

# Timothy Ko

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## EDUCATION

### UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

COMPUTER ENGINEERING  
May 2020

## OTHER

### TECHNICAL BLOGS

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

Over 450,000 views for articles on web development, Ethereum, Docker, etc. Writer at FreeCodeCamp (largest technical publication on Medium).

### SIDEWISE | Co-FOUNDER

<https://sidewise.app>

A chrome extension that basically turns github into linkedin. We help recruiters and startups analyze github profiles to find the talent with the right skillsets. We'll pool all the analyzed profiles into a database, where you can query for candidates with the exact skill set you need.

## 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. • Computer Security

## EXPERIENCE

### SAMSARA | SOFTWARE ENGINEER (OFFER RESCINDED DUE TO COVID-19)

### UBER | SOFTWARE ENGINEER INTERN

May 2019 | San Francisco, CA

- Secured Facebook OAuth Sign in/up flow with migration from implicit to authorization code flow across all Uber products (e.g. rider, eats, freight). Full stack work involving multiple Go backend microservices & react + node.js frontend.
- Designed and wrote new endpoints in collaboration with other teams to support third party integrations. Staged rollout & monitoring.

### 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/ protobufs. Dockerized services for easy setup and improved jenkins CI.

### HACK4IMPACT | Co-DIRECTOR

May 2018 – May 2019 | Champaign, IL

- Led 5 Cross-functional product teams of over 40 students, launching 8 software products for non-profits in a year.
- Established organizational and development practices documenting over 200 pages to shape thought process recruiting, management, client relationships, and product development, strategy, and execution.
- Exceed goals: 160% Student Outreach (800). 6% acceptance rate. Spearhead corporate sponsorships, new Product Infra and Research teams, product design

### 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 SWEs

## ORGANIZATIONS & PROJECTS

Recruitment portal: Led multiple teams to build a portal to manage hundreds of candidates, interview schedules, scorecards to efficiently run our recruitment process. Node.js, Mongo, Next/React

Mechmania Hackathon: Built a web + CLI interface for 24 hr Game AI Hackathon. Processed 8000 hours of game time in <1 hour distr. system. Node.js, MongoDB, Socket.io, Docker

Linux Kernel: Support round-robin task scheduling, paging with user and kernel space execution, interrupt handlers, file system, system calls. C, x86

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