

Electromechanical Design Engineering Intern

📍 Los Angeles, CA 90001

- 💡 **Problem-Solving**
Skilled in troubleshooting hardware challenges, becoming the team's go-to resource for complex issues.
- 👥 **Team Collaboration**
Fostered collective achievement by actively engaging in cross-disciplinary discussions for optimized outcomes.
- 🔪 **Creativity**
Employed innovative approaches in designing prototypes, receiving recognition from peers and faculty alike.
- 🔄 **Adaptability**
Successfully adjusted project scope based on feedback, showcasing resilience in fast-paced environments.
- ✅ **Attention to Detail**
Ensured compliance with technical specifications during project phases, resulting in fewer errors at final review stages.

- Circuit Design
- Embedded Systems
- PLM Management
- Electronics Prototyping
- Debugging Techniques
- Signal Processing
- Schematic Capture
- Arduino Programming
- Analog Circuit Design
- Digital Systems
- Testing & Validation
- Communication Protocols
- Power Management
- Systems Integration

Detail-oriented Electrical Engineering student with hands-on experience in electromechanical design and development through academic projects. Proficient in circuit design, component selection, and debugging, showing a strong grasp of engineering principles. Worked collaboratively within cross-functional teams, aiming for innovative automotive technology advancements. Developed prototypes for effective project demonstrations, emphasizing clarity in technical documentation and teamwork to ensure project success. Excited about contributing skills to advance Rivian Innovations' mission while enhancing personal expertise in the field.

Coursework: Circuit Design, Power Systems, Electronics, Control Systems

- **Design Software:** CAD, MATLAB, LTspice
- **Prototyping Platforms:** Arduino, Raspberry Pi, FPGA
- **Programming Languages:** C, C++, Python
- **Simulation Tools:** Simulink, Multisim, PSpice
- **Database Management:** SQL, MongoDB, PLM Systems
- **Microcontroller Systems:** 8051, PIC, ATmega
- **Network Protocols:** PCIe, CAN, Ethernet
- **Testing Equipment:** Oscilloscope, Multimeter, Function Generator
- **Version Control:** Git, SVN, Mercurial
- **Cloud Computing:** AWS, Azure, Google Cloud

Supported electromechanical design efforts in a capstone environment, focusing on prototype development and testing methodologies.

- Designed a mixed-signal circuit as part of an innovative automotive capstone project.
- Developed Proof of Concept prototypes, streamlining design processes for challenging automotive applications.
- Collaborated effectively with peers, managing design specifications to align with PLM standards.
- Conducted thorough debugging of hardware issues, achieving substantial improvements in reliability.
- Participated in multidisciplinary discussions with software and mechanical teams to enhance overall project performance.

- Assisted in researching electrical architectures, facilitating reports on emerging technologies in transportation.
- Utilized CAD software for precise schematic captures in experimental circuits.
- Engaged in documentation processes for research submissions, promoting clear communication and insight.
- Participated in presentations demonstrating research findings, enabling peer engagement and knowledge sharing.

Collaboration Tools

Technical Documentation

LANGUAGES

English Native

Spanish Intermediate

MY CAREER



● Electromechanical Design Intern at University Project (8 Months)

● Electrical Engineering Research Assistant at Academic Research (7 Months)

● Embedded Systems Developer at Course Project (3 Months)

Embedded Systems Developer

Course Project 📅 September 2024 - December 2024 📍 Los Angeles, CA

Developed functional embedded systems showcasing capabilities for real-time data acquisition in automotive settings.

- Prototyped an embedded system using Arduino for dynamic data collection in various automotive scenarios.
- Implemented effective communication protocols (I2C, SPI) ensuring smooth interactions between components.
- Validated designs through rigorous testing, reporting results for iterative improvement cycles.
- Collaborated with team members during university engineering symposium presentations, enhancing public speaking confidence.

LEADERSHIP & AWARDS

- Dean's List, University of California, Los Angeles (2024, 2025)
- 1st Place, Annual Engineering Hackathon (2025)

CERTIFICATIONS

- Introduction to Embedded Systems 📅 2025
- Fundamentals of Electrical Engineering 📅 2025

PROFESSIONAL AFFILIATIONS

- Member, Electrical Engineering Society, UCLA
- Volunteer, STEM Outreach Program for High School Students

ADDITIONAL INFORMATION

Work Status : Authorized to work in United States. No sponsorship required.

REFERENCES

AVAILABLE ON REQUEST