DAVID CHI
COMPUTER SCIENCE

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in davidchi8
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Skills

Languages: Java, C++, C, JavaScript, SQL, HTML/CSS, Python
Technologies: NodeJS, React, Redux, Flask, MongoDB, Microsoft Detours, Elasticsearch
Tools: Git, Bash, Docker, Jekyll, Firebase

Employment

McAfee   Sept. 2019 to Dec. 2019
Software Developer
- Optimized the state management system of antivirus software, improving UI response time to real time data by 30%
- Implemented and integrated an API to store and fetch historical data using C++ and JavaScript, leading to 60% faster load times
- Added support for localization of the new antivirus software to enhance usability for users of different cultures
- Utilized Microsoft Detours in C++ to simulate failure scenarios for unit tests, increasing code coverage by 10%

Ontario Institute for Cancer Research   Jan. 2019 to May 2019
Applications Developer
- Implemented NodeJS modules to handle user authentication and actions from the Content Management System
- Developed scripts to automate continuous integration processes, improving the project deployment rate by 30%
- Implemented a centralized logging system using ELK Stack, leading to a 100% faster response time to errors on deployed projects
- Developed React components that utilize information in the Redux store to create dynamic webpages

Facility Association   May 2018 to Aug. 2018
Audit Analyst
- Implemented a relational database to store incidents reported under the ERM framework
- Developed a reporting form using the ActiveX framework to insert and/or update incident records through dynamic SQL statements
- Redesigned the process of reporting and reviewing incidents for risk analysis and management

Projects

WLP4 Compiler (C++)   Aug. 2019
- Created a compiler for a simple C++-like language that outputs MIPS assembly code
- Implemented support for dynamic memory allocation and standard IO

Super Pac-Man (Java)   Mar. 2019
- Developed a variation of the Pac-Man game that incorporates different special abilities to enhance the player
- Incorporated Object Oriented Programming practices and the visitor design pattern to handle collisions and interactions between entities and the environment
- Utilized the Java Swing library to provide a graphical user interface

TravelSafe (JavaScript, Actions on Google)   Sept. 2018
- Developed a Google Assistant app using Actions on Google to provide users with a discrete way to report crimes
- Utilized the Dialogflow API and NodeJS to understand user commands and provide appropriate responses
- Added feature to make calls to emergency services through the Twilio API using the MP3 file generated by the Google Cloud Text-to-Speech API

Education

University of Waterloo   Expected Graduation: 2022
Candidate for Bachelor of Computer Science (3A)
- Courses: OOP, Data Structures and Algorithms, Compilers, Operating Systems