

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. I'm passionate about optimizing control systems to improve efficiency in real-world applications. I'm seeking opportunities in automation controls and compliance.

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
 - 03/2025 ○ 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%.
 - Conducted root cause analysis to improve product reliability and regulatory compliance.
 - 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.
 - Coordinated with stakeholders to complete improvement projects on time and within budget.
- 05/2013 – **Certified Technician**, *Community Housing Opportunities Corp.*, Vacaville, CA
 - 06/2016 ○ Performed repairs and maintenance for a weatherization non-profit, ensuring operational efficiency and safety.
 - 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
 - **Bachelor of Science in Mechanical Engineering**, 05/2018

Projects

- Graduate Thesis Developed Sequence-to-Sequence **neural network** models to predict control outputs for closed-loop temperature regulation systems, improving model accuracy in temperature stability applications.
- Racing Projects Machined and tested components for the Formula SAE racing team. In the 24 Hours of Lemons race, contributed to mechanical repairs and **vehicle optimization** for endurance performance.
- Various Controls Projects Simulated **inverted pendulum** stabilization for self-balancing scooter in Simulink. Modeled evasive vehicle maneuvers using system equations in MATLAB. Conducted vehicle dynamics and model predictive control simulations.