

# Simeng Yang

🏠 simengyang.me

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🌐 simeng-yang

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## 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 '16 - May '21 (Expected)

## Coursework

Data Structures & Algorithms  
Object-Oriented Programming  
Digital Computation

## Awards

Most Ambitious, Game Jam F '17  
ECOO Semi-finalists, '15 & '16  
Most Outstanding Army Cadet

## Interests

Swimming lengths  
Muay Thai  
Water Polo  
Cryptography

## Experience

### Software Engineer

Novus Health

Toronto, Ontario

Jan '18 - Apr '18

- Implemented 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
- Composed 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 Developer

Genesys Laboratories

Markham, Ontario

May '17 - Aug '17

- Engineered a media control suite for audio recording and playback in **C++**
- Extended support for next-generation audio codec, boosting sound 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

🌐 [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**

### 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