

Eli Castillo

SUMMARY

Dedicated Electrical Engineer with a Bachelor's in Electrical Engineering and diverse hands-on experience in electromechanical design and software development. Proven performance in fast-paced settings, consistently delivering high-quality projects while fostering teamwork and collaboration. Proficient in programming languages such as C, Java, and PHP, alongside tools including MATLAB, LabView, and EAGLE. Knowledgeable in control theory and embedded systems, demonstrating the ability to tackle complex engineering challenges. Passionate about contributing to innovative solutions that improve product performance and enhance user experience.

EXPERIENCE

Electrical Engineer

June 2025 - Present

Tech Innovations Inc.

Chicago, IL

- As Electrical Engineer at Tech Innovations Inc., a prominent firm, tasked with designing and improving electromechanical devices. Thrived in collaborative environments, driving project efficiency and contributing significantly to technical reviews.
- Developed advanced electromechanical devices focusing on optimizing functionality through rigorous prototype testing and analysis.
 - Collaborated across departments for mobile app integrations; improved device functionality monitoring, resulting in elevated user satisfaction.
 - Executed detailed design reviews, ensuring alignment with stakeholder specifications and bolstered compliance.
 - Engineered cutting-edge embedded systems enhancing power distribution, optimizing energy usage through innovative designs.
 - Led debugging initiatives, slashing malfunction reports by systematically addressing hardware issues utilizing thorough analysis.
 - Applied MATLAB and LabView for extensive data acquisition and documentation, furthering project quality and knowledge sharing.

Junior Electrical Engineer

January 2024 - May 2025

Future Tech Labs

Chicago, IL

- Served as Junior Electrical Engineer, playing a vital role in circuit design and simulations at Future Tech Labs. Fostered an atmosphere of collaboration, resolving technical hurdles alongside teammates to achieve project milestones.
- Assisted in sophisticated digital and analog circuit simulations, directly translating designs into successful production-ready features.
 - Performed thorough stability analyses and PID tuning on automated systems, enhancing their operational effectiveness.
 - Supported PCB design tasks using EAGLE, promoting timely project delivery through critical layout management.
 - Participated in collaborative team sessions for creative problem-solving, fostering innovative solutions and enhancing group dynamics.
 - Enhanced existing applications' interfaces via web services; resulted in a significant improvement in overall user accessibility.
 - Engaged in continuous learning initiatives, gaining proficiency in SCADA systems and PLC programming frameworks.

Intern

June 2023 - December 2023

Innovative Solutions Group

Chicago, IL

- Experience gained as an Intern focused on prototyping at Innovative Solutions Group, immersing in practical electromechanical principles and engaging in meaningful projects.
- Aided in developing prototypes, deepening understanding of electromechanical design processes essential for future innovations.
 - Drove research efforts on hydraulic systems, contributing to successful project proposals and assessments.
 - Collaborated collaboratively on capstone work centered around embedded system designs, sharing insights during academic presentations.
 - Utilized AutoCAD proficiently for creating detailed circuit layouts, streamlining design accuracy both for feasibility and execution.
 - Documented project findings thoroughly; participated in constructive evaluations during design review meetings.
 - Gained familiarity with solid modeling approaches through SolidWorks, paving the way for improved workflow efficiencies.

LEADERSHIP & AWARDS

- Certified LabVIEW Associate Developer (CLAD), 2026
- MATLAB Onramp Certification, 2026

EDUCATION

Bachelor's Degree in Electrical Engineering

University of Illinois at Chicago GPA: 3.8

Chicago, IL

2025

Coursework: Control Systems, Circuit Analysis, Embedded Systems, Digital Design

CERTIFICATIONS

- Certified LabVIEW Associate Developer (CLAD)  2026

- MATLAB Onramp Certification 📅 2026

TECHNICAL SKILLS

- **PCB Design Tools:** EAGLE, Altium Designer, KiCad
- **Simulation Software:** MATLAB, Simulink, LabView
- **Mechanical Design:** SolidWorks, AutoCAD, Autodesk Inventor
- **Development Environments:** Visual Studio, Eclipse, IntelliJ IDEA
- **Programming Languages:** C, Java, PHP, SQL
- **Embedded Systems:** RTOS, Arduino, Raspberry Pi
- **Control Systems:** PID Controllers, Stability Analysis, Automation
- **Diagnostics Tools:** Multimeters, Oscilloscopes, Logic Analyzers
- **Electromechanics:** Sensors, Actuators, Pneumatic/Hydraulic Systems
- **Project Management:** Trello, Asana, JIRA

SKILLS

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|------------------|--|---------------------|
| • Control Theory | • Software Development (C, Java, PHP, SQL) | • LabView |
| • PID Tuning | • PCB Design (EAGLE) | • MATLAB/Simulink |
| • Circuit Design | • AutoCAD | • SCADA Programming |

PROFESSIONAL AFFILIATIONS

- Member of the IEEE Engineering Society, engaging in professional development and networking.
- Volunteer at local STEM programs, promoting technology education among students.

LANGUAGES

- English (Native)

ADDITIONAL INFORMATION

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

REFERENCES

AVAILABLE ON REQUEST