

IAN M. KIM

+1(425) 623-5210 ◊ Fairfax, VA

ian@iankim.dev ◊ <https://www.linkedin.com/in/ian-kim-6772ab1a6/> ◊ <https://github.com/ianmkim>

EDUCATION

Dartmouth College

Expected 2024

Computer Science Major, Philosophy Minor

Honor List

Relevant Coursework: Object Oriented Programming, Android, Applied CS, Discrete Mathematics, Algorithms and Data Structures, Software Design & Implementation.

SKILLS

Languages C/C++, Python, Rust, Java, Go, HTML/CSS/JS

Web Flask, GoFiber, PostgreSQL, MongoDB, IPFS, Docker, Heroku PaaS, AWS EC2, S3, Fly.io PaaS

Embedded Nvidia Orin/Xavier, RedHawk RTOS, Arduino

EXPERIENCE

Software Engineering Intern

June 2023 - September 2023

Neuralink Inc

Fremont, CA

- Neuralink develops ultra high bandwidth brain-machine interfaces to connect humans and computers.
- Owned verification software for robotic surgery system responsible for automated brain electrode insertion
- Created a C++ based service manager interface for remote monitoring and service manipulation on robot and operator devices
- Added critical verification fixture in Nvidia Omniverse Isaac sim

CTO & Co-Founder

Winter 2020 - Present

Daelus Space Inc

San Francisco, CA

- Led a team of three engineers to build a cost-effective, reliable swarm rover prototypes for lunar In Situ Resource Utilization (ISRU) and raised a six-figure seed round from Soma Capital and \$60,000 worth of partnership support from Fletcher Industries.
- Wrote a novel off-road path planning and control software for simulated lunar environments with multiple sensor inputs (Ouster LiDAR, RGB Camera) which led to 2 customer LOI signed. [RUST, C++, Python, ROS]

Autonomy Intern & Engineer

March 2022 - July 2022

Ghost Robotics Inc

Pennsylvania, PA

- Solely developed a CUDA-accelerated lattice path planner for LiDAR data to cut inference times down to sub 50ms on the most widely deployed quadruped robots for the US and allied defense applications. [C++, CUDA, Python]
- Put in charge of upgrading and maintaining control software for Explosive Ordinance Disposal (EOD) robotic arm to increase compatibility and maintainability. [C++]
- Solely created a REST API for mission control software through shared memory communication and WebSockets to reduce click to action latency down to 100ms. [Python/Flask]

VP of Robotics SW

February 2023 - present

Mattimoe Technologies LLC

Palo Alto, CA

- Led company's robotics and autonomy research and development resulting in successfully delivering Technology Readiness Level (TRL) 2 prototype for an automated microdrone system for combat scenarios
- Built gRPC based high-throughput AI inference server to run on the Jetson Orin embedded system to enable edge code generation and VQA for drone navigation

Co-Founder

January 2023 - May 2023

Franca AI Consulting Inc

San Francisco, CA

- Contracted by three funded start-ups as a paid consultant to integrate Large Language Model solutions into their products. Firm achieved profitability within two months of incorporation.

PROJECTS

Arkad AI Used generative language models to predict electorate response to political messaging with 243% higher than baseline emotion prediction accuracy and 23% higher than baseline agreement prediction accuracy. [Python, PyTorch, Bash, Go]

PyDynamica Made an agent-based simulation for studying macroeconomic phenomena based on Klaus Jaffe's work. [Python]