

## Summary

Early-career engineer with a strong background in mathematics, modeling, and control systems, and practical experience applying theory to real-world engineering challenges. I began my studies at San Francisco City College, where I gained an introductory understanding of seismology, and continued through Mechanical and Electrical Engineering degrees focused on problem-solving with data and system dynamics. Skilled in Python, MATLAB, and C-based environments, with hands-on lab experience using test equipment and analyzing signals. My problem-solving approach is pragmatic and rooted in curiosity, and I bring motivation to adapt mathematical tools to complex problems such as seismic imaging and velocity modeling.

## Technical Skills

Software	Python, MATLAB, Simulink, Linux/UNIX command line, C/C++, SolidWorks, AutoCAD
Diagnostics	Oscilloscopes, multimeters, power supplies, calibration, data acquisition
Fabrication	Soldering, machining, prototyping, hands-on electrical & mechanical experience
Controls	Classical control theory, feedback systems, PID tuning

## Experience

- 11/2024 – **Calibration Technician**, *Liberty Test Equipment*, Roseville, CA
  - 03/2025 Executed high-precision calibration of electronics test lab equipment in an A2LA-accredited lab.
- 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 weatherization for a non-profit, ensuring home efficiency and natural gas appliance safety.
  - Provided excellent customer service and community support.

## Education

- 08/2018 – **Master of Science, Electrical and Electronic Engineering**, *California State University, Sacramento*, CA
  - 12/2024 GPA: 3.67
  - Focus: Control Systems, Signal Processing, Modeling, Robotics
  - Thesis: Applied a **neural network** + attention mechanism to a classical controls problem.
- 08/2016 – **Bachelor of Science in Mechanical Engineering**, *California State University, Sacramento*, CA
  - 05/2018 Coursework: Dynamics, Thermodynamics, Mechanics of Materials, Fluid Mechanics
  - Senior project involved applying mechanical design principles to an illuminated roadside pantograph.

## Projects

- Racing Projects Machined and tested components for Sac State Formula SAE team; participated in 24 Hours of Lemons endurance race, contributed to mechanical repairs and **vehicle optimization**.
- Simulation Modeled **inverted pendulum** stabilization using control theory.