J. Echeverria

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www.jecheverria5252.com/2025-resume-x4jK92vD/Electrical.pdf

Summary

Early-career Electrical Engineer with experience in compliance testing, circuit validation, and hardware diagnostics. Skilled in oscilloscopes, multimeters, power supplies, and CAD-based documentation. Proficient in Python, MATLAB, and C-based environments for modeling, analysis, and data processing. Hands-on background in electronics labs and field environments has shaped a problem-solving approach focused on accuracy, reliability, and system performance. I bring both technical rigor and applied testing experience to support product development and validation.

Technical Skills

Controls	PID tuning, ladder logic Allen-Bradley, classical control theory and feedback
Software	Simulink, RSLogix, MATLAB, Python, AutoCAD, SolidWorks, C/C++
Diagnostics	Oscilloscopes, multimeters, power supplies, electronics troubleshooting, calibration, emissions testing, I/O validation, Digital acquisition
Fabrication	Soldering, machining, prototyping, automotive diagnostics, hands-on electrical & mechanical

Experience

11/2024 – 03/2025 **Calibration Technician**, *Liberty Test Equipment*, Roseville, CA
- Executed high-precision calibration of electronics test lab equipment in an A2LA-accredited lab.

05/2023 – 06/2024 **Certification Test Engineer**, *Trackonomy Systems*, San Jose, CA
- 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 – 11/2022 **Maintenance Technician**, *Peregrine School*, Davis, CA
- 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 – 06/2016 **Certified Technician**, *Community Housing Opportunities Corp.*, Vacaville, CA
- Performed weatherization for a non-profit, ensuring home efficiency and natural gas appliance safety.
- Provided excellent customer service and community support.

Education

08/2018 – 12/2024 **Master of Science, Electrical and Electronic Engineering**, *California State University*, Sacramento, CA
- GPA: 3.67
- Focus: Control Systems, Signal Processing, Modeling, Robotics
- Thesis: Applied a **neural network** + attention mechanism to a classical controls problem.

08/2016 – 05/2018 **Bachelor of Science in Mechanical Engineering**, *California State University*, Sacramento, CA
- 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.