

# 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, Laravel, Android, LAMP Stack, PostgreSQL

## 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

### 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 terrain

### 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, multiple tabs and linear history

### 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+%)