Summary

I'm an early-career engineer with a strong foundation in classical control systems and practical experience in automation and vehicle dynamics. I have worked with PID tuning, system stability, and real-world control applications.

I've been involved in hands-on environments—including warehouses, grapevine nurseries, agricultural equipment manufacturers, and electronic labs. Passionate about optimizing control systems to improve efficiency in real-world applications. Seeking opportunities in automation and automotive control systems.

Technical Skills

Software SolidWorks, Simulink, Python, MATLAB, AutoCAD, C/C++

Testing Electronics lab test equipment, oscilloscopes, power supplies, digital multimeters, hardware diagnostics, data acquisition

Fabrication Soldering, machining, electrical & mechanical troubleshooting, automotive repair

Experience

11/2024 - Calibration Technician, Liberty Test Equipment, Roseville, CA

03/25 • Executed high-precision calibration of oscilloscopes, power supplies, and digital multimeters in an A2LA-accredited lab, ensuring compliance with industry standards.

05/2023 - Certification Test Engineer, Trackonomy Systems, San Jose, CA

06/2024 • Led hardware compliance testing for CE, FCC Part 15, and UL standards, increasing certification approvals by 30%.

 $\,\circ\,$ Conducted root cause analysis to improve product reliability and regulatory compliance.

O Collaborated with cross-functional teams to secure market access for new products.

03/2019 - Maintenance Technician, Peregrine School, Davis, CA

11/2022 Managed facilities repair and maintenance, including cost estimation and project planning.

O Coordinated with stakeholders to complete improvement projects on time and within budget.

05/2013 - Certified Technician, Community Housing Opportunities Corp., Vacaville, CA

06/2016 O Performed repairs and maintenance for a weatherization non-profit, ensuring operational efficiency and safety

O Provided excellent customer service and community support.

Education

2016 – 2024 California State University, Sacramento, CA

- Master of Science in Electrical and Electronic Engineering, 12/2024
- O Bachelor of Science in Mechanical Engineering, 05/2018

Projects

Graduate Developed Sequence-to-Sequence neural network models to predict control outputs for closed-loop

Thesis temperature regulation systems, improving model accuracy in temperature stability applications.

Racing Machined and tested components for the Formula SAE racing team. In the 24 Hours of Lemons Projects race, contributed to mechanical repairs and vehicle optimization for endurance performance.

Various Simulated inverted pendulum stabilization for self-balancing scooter in Simulink. Modeled evasive

Controls vehicle maneuvers using system equations in MATLAB. Conducted vehicle dynamics and model

Projects predictive control simulations.