## LIAM PREVELIGE

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### EDUCATION

## Dartmouth College

Hanover, NH

B.A. Computer Science and Economics *GPA*: 3.8

Sep 2019 - Jun 2023

Relevant Courses: Software Design & Implementation, Algorithms, Machine Learning & Statistical Analysis, Smartphone Programming, Architecture, Discrete Math in CS, Foundations of Applied CS, Multirobot Systems

### TECHNICAL COMPETENCIES

Programming Languages:

Java, Python, JavaScript, C, CSS, HTML, Y86 Assembly

Frameworks & Technologies: Android, Docker, ROS, Gazebo, Stage, Firebase, MATLAB, Logisim

### Relevant Experience

# Dartmouth Reality and Robotics Lab

Hanover, NH

Research Assistant

Sep 2020 - Present

- Develop routing software for a multirobot system using ROS, Docker, Python, and simulated data to compare bio-markers between simulation & sensor inputs, enabling early detection of toxic algae blooms.
- Collaborate with a network of 60 professors & PhD students across 6 universities & 4 states to improve the algae detection system and explore new publications on modern multirobot systems research.

### **DataCrunch Solutions**

Remote

Founder, Software Developer

Sep 2020 - Present

• Create software with team of three to improve corporate efficiency, with projects including using Python, Pandas, & session-based HTTP requests to complete months of documentation for government contracts in minutes and using Python, Selenium, Aliases, & HTTP requests to connect employees at Connect Healthcare Collaboration to thousands of customers in seconds.

## Plug and Play Tech Center

Remote

Investment Intern

Oct 2021 - Present

• Analyze 25 software-based startups with international students from 70 universities for 5 hours per week, providing input on tech & funding to investment committee of world's largest startup accelerator.

### Relevant Projects

### PreSell

Software Developer

- Individually developed e-commerce platform using Android, Java, XML, JavaScript, Stripe, Glide & Firebase, with 40 Java classes & 46 menus, for sale of custom merchandise on user-friendly marketplace.
- Android app enables adjustable time-dependent pricing, sales listings in three steps, design editing tools, secure payments with Stripe Connect, and safe asynchronous communication to a JavaScript server.

### Autonomous Multirobot Patrol System

Researcher, Software Developer

- Designed supervised machine learning algorithm & framework for optimizing detection of robots escaping from confined area, communicating algorithm & experimental results in formal research paper.
- Improved detection up to 400% over naive algorithm in simulation using Python, ROS, and Stage.

## Nuggets

 $Software\ Developer$ 

• Managed team of three using Scrum framework, C, and Unix development tools to create the 'Nuggets' game server, allowing up to 26 players to compete to collect gold in visibility-limited maps.

# Y86 Simulator

 $Software\ Developer$ 

• Created microarchitecture for Y86 in Logisim with Harvard architecture; designed & wired arithmetic logic unit, register reader/writer, finite state machine, microsequencer, I/O, RAM, & microinstructions.

# Leadership & Awards

## Magnuson Center for Entrepreneurship

Hanover, NH

Chair, Student Leadership Board

Jan 2020 - Present

• Devote 10 hours per week to managing Dartmouth's entrepreneurial programming and startup support.

### Chi Gamma Epsilon

Hanover, NH

Treasurer

Jun 2020 - Present

• Actively manage \$450,000 in annual income and facilitate key decisions as one of ten voting executives.

# Venture Capital Investment Competition

Boston, MA

Dartmouth Undergraduate Investment Team

Nov 2019 - Feb 2021

• Received first place and \$1,000 prize in 2020 New England Regional Competition.