# MARSHALL SALTZ

HTTPS://LSALTZ.GITHUB.IO/

## **OBJECTIVE**

Seeking a part-time internship or job to which I can apply my unique skillset

#### CONTACT

[REDACTED]

#### **SKILLS**

**Electrical:** Schematics, Electronics prototyping, Soldering

**Mechanical:** Fusion360, Power tools, Assembly, Hand tools, 3D Printing

**Software:** C++, Python, Ubuntu Linux, Simulations, Computer Vision, ROS2

**Other:** Musical Composition and Performance, Multimedia Art, Creative Writing, Microsoft Excel, Customer Service, Troubleshooting

## **EDUCATION**

#### **OREGON STATE UNIVERSITY**

HONORS BACHELOR OF ELECTRICAL AND COMPUTER ENGINEERING MINOR: COMPUTER SCIENCE FALL 2021-SPRING 2025

Completed coursework in Differential Equations, Linear Algebra, Algorithms, Digital Logic, and Circuit Analysis

#### **EXPERIENCE**

#### **AGAID INTERN**

Oregon State University June 2023–August 2023

Using RGB and depth data to generate 3D models of trees for use in a simulation to train a robotic pruning system

### **SERVICE DESK TECHNICIAN**

Oregon State University
November 2021–June 2022; November 2022–Current
Assisting the over forty thousand students and employees of OSU with troubleshooting technical problems in addition to imaging computers for the Oregon State Community

## OTHER EXPERIENCE AND ACHIEVEMENTS

- Robotics Lab Researcher (January 2022 Current)
- Engineering Student Council (March 2022 May 2023)
- Poetry Published in Prism Magazine (2022)
- All-USA Academic Team Scholarship Nomination (2021)
- Computer Science Club President (August 2020-May 2021)

## RELEVANT PROJECTS

## Modeling Trees in 3D From RGB D Data

Completed internship project using Python, OpenCV, Blender, and Ubuntu 22.04 to model trees from RGB D data from an Azure Kinect by fitting Bezier curves to the branches.

## Follow-Me Robot Vehicle

Completed robotics project using Fusion360 to design a robotic vehicle that detects and tracks a person, adjusting its movements according to their distance. Uses OpenCV and a Jetson Nano.

## **Evolutionary Algorithm with PyBullet Simulation**

Ongoing thesis project using PyBullet on an Ubuntu distribution to generate a robotic gripper design via an evolutionary algorithm.