

Astrid Delestine

48 Hilton Head Dr Rancho Mirage, CA 92270

+1 (206)-851-5116 | Astrid@delestine.com | [Linked In](#)

[Git Profile](#) | [Custom Webpage](#)

Summary

Results-driven junior engineer specialized in research and development, skilled in firmware and software solutions. Demonstrated success in optimizing energy efficiency of smart home systems and streamlining mathematical processing for faster computations. Eager to leverage technical expertise to innovate and improve product development in dynamic environments.

Education

Oregon State University

Bachelor of Science, Electrical and Computer Engineering

Sep 2020 - Mar 2025

Corvallis, OR

- **GPA:** 3.38
- **Coursework:** Microcontroller System Design, Computer Org & Assembly Lang, VLSI System Design, Network Security, Electro-mechanical Energy Conversion, Transmission Lines, Operating Systems

Experience

Leviton

MECOP R&D Firmware Engineer

Jun 2024 - Dec 2024

Eugene, OR

- Researched two distinct types of Micro-electromechanical system microphones, enhancing understanding of their applications in consumer lightswitches
- Implemented pulse density modulation decoding at a firmware level to accurately detect human occupancy, leading to a 30% increase in energy efficiency for smart home systems.
- Improved existing pulse density modulation decoding codebase, decreasing code use by 10,000+ lines
- Developed an object-oriented project path, incorporating light switches, light-emitting diodes, and microphones, resulting in a reduced-cost Bluetooth light control unit.
- Collaborated using the Atlassian (Jira) suite of tools, enhancing team communication and project management efficiency

Datalogic

MECOP R&D Software Engineer

Apr 2023 - Sep 2023

Eugene, OR

- Improved my knowledge of version control systems, C, C++, and C preprocessor intrinsics, to apply platform-tailored assembly instructions
- Utilized system-specific assembly instructions to parallelize mathematical operations decreasing processing time by 15%
- Created code testing infrastructure to systematically evaluate all possible values of a given operation using the Catch2 framework
- Worked with team members across multiple time zones to enhance project coordination and ensure timely delivery, improving team communication and project outcomes

Leadership & Activities

Scouting America: Troop 186 Seattle, WA

Jul 2019 - Dec 2019

Assistant Senior Patrol Leader

- Assisted in leading Troop 186 in the second half of the year
- Achieved the rank of Eagle Scout

FIRST Robotics: Team 4682 Seattle, WA

Jan 2017 - Mar 2020

Team Captain, Programming & Electrical Lead

- Lead a team of 14-19 high school students to design a 5000\$ robot over 10 weeks
- Developed skills in Fusion 360, Rhino CAD, Eclipse, Visual Studio Code, basic panel wiring, Lab-view, and Java to design, program, and wire the robot

Skills & Interests

- **Projects:** Remote Desktop Access Terminal, Fish Tank Monitor
- **Laboratory:** Advanced Soldering, Oscilloscope, Power Load calculation
- **Technical:** Advanced C, C++, Java, Fusion360, KiCad, Python, Meson, Linux, Windows, Mac OS, Intermediate Verilog, VHDL, Adobe Creative Suite, HTML, CSS, SQL
- **Interests:** Laptop Design, Open source, 3d Printing, Volleyball