

# Simeng Yang

🏠 <http://simengyang.me>    ✉ [s275yang@uwaterloo.ca](mailto: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

Candidate for B.S, Computer Science  
Sept. 2016 - May 2021

## 📖 courses

Data Structures & Algorithms,  
Object-Oriented Programming,  
Digital Computation

## 🏆 awards

Most Outstanding Army Cadet  
Engineering Entrance Award  
CEMC Contest Distinctions

## 👤 interests

Swimming regularly  
Watching movies  
Cryptography  
Puzzles & Brainteasers

## 👜 experience

### Software Engineer

Jan '18 - Apr '18

Novus Healthcare International

- Designed and created a user dashboard for health assessments using **React**, reducing turnaround 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

- Architected 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](https://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](https://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](https://git.io/vp49H)

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