

THANAKUL (JA) WATTANAWONG

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Education

University of California, Berkeley

B.S. in Electrical Engineering and Computer Science | Expected Graduation in May 2022 | GPA: 3.92

Coursework: **Algorithms, Data Structures, Operating Systems, Internet Architecture, Machine Learning, Computer Vision, Probability & Random Processes, Optimization Models in Engineering, Digital Design and ICs, Computer Graphics**

Skills Summary

- Proficient Frameworks/Technologies: Python (incl. NumPy, PyTorch, CVXPY), Go, Java, C/C++, JavaScript (React, Node.js), Docker, Kubernetes, SQL, Cloud Infrastructure (AWS and GCP).
- Fluent in English and Thai. Conversational Japanese fluency (certified JLPT N2).

Experience

Facebook

Production Engineer Intern | June 2020 – August 2020

- Worked on XDB, a distributed database used by thousands of teams with tens of petabytes of data.
- Rewrote the Python-based server to enforce new ownership and privacy guarantees, eliminating thousands of cases of metadata drift and missing ownership.
- Created approximately 15 new endpoints in Hack (a dialect of PHP) and React to support the new changes while collaborating closely with the front-end team to ensure quality.
- Architected an access control library that allows granular permissions to be specified.

Kelda

Software Engineer Intern | June 2019 – August 2019

- Worked on a local development tool for Kubernetes using Go, gRPC, and Kubernetes Custom Resource Definitions.
- Streamlined the install/upgrade process, cutting update time by half and reducing the process to a single user-friendly command backed by AWS Lambda function.
- Designed a feature to reduce undesirable pod evictions in multi-tenant cluster situations.

UC Berkeley NetSys Lab

Research Assistant | Feb 2019 – July 2019

- Researched ways to maximize throughput and minimize latency in microservices. Wrote multi-threaded simulator for various scheduling algorithms in C using pthreads.

Activities

- Open Computing Facility (ocf.berkeley.edu). Serving as Site Manager since January 2020 to present. I directed spending of over \$25,000 in new hardware, mentored new volunteer student staffers, and wrote code to manage our Linux servers and 3-node Kubernetes cluster.