

Samuel Yang

<https://syang.ca>

hello@syang.ca
github.com/Optykan
linkedin.com/in/Optykan

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, PHP, Java, C, C++, Python, Scheme

Web Tooling: Tornado, Express.js, Angular 2+, React, jQuery, Laravel, Wordpress Core

Data Management: PostgreSQL, MySQL, Redis, Firestore, MongoDB

Developer Operations: Jira, Webpack, Docker, Git, SVN, Kubernetes, CircleCI, Amazon EC2, Amazon EKS

EXPERIENCE

Backend Developer | Hack The North **Feb 2019 - Present**

- **Dockerized** codebase to accelerate development and ensure compatibility on all platforms
- Coordinated with Design and Marketing teams to handle and email 100+ event participants over 1 week
- Developed **Python + Tornado** backend to support over 7000 hacker applications and 1000 day-of hackers

Cloud Services Developer | North (formerly Thalmic Labs) **Jan 2019 - Apr 2019**

- Implemented a **RESTful Node.js** service to back a Spotify integration used by over 50% of active users
- Managed, designed (UI/UX), and developed a **React + Node.js** internal tool for rapid feature prototyping
- Refactored internal documentation portal with **React** to improve reliability and page load by 2.5x
- Configured automatic **Kubernetes** deploys with **Amazon EKS** as well as test automation through **CircleCI**

Software Developer | OpenText **May 2018 - Aug 2018**

- Implemented a back-end data caching system with **Java** to reduce browser page load time by 95%
- Designed a compression method with **JavaScript** to reduce browser memory usage by 88%
- Developed a JavaScript delta encoding algorithm to reduce network load by only sending modified data
- Created a JavaScript plugin to provide cross-browser support for HTML tables with over 1 million rows

PROJECTS

Biquadris | CS246 Final Project **Dec 2019**

- Developed a memory-efficient multiplayer tetris game using **C++11**
- Implemented event-driven architecture to dynamically dispatch customizable actions
- Created a trie-based command interpreter linked with the event system to support player actions

Beat | PennApps XVII **Jan 2018**

- Aggregated Spotify, Napster, and Xiami Music API results to determine song lyrics and lyric timestamps
- Analyzed YouTube music results to match song to aggregated lyric results
- Wrote **JavaScript** script to automate dynamic addition of new songs with lyrics to library

AWARDS

Best UI/UX Hack | PennApps XVII **Jan 2018**

Nortel Institute Undergraduate Scholarship | University of Waterloo **Sept 2017**

Governor General's Academic Medal - Bronze | Markville Secondary School **June 2017**

University of Toronto National Book Award | Markville Secondary School **June 2017**

EDUCATION

Bachelor of Computer Science | University of Waterloo (Expected) **2017 - 2022**