

Liv Lofaro

www.lofarorobotics.com

SF Bay Area • olivialofaro@gmail.com • (862) 210-0119

INTRODUCTION

Robotics Hardware Engineer with 7+ years of hands-on experience developing, designing, and integrating hardware for complex robotics programs aimed at having a positive influence on humanity, society, and the world.

PROFESSIONAL EXPERIENCE

Cruise, San Francisco, CA

Senior Vehicle Integration Engineer

May 2021 – Present

- Integrated multiple new vehicle platforms and major retrofits across two generations of autonomous vehicle fleets
- Presented in quarterly high-priority executive / investor demos and executed major company milestone achievements
- Specialized in configuration management for initial Origin AV builds and validated stability of incoming firmware
- Supported integration and user experience testing of the Wheelchair Accessible Variant of the Origin AV

Fleet Reliability Engineer

August 2019 – May 2021

- Investigated root cause, containment plans, and corrective actions for issues seen across the autonomous vehicle fleet
- Managed LIDAR, Radar, and Host Vehicle subsystem reliability and worked with vendors and cross-functional teams
- Selected for Continuous Improvement project team to support the early design and development of the Origin AV

Google X, Mountain View, CA

May 2018 – August 2018

Everyday Robots — Hardware Engineering Intern

- Designed repeatable reliability experiments and test fixtures for robotic subsystems, cables, and sensors
- Validated and calibrated sensor performance by developing accuracy and precision test procedures
- Performed end-of-life teardown failure analysis on robotic arms after lifetime cycling

NASA Jet Propulsion Laboratory, Pasadena, CA

May 2017 – August 2017

California Institute of Technology — Robotics Intern

- Redesigned a \$30k Custom Model Rover to be a \$2.5k Open Source Rover built exclusively with off-the-shelf parts
- Miniaturized NASA's rover-standard, all-terrain rocker-bogie suspension and corner-steering system
- Documented mechanical and electrical build process and compiled an instruction booklet suitable for students

Complex Rheology and Biomechanics Robophysics Lab, Atlanta, GA

Georgia Institute of Technology — Undergraduate Researcher

January 2015 – February 2017

- Individually designed and constructed 3 generations of mudskipper-inspired, all-terrain, PID-controlled robots
- Presented findings at Southeast SICB Research Conference [Society for Integrative and Comparative Biology]
- Assisted Master's student in developing fire-ant-inspired, tunnel-digging robots to study swarm theories

EDUCATION

Georgia Institute of Technology, Atlanta, GA

Bachelor's of Science in Mechanical Engineering

Capstone Project (*Sponsored by Kids II*)

- Designed a universally accessible, developmental children's toy in a collaboration with the Industrial Design College

SKILLS

Mechanical:	Dynamic Modeling, SolidWorks, Autodesk Inventor, 3D Printing, Laser Cutting, Wood/Metal Shop
Electrical:	Sensor Development, Ethernet Networking, Circuit Design, Automotive Wiring, Soldering, PCBs
Software:	Configuration Management, Firmware, Github, C++/C, Python, Java, Bash, Linux, Microcontrollers
Reliability:	8D Problem Solving, Root Cause Analysis, Failure Analysis, DFMEA, DFM, Data Analysis
Documentation:	System Requirements, Integration Planning, Technical Writing, Data Presentation
Leadership:	Project Management, Public Speaking, Multitasking, Mentorship, Technical Foresight

VOLUNTEER EXPERIENCE

LGBTQruise, Cruise LGBTQ+ ERG

November 2019 – Present

Leadership Co-Chair

- Curated year-round programming, gatherings, education, and initiatives on behalf of the LGBTQ+ Cruise Community
- Spearheaded Cruise's San Francisco Pride participation and internal Pride Month agenda from 2020–2023
- Managed a team of 6-8 dependent leads and functioned as a bridge between Executives, DEIB, and the community

Melt With Me, National Flow Arts Collective

July 2017 – Present

Co-Founder and Project Manager

- Founded a non-profit organization designed to promote community building, performer networking, and skill sharing
- Recruited and coordinated 300+ volunteer artists to host workshops at 80+ events around the country
- Remotely managed project schedules, apparel manufacturing deadlines, and teams of onsite leads for each event