

Simeng Yang

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EXPERIENCE

Microsoft | [Incoming Software Engineering Intern, Business AI](#) | Jan – Apr 2020

Broadway Technology | [Software Engineering Intern](#) | May – Aug 2019

- Developed support for new class of trading instruments within Broadway's trade querying and subscription system using **C++** and **Python**
- Enhanced trade times to microsecond precision by revamping code to the latest FIX trading protocol
- Reduced code complexity and duplication by using generic libraries / templates for Broadway's trading platform
- Unblocked major software releases for clients through fixing 10+ showstopping code and environmental bugs

SnapTravel | [Software Engineering Intern](#) | Sept – Dec 2018

- Profited an estimated gross sales impact of **\$5M USD** (GMV) for 2019 by developing a loyalty rewards **Flask** microservice for business travelers
- Created a utility to manage the lifecycle of loyalty credits in **Django**, used hourly to resolve customer incidents
- Saved upwards of 50 hours / week by implementing a PDF library in **Python** to autogenerate and upload invoices
- Increased booking ratings by 0.2 / 5 stars by collaborating with product teams to redesign dynamic order emails

Novus Health | [Software Engineering Intern](#) | Jan – Apr 2018

- Decreased turnaround for publishing campaigns from hours to minutes by designing and implementing a dashboard for crafting medical questionnaires using **React / Redux**
- Reduced entry update times by 38% by composing and automating data import tools in **PHP** and **SQL**
- Exposed critical data for clinical requests by creating 10+ **REST APIs** to integrate with third-party services
- Improved developer productivity by implementing a text parser to autogenerate API documentation using **Laravel**

Genesys | [Software Engineering Intern](#) | May – Aug 2017

- Served hundreds of call transmissions daily on the principle voice platform by building and deploying a media control suite for audio recording and playback in **C++**
- Boosted sound quality by up to 50% by extending support for the next-generation Opus audio codec
- Cut development wait times for pushed builds by 4x by updating a build status report system in **Python**

EDUCATION

Bachelor of Computer Science | [University of Waterloo](#) | Sept 2016 – Apr 2021

- Robotics Club, Computer Science Club, Intramural Ultimate Frisbee, President's Scholarship (95+%)

PROJECTS

3D Dogfighter 🎮 ["Most Over-the-Top" Prize Winner at Waterloo Game Jam 2017](#)

- Developed a multiplayer aerial combat game in **C#** with **Unity**
- Integrated server networking logic with matchmaking system for hosting 20+ concurrent users
- Designed combat and flight mechanics, user interface and 3D terrain for maps

Student Management System 🎮

- Implemented a database to manage 1,000+ student records using **LAMP Stack**
- Designed robust input sanitation and validation using error handlers and regular expressions in **PHP**

Re-Vim'd 🎮

- Programmed a clone of Vim editor in **C++** based on **MVC** architecture, with 40+ commands and enhancements

SKILLS

Languages: Python, Java, JavaScript (ES6), C++, C#, Go, SQL, R, Bash

Frameworks/Tools: React, Redux, Flask, Node.js, Laravel, Django, Android, Docker, Redis, Git, PostgreSQL