

Simeng Yang

🏠 <http://simengyang.me> ✉ s275yang@uwaterloo.ca 🌐 [simeng-yang](#) ☎ +1 905 807-6948

☰ skills

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

Frameworks & Tools: Unix/Linux, Node.js, React/Redux, Laravel, LAMP Stack, Unity, Git

🎓 education

University of Waterloo
Bachelor of Computer Science
Sep 2016 - May 2021

📖 courses

Data Structures & Algorithms
Object-Oriented Programming
Digital Computation

🏆 awards

Most Outstanding Army Cadet
Engineering Entrance Award
President's Scholarship (95%+)

👤 interests

Swimming lengths
IoT – Arduino, Raspberry Pi
Cryptography
Puzzles & Brainteasers

👜 experience

Software Engineer Jan '18 - Apr '18

Novus Healthcare International

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

Software Development Intern May '17 - Aug '17

Genesys Laboratories

- Engineered a media control suite for server-side recording and browser playback in **C++**
- Extended support for next-generation audio codec, boosting call quality by up to 50%
- Implemented unit tests for media encapsulation with **Google Test** on **Linux** and **Windows**

🔧 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

- Programmed a lightweight clone of the classic Vim editor in **C++**
- Replicated navigation, file open/save, editing, macros, syntax-highlighting and other core features

3D Dogfighter 🌐 git.io/vp49M

- Developed a multiplayer aerial combat game in **C#** with **Unity**
- Integrated networking with match-making system for hosting 20+ concurrent users

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