Jahmel Garduno

jjgardun@asu.edu | www.linkedin.com/in/jahmel-garduno-231282350 | (209) 981-7194

OBJECTIVE

Aspiring Electrical Systems Engineer with manufacturing microelectronics and entrepreneurship secondary focuses seeking an opportunity to gain hands-on experience as an intern. Dedicated to applying technical knowledge and problem-solving skills to contribute to innovative projects and advance professional growth in the field of electrical engineering. Due to my experiences and knowledge, I would be a great candidate as an Engineering Intern.

EDUCATION

B.S. Electrical (Systems) Engineering Graduating May 2026
Arizona State University, Mesa, AZ
Certifications: Red Cross CPR & First Aid

WORK EXPERIENCE

Sun Devil Fitness Center | *Supervisor's Manager* 2024 - Present

- Manage a team to perform wellness checks and to keep the facility sanitized and organized.
- Specialize in medical attention if needed and train to keep the facility in order during these times.
- Marketed items at the facility to customers to help them with their daily routine at the gym

PROJECTS

EGR 314 Smart Cooling Enclosure | Spring 2025 | Individual Report | Team Report |

- Designed and built a temperature-controlled enclosure using microcontrollers, sensors & display
- Led the integration of UART-based daisy chain communication protocols across subsystems (Sensor, HMI, Fan, and WiFi)
- Programmed the PIC18F microcontroller to transmit temperature data and control fan speed through a structured messaging protocol
- Designed the system's power budget, button interface logic, and implemented LEDS to show live temperature changes
- Collaborated with a team to document the block diagram, message structure, and final demo presentation

Review of Glass Interposers for Semiconductor Packaging | Spring 2025

- Researched the electrical, thermal, and mechanical advantages of glass substrates for microelectronics, emphasizing high resistivity, tunable thermal expansion, and packaging reliability.
- Analyzed fabrication techniques such as Through-Glass Via (TGV) technology and their impact on performance in high-density, high-frequency packaging.
- Examined current applications of glass interposers and identified future research directions based on gaps in literature and industry challenges.

Bike Innovator Embedded Systems | Fall 2024

Collaborated with a team of four to design an embedded system to reduce cyclist impact from accidents

- Managed the Microcontroller and Power Regulation Subsystem and routing their connections
- Designed the power regulator circuit and pcb by using KICAD
- Soldered components and worked up a power budget for final report

TECHNICAL SKILLS

Design and Modeling Tools: KiCad, Altium, Soldering, Cadence, Solidworks, MatLab/Simulink, C and Python Coding, Arduino, Google Doc/Slides/Excel, Powerpoint, ChopShop Bot, Laser Cutter