Jonathan Krawczyk

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Education

Auburn University, Samuel Ginn College of Engineering
Bachelor of Science Computer Engineering (B.S.C.E), Cum Laude, GPA: 3.5/4.0 May 2025
Dean's List Spring 2024, Fall 2024, Spring 2025

Experience

Undergraduate Teaching Assistant (Part-Time), *(October 2024– May 2025),* Auburn University**,** Auburn, AL
- Provided assistance to 20+ students for the Embedded Systems lab by administering quizzes and lab demonstrations.
- Provided help to students regarding the troubleshooting processes.

Electrical Engineering Intern, *(July 2023- August 2023),* Ilsa S.p.A**,** Arzignano, Italy
- Evaluated engineering feasibility of installing solar arrays on top of Ilsa's Molfetta and Arzignano manufacturing facilities.
- Estimated 440,000 and 110,000 kWh annual solar potential; supported payback model with ROI estimates in 3 to 4 years for both plants respectively.
- Projects were approved for funding and subsequently resulting in providing a 100% renewable energy source to the operations

Manufacturing Engineering Intern, *(June 2022- August 2022),* J.M Huber Corporation**,** Atlanta, GA
- Analyzed manufacturing data obtained through Oracle to determine the Overall Equipment Effectiveness (OEE).
- Used data to isolate and prioritize problematic maintenance issues identifying the top 5 most common bottlenecks for each two different manufacturing facilities for resolution.
- Worked directly on a packing line to observe and gather live data to identify value streams and bottlenecks in support of a Six Sigma project.

Activities

Engineering Capstone Project, *(January 2025 – May 2025)* Auburn, AL
- Worked with a team of electrical and computer engineers to create a digital rights management (security concept) to encrypt and decrypt files.
- Utilized block chaining and arithmetic encryption standard for the cryptography of the files.
- Created a bio-authentication unit that scans users' fingerprints to unlock and lock files.

Auburn Study Abroad Engineering Project, CENER, *(May 2023 – July 2023)* Pamplona, Spain
- Sole electrical engineering member of a team that evaluated using a thermoelectric cooler's ability to heat water using solar energy on cloudy days.
- Utilized TRNSYS software to simulate conditions of the thermoelectric heat pump.
- Performed financial analyses to compare the commercial feasibility of a solar powered water heater to traditional water heater demonstrating feasibility and return on investment.

Relay For Life, (August 2021 - May 2025)
- Regularly volunteer with activities to raise money to fund research for the American Cancer Society.
- Helped to contact companies as well as set up events to raise money for research.
- Work in the Event Planning group along with other students to plan events.

Skills

Java, Java Script, C++, Verilog, Python, MatLab, Microsoft Office, Data Analysis using Excel Continuous Improvements, Solution Development,, Technical Presentations, Computer Engineering, Digital Logic Circuits, Embedded Systems, Circuit Analysis, Digital Electronics, Signals and Systems, Communication, Deadline Prioritization, Computer Architecture, ASIC Design, Debugging, Lean Six Sigma, Data Mining, AI and Neuromorphic Hardware.