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github.com/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/Redux, Laravel, Android, PostgreSQL, jQuery

Experience

Software EngineerToronto, OntarioNovus HealthJan '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

- 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

- 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

- 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

- 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+%)