

Nathan Gunderson

Eugene, OR | (541) 232-4298 | ndgunder07@gmail.com | [Personal Website](#) | [LinkedIn Profile](#)

Electrical Engineering junior at Oregon State University (4.0 GPA). Experience in semiconductor device characterization, ALD research, and embedded system design. Skilled in Python, C++, MATLAB, & circuit design software.

EDUCATION

- **B.S–Electrical & Computer Engineering:** Oregon State University; Corvallis, OR Est: Jun 2027
 - 4.0 GPA; Focuses: *Energy Systems & Electronic Materials and Devices*
- **Community College:** Lane Community College; Eugene, OR 2022 - 2025
 - 4.21 GPA (4.3 assigned for an A+)

WORK EXPERIENCE

- **ALD Research Group;** Part-time; **Oregon State University:** Corvallis, OR Jan 2026 - Present
 - Developing software with help from Google Gemini to characterize MIM & MIS capacitors from I-V data, extracting barrier height and dielectric behavior.
 - Investigated atomic layer deposition (ALD) processes and their impact on electrical characteristics.
 - Collaborated with grad students to redesign circuitry for deposition tool; soldered together new circuitry
- **Peer Tutor;** Part-time; **Lane Community College:** Eugene, OR Oct 2024 - Jun 2025
 - Tutored college students in *Math* (through Differential Equations), *Computer Science*, and *Writing*
- **Food Service Manager;** Part-time; **Domino's Pizza:** Eugene, OR Sep 2023 - Dec 2025
 - Rapidly promoted to manager upon turning 18; led teams to maintain efficiency and ensure product quality
- **Lawn Work;** Intermittent (Averaging 50-75 hours/year); **Self-Employed:** Eugene, OR Jun 2019 - Sep 2025
 - Built & maintained lawn work business with 2-5 clients for 6 years

SKILLS

- **Technical Skills:**
 - **Programming:** Python, C++, MATLAB, SystemVerilog, Arduino
 - **Circuit Design:** LTSpice, KiCad, Quartus.
 - **CAD/Modeling :** OnShape, 3-D printing
- **Engineering Areas:**
 - Semiconductor device characterization
 - Embedded systems
 - Power systems fundamentals
 - PCB Design

RELEVANT PROJECTS (see website for more information)

- **Oscilloscope** Apr 2026 - Present
 - Developed embedded user interface, integrated switches & rotary encoders for display control
 - Modeled user interface schematic & developed section of PCB; Soldered PCB & troubleshoot faulty connections
 - 3D modeled & printed enclosure
- **Battery-Powered Distance Sensor** Feb - Mar 2026
 - Designed/built battery-powered distance sensing system with custom voltage regulator PCB
 - Programmed embedded microcontroller in Arduino IDE to acquire time-of-flight sensor measurements & display data on LCD
- **Rocket Design & Launch** Oct - Dec 2025
 - Designed custom payload for in-flight data acquisition
 - 3D modeled, optimized, and printed rocket body, motor holder, and nose cone
 - Facilitated team discussions and ensured team was on track
- **FRC Robot** Jan - Apr 2025
 - Coded autonomous paths and arm control using Kotlin (similar to Java)

RELEVANT COURSES

- Semiconductor Processing (ECE 310)
- Electronics 1 & 2 (ECE 320 & 323)
- Power Up–electricity generation, transmission, and distribution (ECE 330)
- Electromechanical Energy Conversion (ECE 331)
- Digital Signal Processing Foundation (ECE 350)
- Junior Design 1 & 2 (ECE 341 & 342)
- Probability for Electrical and Computer Engineers (ECE 353)