

# Guangyuan (Charlie) Yang

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## Education

### University of Waterloo

Candidate for Bachelor of Mathematics  
Expected 2021

## Skills

**Programming:** Python, Go, C, C++

**Cloud:** Backend/Infra Development,  
Scripting, UNIX System Engineering

## Experience

### Hudson River Trading

New York, NY (Remote)

Systems Engineering Intern

Jan 2021 - Apr 2021

- Designed and implemented a real-time in-kernel storage monitoring tool with eBPF and Prometheus
- Implemented in-house monitoring and profiling tools for ZFS/NFS filesystems and networking

### Instacart

Toronto, ON

Data Engineering Intern

Sep 2019 - Dec 2019

- Built an orchestration service platform for California Consumer Privacy Act (CCPA) compliance
- Implemented and optimized data ETL pipelines with Snowflake and Apache Airflow

### Autodesk

San Francisco, CA

Infrastructure Engineering Intern

Jan 2019 - Apr 2019

- Developed a backend monitoring system and an integration bot that improved developer efficiency
- Improved infrastructure tools for standard builds, container orchestration and data piping

### Activision

Shanghai, China

Software Development Intern

Sep 2017 - Dec 2017

- Implemented server-side features, interfaces, and tests for the Call of Duty Online titles
- Diagnosed and optimized core multiplayer features alongside the SRE team

### FreeBSD Foundation

Kitchener, ON

Open-Source Software Developer

May 2017 - Aug 2017

- Developed and improved several of FreeBSD's kernel, userland components and test cases
- Implemented proof-of-concept IoT projects on Raspberry Pi boards running FreeBSD

### NAVBLUE, an Airbus Company

Waterloo, ON

Software Developer

Sep 2016 - Dec 2016

- Implemented a centralized release management web application used by all Dev and QA teams
- Improved the ETL scripts that reduced the database update latency by 98%

## Activities

### The FreeBSD Project

Remote

Committer

Sep 2017 - Present

- FreeBSD is a modern open-source Unix-like OS that powers servers, desktops, and embedded devices
- Working on the official ports and package repository, and packaging and doc infrastructure
- Working with contributors worldwide on bug reports, code reviews, patches, and mentoring