

# Jonathan Xu

☎ 647-638-4839 | ✉ contact@jonathanxu.com | 🌐 jonathanxu.com | 📄 JonathanXu1

## Skills

---

**Languages** Java, JavaScript, Python, HTML/CSS, C/C++  
**Technologies** Git, Bash, Docker, Unix, AWS, Postman

**Frameworks** ReactJS, NodeJS, Heroku, PostgreSQL,  
GraphQL, Firebase, Redux, React Native

## Experience

---

### Fractal Computers

SOFTWARE ENGINEER INTERN

*Boston, Massachusetts*

*Apr 2020 - Aug 2020*

- **Reduced Azure costs by 70%** by automating resource management for virtual machines, disks, and users
- Revamped the **PostgreSQL** data warehousing schema and implemented **GraphQL** APIs, **cutting query latency by 50%**
- Migrated the **Flask** backend webserver to a **Heroku CI pipeline**, speeding up tests and deployment by **5x**
- Built a client application with **React Native & Redux** to enable container app streaming directly to Android & iOS

### Trofi

FOUNDER

*Toronto, Ontario*

*Apr 2020 - Aug 2020*

- **Decentralizing food distribution** through a group buy platform that connects local farmers directly to consumers
- Received \$40,000 in pre-seed funding, a **\$1M valuation cap**, and 3rd place out of 500+ applicants at **Mozilla Builders**
- Captured **5 digit revenue** through the platform in 4 weeks, with **1K+ unique customers** and 400+ unique items sold
- Conducted **20+ interviews** with farmers, food distributors, and end users to optimize product market fit
- Built platform for distributors, leaders and buyers to manage listings and sales, using **React & Firebase**

### Myriade Inc

SOFTWARE ENGINEER INTERN


*Montreal, Quebec*

*Oct 2019 - Jun 2020*

- Created a **Dockerized React** web app that allows users to view Monero mining analytics and participate in raffles
- **Increased signups by 35%** by creating a landing page and stylizing the sign up flow using **Bootstrap**
- Implemented state management for React components using Context API, **improving load times by 1.5x**

## Competitions and Projects

---

COMPETED AT 40+ HACKATHONS 

### Noisy

PERSONAL PROJECT

*Nov 2020*

- Built a Discord + Telegram bot that generates music on the fly using the **OpenAI MuseNet** deep neural network
- Created the full stack that powers the live generation and playback of **15k songs** every month to **125k+ users**

### Google Code-in - Public Lab

FINALIST OUT OF 3000+ CONTESTANTS

*Dec 2018*

- Redesigned 5 application pages and a sequential image editor through **open source contributions**
- Improved login and authentication flows with **Ruby on Rails**, decreasing signup times by **65%**

### Hack the North - Audite

FIRST PLACE OUT OF 1200+ HACKERS

*Sept 2018*

- Built a **speech transcription** tool with visual location cues for people with hearing impairments
- Utilized Raspberry Pi, Arduino, ultrasound, and **real-time speech to text** to annotate speech over the source in AR

## Education

---

### University of Waterloo

BACHELOR OF SOFTWARE ENGINEERING

*4.0 GPA*

*Sept 2019 - Apr 2024 (expected)*

Dean's Honor List, Cohort Academic Representative