

Timothy Liu

<https://github.com/tbliu> · <https://www.linkedin.com/in/tbliu/> · <https://tbliu.github.io/>

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)