

Simeng Yang

📄 github.com/simeng-yang

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🏠 simengyang.me

Skills

Languages: C/C++, Python, C#, JavaScript, HTML / CSS, Java, PHP, SQL, Scala, MATLAB

Frameworks & Tools: Git, Bash, React/Redux, Laravel, Android, PostgreSQL, jQuery

Experience

Software Engineer

Novus Health

Toronto, Ontario

Jan '18 - Apr '18

- Designed and implemented a **dashboard** for health assessments using React, decreasing turnaround for publishing campaigns from **hours to minutes**
- Created several new APIs and refactored deprecated APIs for customer products and internal tools
- Composed and automated data import tools in PHP and SQL, reducing time to update records by **30%**
- Developed a text-parsing engine for reading and writing files in Laravel

Software Developer

Genesys Laboratories

Markham, Ontario

May '17 - Aug '17

- Engineered a **media control suite** for audio recording and playback in C++, serving **hundreds** of call transmissions daily on the principle voice platform
- Extended support for next-generation audio codec, boosting sound quality by **up to 50%**
- Updated a build status report system in Python, accelerating development for pushed builds

Projects

Student Management System

git.io/vp49K

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

Re-Vim'd

git.io/vpzdj

- Programmed a lightweight clone of the classic **Vim editor** in C++
- Replicated 40+ supported commands and enhancements, such as syntax-highlighting, regex search and linear history

3D Dogfighter

git.io/vp49M

- Developed a multiplayer **aerial combat game** in C# with Unity
- Integrated networking logic with match-making system for hosting 20+ concurrent users
- Designed combat and flight mechanics, user interface and various terrains

Fraud Detector

git.io/vp49H

- Implemented an **SVM** in Python to identify fraudulent employees
- Tuned classification algorithm to achieve 85% accuracy on 14,000+ employee profiles

Education

University of Waterloo

Candidate for Bachelor of Computer Science, 3.88 cGPA

Waterloo, Ontario

Sep '16 - May '21 (Expected)

- **Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Digital Computation
- **Awards:** Faculty of Engineering Entrance Scholarship, President's Scholarship (95+%)