SIMENG YANG

+1 (905) 807-6948 | s275yang@edu.uwaterloo.ca | simengyang.me | simeng-yang

Skills

Languages   C/C++, Python, C#, JavaScript, HTML / CSS, Java, PHP, SQL
Frameworks & Tools   Android, React, NodeJS, Laravel, LAMP Stack, Unity, Git

Experience

Software Engineer   *Toronto, ON*
NOVUS HEALTH   *January - April 2018*
- Designed and created a user dashboard for health assessments using **React**, reducing the turnaround for publishing campaigns 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   *Markham, ON*
GENESYS LABORATORIES   *May - August 2017*
- 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**
- Developed and maintained features for the web-based Real-Time Communications system
- Wrote **XML** scripts to simulate user-agent scenarios with SIP protocol over the media server

Projects

Student Management System
JAVASCRIPT, PHP, MYSQL, HTML / CSS, LAMP STACK, APACHE
- Implemented a secure database to manage 1,000+ student records using **LAMP Stack**
- Developed web interface using **JavaScript** and **HTML / CSS**, with database integration via **MySQL** and **Apache**
- Designed robust input sanitation for text-fields using error-handlers and regular expressions in **PHP**

Re-Vim'd
C/C++
- Programmed a lightweight clone of the classic Vim editor in **C++**
- Replicated navigation, file open/save, editing, macros, syntax-highlighting and other core features
- Designed a highly pluggable MVC architecture for easily hooking up additional functionality

3D Dogfighter
C#, UNITY
- Developed a multiplayer aerial combat game in **C#** with the **Unity** game engine
- Integrated networking with match-making system for hosting 20+ concurrent users
- Designed combat and flight mechanics, user interface and terrain

Fraud Detector
PYTHON
- 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

QuickConnect
ANDROID
- Developed an **Android** App to effortlessly connect with peers on social media using NFC
- Leveraged Facebook API to share social invites and messages

Education

University of Waterloo
CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE   *Sep. 2016 - Exp. May 2021*