


# Simeng Yang

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 [simengyang.me](http://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

Toronto, Ontario

*Novus Health*

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 the time to update records by **30%**
- Developed a text-parsing engine for reading and writing files in **Laravel**

### Software Developer

Markham, Ontario

*Genesys Laboratories*

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 recently pushed builds

## 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

[git.io/vpzdj](https://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](https://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](https://git.io/vp49H)

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

## Education

### University of Waterloo

Waterloo, Ontario

*Candidate for Bachelor of Computer Science, 3.88 cGPA*

Sep '16 - May '21 (Expected)

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