

Timothy Ko

<https://www.timothyko.org> | tk2@illinois.edu | 408-663-0739

 [tko22](#) |  [timothy-ko](#) |  [@timmykko](#)

EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

COMPUTER ENGINEERING
May 2020

TECHNICAL

COMMUNICATION

TECHNICAL BLOGS

<https://medium.com/@timmykko>

Over 350,000 views for articles on web development, Ethereum, Docker, etc. Writer at FreeCodeCamp (largest technical publication on Medium).

WEBMONKEYS | CO-CHAIR

August 2016 - August 2018
Taught and led an ACM Special Interest Group that runs multiple workshops and events teaching React, HTML, JS.

SKILLS

COMFORTABLE

Python • Go • C/C++ •
JavaScript/Node • HTML/CSS

FAMILIAR

Java • IOS

LIBRARIES/PLATFORMS

Django/Flask • React • JQuery
• Postgres • MongoDB •
GraphQL

OTHER

Linux • Git • Docker •
Ethereum

COURSEWORK

Operating Systems • Analog
Signal Processing • Data
Structures • Algs & Models of
Computation • Distributed
Systems.

EXPERIENCE

UBER | SOFTWARE ENGINEER INTERN

May 2019 | San Francisco, CA

TESLA | SOFTWARE ENGINEER INTERN

May 2018 - August 2018 | Palo Alto, CA

- Sole maintainer of the Test Automation Infrastructure that validates every BodyControls firmware release to all Tesla vehicle models. Expanded to multiple other teams including gateway, drive inverter, Tesla Energy etc.
- Rewrote test collection system to test multiple branches instead of just one branch (versions), greatly improving their validation workflow and productivity.
- Cut infrastructure downtime & test failure by 50%. Revamped architecture by decoupling components and scoped & wrote a new REST API in Flask w/ protobuffs. Dockerized services for easy setup and improved jenkins CI.

HACK4IMPACT | CO-DIRECTOR

May 2018 - Present | Champaign, IL

- Overseeing over 40 students and full development lifecycles of 8 impactful software products for non-profits. cultivating organization culture and values.
- Documented over 200 pages worth of organizational methodology, shaping thought process recruiting, management, client relationships, and product development and execution. Drive forward intentional leadership.
- Exceed goals: 160% Student Outreach (800). 6% acceptance rate. Community engagement (user posting messages increase by 2800%)
- First to: bring on Product Designer, Source Sponsorship, formalize new Product Infra and Research Team.

HACK4IMPACT | PRODUCT MANAGER

Sep 2017 - May 2018 | Champaign, IL

- Shipped an open sourced English education tool that connects tutors and Cambodian students with standard lesson plans for Love without Boundaries.
- Full Stack dev with GraphQL/Node/MongoDB backend + React/Relay frontend
- Created a PRD, user stories, and feature roadmap to guide a team of 8 Software Engineers.

ORGANIZATIONS & PROJECTS

MECHMANIA HACKATHON | STAFF

Sep 2017 - Present | Node.js, MongoDB, Socket.io, Firebase, Docker

- Developed a web + CLI interface for contestants at a 24 hr Game AI Hackathon. Platform based on a microservice approach.
- Processed 8000 hours of game time in <1 hour distr. system.

LINUX KERNEL

Jan 2018 - May 2018 | C, x86

- Built a Linux kernel supporting round-robin task scheduling, multiple terminals and tasks, paging with userspace and kernel space execution, interrupt handlers, file system, system calls.

A lot more projects at <https://github.com/tko22!>