

Matthew Craig

matt @ <mattcraig.tech> • [linkedin.com/in/mattcraig-tech](https://www.linkedin.com/in/mattcraig-tech) • github.com/0x65-e

EDUCATION

University of California, Los Angeles (UCLA) | B.S. in Computer Science, B.A. in Economics Expected June 2023

- GPA: 3.98/4.0
- Minor in Data Science Engineering, Concentration in Technology Management
- Dean's Honors List and member of Upsilon Pi Epsilon, Tau Beta Pi, and Mortar Board honor societies
- Relevant Coursework: Data Structures, Algorithms, Software Construction, Operating Systems, Programming Languages, Machine Learning, Deep Learning, Linear Algebra, Probability and Statistics, Financial Engineering

EXPERIENCE

Software Engineering Intern June 2022 - Sep 2022

Palantir Technologies | Palo Alto, CA

- Integrated a web map written in Java with both commercial and custom in-house tile servers. Reduced customer configuration by 80% for existing tile servers and enabled access to thousands of open-source tile sets.
- Added concurrency to a language server for Typescript written in Rust using asynchronous runtimes.

Software Engineering Intern III June 2021 - Dec 2021

The Aerospace Corporation | Remote

- Developed an autonomous agent using C#/.NET to simulate realistic user behavior. Used agent to evaluate accuracy of machine learning model for anomaly detection.
- Achieved 80% unit test coverage using PyUnit for machine learning deployment in Tensorflow/Keras.
- Deployed infrastructure-as-code tools to manage virtual machines for cybersecurity competition.

Software Engineering Intern II June 2020 - May 2021

The Aerospace Corporation | Remote

- Led intern development team improving Android penetration testing app from previous summer. Integrated new tools for network sniffing and exploitation. Developed version control system to track tool versions and updates.
- Implemented a network traffic generator to provide a realistic baseline for machine learning anomaly detection.
- Demonstrated proof-of-concept hardware and software proxies to intercept and monitor USB traffic.

Software Engineering Intern I June 2019 - May 2020

The Aerospace Corporation | El Segundo, CA

- Led intern development team to create an Android penetration testing app. Integrated tools for network scanning, packet capture, and data exfiltration. Added concurrency to support multithreaded processes on Android.
- Designed an embedded security model using containerization to mitigate cyber threats to satellites, reducing successful penetration attempts by 95%.

PROJECTS

OML Alexandria Jan 2023 - Mar 2023

- Visual Studio Code extension to provide language support and visualization for systems engineering language OML

Kokomo Aug 2020 - Oct 2021

- Competitor for the Robocode programming game written in Java. Uses online machine learning methods to adapt to opponent's movement pattern. Ranked in the top 10% of competitors globally.

PROGRAMMING LANGUAGES

C++ | Python | Java | C | Rust | OCaml | Lisp | Typescript

LIBRARIES AND FRAMEWORKS

OpenMP | Google Guava | NumPy | PyUnit | Pandas | sklearn | TensorFlow | Keras | Jupyter Notebook | Seaborn