# **Christian Flores**

(541) 321 - 2033 • florchrs@oregonstate.edu • Corvallis, OR

#### EDUCATION

#### **Oregon State University**

Bachelor of Science in Electrical and Computer Engineering, Magnum Cum Laude (GPA: 3.77) Anti Masters of Engineering in Electrical and Computer Engineering Anti • GPA: 3.77

• Finley Academic Excellence Scholarship, OSU Opportunity Grant Recipient, Jack Geer Engineering Scholarship, Dick & Mary Cay Sherman Engineering Scholarship & William L Stephens Engineering Scholarship

#### **PROJECTS**

#### Junior Electrical Engineering Capstone: Teensy Based Oscilloscope

- Designed and implemented a fully functional digital oscilloscope using a Teensy 4.1 microcontroller and ILI9341 TFT display. Developed the complete firmware in C++, including real-time waveform rendering, adjustable amplitude and time scaling, and cursor/trigger functionality.
- Designed the system schematic and wiring using KiCad, selecting and integrating the ADC input channels, encoders, and signal conditioning. Focused on fidelity and performance by optimizing display refresh and sample timing for >200 kHz operation across dual analog channels.

#### Junior Electrical Engineering Capstone: ESP32 Based Temperature Sensor & Linear Voltage Regulator

- Designed, simulated, and assembled a linear voltage regulator using the NCP1117 for stable 5V output from a 9V source. Integrated this with an ESP32-WROOM-32 and LM75A I<sup>2</sup>C temperature sensor to create a real-time monitoring system.
- Developed HTML interface and WiFi logic to host a webpage that displayed live temperature readings. Verified regulator performance through simulation and hardware testing, ensuring system stability and accuracy across the operating range.

#### WORK EXPERIENCE

### **Oregon State University – College of Engineering**

*Undergraduate Learning Assistant for the School of Electrical Engineering & Computer Science August 2024 – Current* • Mentoring, lecturing, and facilitating labs for students in sophomore electrical engineering courses, as well as holding office

- hours and assisting in the writing of labs and recitations for ENGR 201 and ENGR 202, Electrical Fundamentals I & II. • Responsible for assisting in labs, holding office hours, building review sessions, and assisting students through any difficulties
- and course challenges present throughout the term.

#### **Oregon State University - Library Information Technology**

Information Technology Student Assistant

- Creating, implementing, and maintaining software images for virtual desktop environments running on Citrix Provisioning Services using tools such as SCCM, CMWare, Activity Directory, and PVS.
- Responsible for assisting in the collection, recording, and solving of ETS support tickets on any and all library technology issues/questions.

#### Oregon State University - Library Experience & Access Department

Library Student Research Consultant

- Delivered customer service to students, staff, and the general public through face-to-face, virtual, and telephone interactions, providing informational, reference, and research assistance.
- Demonstrated a courteous and friendly demeanor while ensuring patron confidentiality and effectively communicating and addressing inquiries or referring them to appropriate staff members.

#### ACTIVITIES

#### **Society of Hispanic Professional Engineers**

Club Office Treasurer

- Managed a budget of \$30,000, ensuring prudent allocation of funds for various events, conferences, and activities
- Implemented efficient financial record-keeping and tracking systems, resulting in accurate financial reporting and transparency within the club.
- Developed and presented financial reports at regular club meetings, offering insights on financial performance and guiding future budget decisions.

### SKILLS

## Corvallis, OR

Anticipated Spring 2026 Anticipated Spring 2027

# Corvallis, OR

**Corvallis**. **OR** 

May 2023 - June 2024

**Corvallis**, OR

**Corvallis**, **OR** 

April 2023 – Current

September 2022 – April 2023