



The Department Congratulates

2021 Newnan Student Excellence Award Winner

Ms. Gaia Bach



Gaia recently graduated from the BSISE program and was awarded Cum Laude honors for her outstanding academic record. She also achieved a notable record of service to the ISE program as a former Treasurer and Vice President of the Institute of Industrial & Systems Engineers (IISE) student chapter. While serving in those roles, Gaia managed the transition of club meetings to online platforms such as Discord and Zoom due to the COVID-19 pandemic and raised money to provide free graduation stoles for the class of 2021. She is also a member of Tau Beta Pi Engineering Honors Society, and a past member of Engineers Without Borders and Society of Women Engineers (SWE). As a member of these organizations, she was able to mentor freshman engineering students to help them with semester scheduling, resume development, and tutoring. She is committed to giving back to the ISE community as her record clearly shows.

Through internship experiences at Moog, Inc. and Cytek Biosciences, Gaia has developed a strong interest in project management and lean production systems. She intends to pursue a Master of Science degree in Industrial and Systems Engineering and explore further topics in continuous improvement and systems optimization methodologies. She writes:

“I value continuing education because it will allow me to be an even more experienced member of my organization ... I have great pride in being an industrial and systems engineer and am honored for being a part of this amazing community.”



Some of Gaia’s favorite hobbies include surfing, dancing, and rock climbing. She reports that she has been dancing since high school where she danced competitively and performed in front of large audiences. She has also performed for Disneyland and the City of Torrance parades for 3 years and has continued dancing

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Gaia Bach continued:

competitively for an urban dance team at San Jose State University. Her passion for surfing began in the summer of 2021 when she surfed in Hawaii for the first time. Since then, she has gone surfing every week.

Before SJSU? Early years...

I was introduced to the eye-opening possibilities of being a woman in engineering when my middle school took all the girls on a field trip to ExxonMobil. Performing electrical circuit experiments and achieving the farthest distance in our team-assembled mini vehicles astonished me as a young girl. Since then, I knew I wanted to pursue something innovative and impactful to the world as a woman in engineering.

Why did you choose SJSU for ISE?

I knew I wanted to attend San Jose State University because of their top-ranked engineering program being the largest contributor to the Silicon Valley workforce. During my senior year of high school, I attended the engineering orientation held at the Charles W. Davidson College of Engineering building and learned about Industrial and Systems Engineering. I then learned that being an Industrial and Systems Engineer requires creativity and resourcefulness to efficiently identify solutions and areas for improvement. The idea of constantly being productive and having visionary projects deeply resonated with me.

Sr. Design project? Challenges/achievements

The client, Code With Us, is a Silicon Valley based EdTech organization founded in 2016 that provides coaching and tutoring services in the field of coding and robotics for kids ages 5 through 18. The main problem that was addressed is the customer satisfaction rate. The main challenge that we faced was initially utilizing less than one year of data beginning in the start of the COVID-19 pandemic. The team implemented solutions to address 76% of unsatisfied customers from April 2020 to October 2021 and increase retention of customers which will potentially save the company about \$256,029.41 as a NPV of 5 years.

Current position? Are you in the MS program now?

I will begin my Master of Science in Industrial and Systems Engineering at USC Viterbi School of Engineering in Fall 2022. In the meantime, I would like to apply for internship or job positions to gain more industry experience.