SIMENG **YANG**

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Skills

Proficient	C/C++, Python, C#, HTML / CSS, PHP, SQL
Familiar	Java, JavaScript, Android, LAMP Stack, Perl, Matlab, Arduino
Technologies	Unix/Linux, GDB, Git/Mercurial, Jira, Apache

Experience

Software Development Intern
Markham, ON

GENESYS LABORATORIES
May - August 2017

- Developed a media interface for audio recording and playback over Chrome and Firefox in **C++**
- Implemented unit tests for audio encapsulation with Google Test on **Linux** and **Windows**
- Wrote **XML** scripts to simulate user-agent scenarios with SIP protocol over the media server
- Programmed and tested features for the web-based Real-Time Communications (RTC) system
- Performed and underwent code reviews to ensure a consistently high quality of code

ECOO Programming Contest
Toronto, ON

REGIONAL QUALIFIER X 2
Feb 2016/2015

- **Semi-finalists** across Ontario, 2015 and 2016
- Solved problems by implementing **Search, Sort, and Pathfinding** algorithms in **C++**, **Python**, and **C#**
- Applied **dynamic programming** to optimize solutions and satisfy runtime constraints

Projects

Student Database Management System

JAVASCRIPT, PHP, MYSQL, HTML / CSS, LAMP STACK, APACHE

- Implemented a login-authenticated database to manage 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**

SketchIt! - 2D Printer

C/C++

- Programmed a printer to reproduce sketches from a set of 25+ points on a brick microcomputer
- Developed a graphical interface for plotting points through keyboard and mouse input in **C++**
- Coded the calibration and 3-axial operation of the printer in **C**

Classifier

PYTHON

- Implemented a Support Vector Machine in **Python** to identify employees who may have committed fraud based on financial and email datasets
- Tuned classification algorithm to achieve 85% accuracy on a dataset of 14,000+ employee profiles

QuickConnect App

ANDROID

- Developed an **Android** App to effortlessly connect with peers on social media using NFC
- Leveraged Facebook, Snapchat and Instagram APIs to share social invites and messages

Education

University of Waterloo

CANDIDATE FOR BACHELOR OF COMPUTER SCIENCE, 3.9 CGPA
Sep. 2016 - Exp. May 2021

PYTHON FOR DATA SCIENCE (DSE200X), EDX

INTRO TO MACHINE LEARNING (UD120), UDACITY