Timothy Liu

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Experience

Facebook, Software Engineer, Menlo Park, CA   January 2020 – Present
- Built a change management flow for an internal tool that tracks all Facebook products and features and which teams own them.
- Built a library in Android to restrict collection and use of privacy-sensitive data and APIs if the feature a user is accessing does not have an approved privacy mitigation.
- Collected information about features accessed at runtime to determine which team owns any given code or data asset.
- Tech stack: JavaScript (React, Flow), PHP (Hack), GraphQL, Java (Android)

Facebook, Software Engineering Intern, Seattle, WA   May 2019 – August 2019
- Implemented mobile device emulation for Facebook's integrity crawler, which is used to determine if ads appearing on user's news feeds abide by company policy.
- Added a framework for clients to define new use cases with individual rules for the integrity crawler and to auto-generate common changes to the code.
- Built a dashboard where users can track various metrics, like failure types and success rates for different crawl rules.
- Tech stack: Python, PHP (Hack, XHP), Thrift, JavaScript (React)

Shell TechWorks, **Software Engineering Intern**, Boston, MA   May 2018 – August 2018
- Worked as a full stack developer on the Plug and Abandonment (PandA) project to allow well engineers to import configurations and export data to spreadsheets for auditing when decommissioning deep-sea oil wells.
- Tech stack: C# (.NET), JavaScript (React, WebDriverIO, Jest)

Ubiquitous Swarm Lab, Undergraduate Researcher, Berkeley, CA   May 2017 – August 2017
- Implemented a corner detection algorithm used to help a drone determine its movement and orientation.
- All projects done under the supervision of Professor Kris Pister.
- Tech stack: Python (OpenCV, NumPy), MATLAB

Education

University of California, Berkeley   August 2016 – December 2019
B.A. in Computer Science
Minor in Electrical Engineering and Computer Science

Selected Coursework: Data Structures, Algorithms, Operating Systems, Compilers, Machine Learning, FPGAs and Integrated Circuits, Probability Theory, Computer Security, Linear Algebra

GPA: 3.6 / 4.0

Projects

- Designed and implemented a three-stage RISC-V CPU and used it to build a subtractive synthesizer. (Verilog)
- Built a script to auto-balance my stock portfolio after any allocation deviates by 5%. (Go)