them and learned something new.

3. What is your dream job?

My dream job is to become a high school machine shop teacher. The reason for this is that I want to provide manufacturing experience to students with a passion for manufacturing and fabrication. In my high school, there are no classes that allow students to express creativity and their passions through the use of machines, and I wish I could help solve that problem. If I could create a machine

shop inside a high school, not only would some students love it, but those students would also be prepared to enter apprenticeships and manufacturing jobs directly out of high school.

This job would be for me because I know the feeling of high schoolers who want to use heavy machinery. After all, I was one of them. If I were to become a high school machine shop teacher, I would wish that I could give a student a clear path to their future career or even just an enjoyable school year.

4. What advice would you share with your freshman self?

The main advice I would give to my freshman self is to follow your passion for making things and do whatever it takes to get there. When I was a freshman, I did not know what career or major I wanted to pursue because there were so many options. If I locked in on my passion for using my hands, I would have acquired two more years of machinery experience with robotics clubs which would have greatly benefitted me today.

Volodymyr Zhukov | Aerospace Engineering

Calm | Diligent | Goal-oriented

1. Why did you choose your major?

Since childhood, I have always had an interest in space. I have been watching TV shows about space since I was 8, and about other technical things as well. In school, I was not sure where to study, but in my last two years, I started to look into majors available for me and Aerospace Engineering could combine my skills and interests. Applying to a US university also meant that I had to pass many different tests, and it was the hardest for me to learn another language. The English test took me three attempts to take until I could pass it. The next challenge I met was a totally different educational system. It took me a few semesters to understand how it works, but when I did, it was finally possible for me to focus purely on studying and developing. Maybe those challenges as well as many smaller ones I met before allowed me to always keep pushing until I reach results or complete my goals, and it was very useful in my undergrad years.

2. Are you involved in any school or community activities?

I am involved with several school projects and I am helping group of AE student to create a club out of a Spaceport America Cup project I was working on. I like to keep myself busy and have goals that I treat as a step on my pathway. I always see more steps after I pass previous ones. I want to make a project I was working on something similar to Spartan Racing Club at some point, and I already was lucky enough to be in a leadership position at the very fundament of it. I was more involved in community activities before my senior year, which consisted of International House involvement with many different activities, holidays, and intercultural learning. It was a great experience and taught me more than I could know I would get.

3. What is your dream job?

I want to participate in a new Space Race and learn more about how the space industry works. I really like space and manufacturing, and want to be involved in space mining. I developed some ideas, take classes to know how to improve them and wanted to get to work on real-world problems

in that direction. I believe that it is possible to move a lot of industry in space where it will not have such an impact on Earth and its ecosystem. It might take many decades but I feel excited and motivated when I think about it. My dream is to fund my own company connected to the aerospace and space industry at some point.

4. What advice would you share with your freshman self?

I would recommend my younger self to not be so shy about my language, and spend more time with my classmates in shared space.

Wendy Macias-Torres | Aviation and Technology

Passionate | Creative | Dedicated

1. Why did you choose your major?

I chose my major in aviation after a memorable experience as a passenger on Aeromexico during a turbulent flight. While others around me were anxious, I was captivated by the flight crew's calmness and skill in ensuring our safety. Initially, I faced challenges with the rigorous math and physics coursework, often doubting my abilities and considering a change in path. However, I realized that my dedication transformed into motivation; I sought information and dedicated extra time to mastering the material. This experience taught me resilience and the importance of perseverance, fueling my passion for aviation and inspiring me to contribute to the field I admire.

2. Are you involved in any school or community activities?

During 2023 at San Jose State University, I became actively involved in the Alpha Omicron Epsilon (AoE) sorority, which has profoundly shaped my college experience. As ambassadors for the Silicon Valley Women in Engineering (SV WiE) Conference, we assisted female technical leaders in discussing emerging technologies and career success, allowing me to connect with industry professionals and understand the unique challenges women face in tech. Taking on leadership roles as a coordinator helped me develop my organizational and teamwork skills while planning initiatives that strengthened our sisterhood and raised awareness for important causes. Through AoE, I've learned the value of collaboration and gained lifelong friendships, all while embodying the principles of leadership, scholarship, and service that have significantly influenced my personal and academic growth at SJSU.

3. What is your dream job?

My dream job is to become an air traffic controller, a role I believe is crucial for ensuring the safety and efficiency of air travel. One existing problem in the industry is the increasing congestion in airspace, leading to delays and heightened stress for both pilots and passengers. I plan to address this issue by advocating for and implementing advanced technology solutions, such as AI-driven traffic management systems, which can optimize flight paths and reduce bottlenecks. Additionally, I aim to promote a culture of collaboration and communication among air traffic controllers, pilots, and airlines to enhance situational awareness. By improving operational efficiency and safety protocols, I hope to create a more seamless travel experience for everyone involved, ultimately making air travel safer and more enjoyable for passengers.

4. What advice would you share with your freshman self?

If I could give advice to my freshman self, it would be to prioritize making connections and getting involved in student clubs and activities. Joining clubs related to my interests, like aviation, would not only enhance my skills but also help me meet like-minded peers. I'd encourage myself to seek out internships early on to gain practical experience and start networking with professionals in the field. I'd remind myself that building friendships and a support network can make the challenges of college much easier and more rewarding.