
MARSHALL SALTZ

[HTTPS://LSALTZ.GITHUB.IO/](https://lsaltz.github.io/)

OBJECTIVE

Seeking an interdisciplinary engineering position in which I can utilize and expand my skill set

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, Robotics Programming, ROS2, C, OpenCV, PyBullet

OTHER EXPERIENCE AND ACHIEVEMENTS

Engineering Student Council

Oregon State University
March 2022 – May 2023

All-USA Academic Team Scholarship Nomination

Front Range Community College
2021

Computer Science Club President

Front Range Community College
August 2020-May 2021

EDUCATION

HONORS BACHELOR OF ELECTRICAL AND COMPUTER ENGINEERING

MINOR: COMPUTER SCIENCE

Oregon State University

September 2021-June 2025

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

EXPERIENCE

ROBOTICS LAB RESEARCHER

Oregon State University

January 2022-Current

Completing honors thesis project that uses an evolutionary algorithm to find the two-fingered gripper with optimal reachability. Uses inverse kinematics (Denavit-Hartenberg parameters) to obtain the reachable space which is verified in simulation.

AGAID INTERN

Oregon State University

June 2023-Aug 2023

Completed project using Python, OpenCV, and Blender to generate 3D models of trees from Azure Kinect RGB D footage by fitting Bezier curves to the branches and annotated images for training an image segmentation model.

SERVICE DESK TECHNICIAN

Oregon State University

Nov 2021-Current

In-person and remotely assisting the students and employees of OSU with troubleshooting technical problems in addition to imaging computers for the Oregon State Community.

RELEVANT PROJECTS

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.

Robotics Drawing Arm

Junior Design II team project involving a custom voltage regulator PCB, Python GUI interface, computer vision, 3D printing, and an Arduino to build, assemble, and control a robotic arm that can accept G-Code commands. Currently undergoing added functionality of image replication.