Simeng Yang

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EXPERIENCE

Microsoft | Software Engineering Intern, Business AI | Jan – Apr 2020 (Ongoing)

- Working to enhance the performance of Microsoft's prediction pipeline for business insights in Python and Spark

Broadway Technology | Software Engineering Intern | May – Aug 2019

- Developed support for new class of bonds 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 by refactoring Broadway's trading platform to use generic libraries / templates
- Unblocked critical software releases for clients through fixing 10+ showstopping code and environmental bugs

SnapTravel | Software Engineering Intern | Sept – Dec 2018

- Profited an estimated sales impact of $5M USD in 2019 by developing a loyalty rewards Flask microservice for business travelers
- Enabled production launch by creating a dashboard to easily manage the lifecycle of loyalty credits in Django
- Saved team 50+ hours / week by implementing a PDF library in Python to autogenerate and upload invoices
- Increased user ratings for bookings by 0.2 / 5 stars by redesigning dynamic order emails with product teams

Novus Health | Software Engineering Intern | Jan – Apr 2018

- Decreased turnaround for crafting questionnaires from hours to minutes by implementing a drag-and-drop builder using React / Redux
- Reduced entry update times by 40% 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 calls daily by building 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 implementing a build status report system in Python

EDUCATION

Bachelor of Computer Science | University of Waterloo | Sept 2016 – Apr 2021

- Coursework on Operating Systems, Data Structures & Algorithms, Concurrency, Compilers, Artificial Intelligence

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

SKILLS

Languages: Python, Java, JavaScript (ES6), C++, C#, Go, SQL, R, Bash
Frameworks/Tools: React, Redux, Flask, Spark, Node.js, Laravel, Django, Android, Docker, Redis, Git