

DAVID CHI

COMPUTER SCIENCE

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in davidchi8

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Skills

Languages: JavaScript, Python, C++, C, Java, Bash, SQL, GraphQL

Frameworks: React, Redux, NodeJS, ExpressJS, ObjectionJS, Flask

Tools: Git, Docker, AWS, GCP, PostgreSQL, MongoDB, Elasticsearch, Heroku

Experience

tilr – Full Stack Developer

Apr 2020 to Sep 2020

- Owned development of data-visualization dashboard using React, NodeJS, and PostgreSQL, providing companies with workforce performance metrics
- Implemented scalable subsystems to send emails and push notifications using NodeJS, **GCP Pub/Sub** and **Cloud Functions**, targeting **thousands of users daily**
- Secured sensitive endpoints by building middleware to support role-based access control using **NodeJS**

McAfee – Software Developer

Sep 2019 to Dec 2019

- Optimized the state management system of antivirus software, improving UI **response time** to real-time data by **30%**
- Redesigned the API for management of historical data using **C++** and NodeJS, leading to **60% faster load times**
- Added support for localization of the new antivirus software to enhance usability for users of different cultures

Ontario Institute for Cancer Research – Applications Developer

Jan 2019 to May 2019

- Implemented user authentication for the Content Management System using **NodeJS** and OAuth 2.0
- Developed scripts to automate continuous integration processes, leading to **30% faster project deployment**
- Built a centralized logging system using ELK, resulting in **100% faster resolution of errors** on deployed projects
- Developed interactive **React** components to enhance the showcase of cancer research for 10+ OICR Labs

Facility Association – Database Developer

May 2018 to Aug 2018

- Engineered a relational database schema to manage incidents under the ERM framework
- Developed a reporting form to create and maintain incident records using **SQL** and ActiveX, redesigning the process of risk analysis and management

Projects

Super Pac-Man – Java

Aug 2019

- Developed a Pac-Man game that incorporates special player abilities, incorporating **OOP** practices and the **visitor design pattern** to handle collisions and interactions between entities and the surrounding environment

WLP4 Compiler – C++

Aug 2019

- Created a compiler for a C++ like language that outputs into MIPS assembly, supporting dynamic memory allocation and standard I/O features

TravelSafe – JavaScript, Actions on Google

Sep 2018

- Built a Google Assistant app using NodeJS and Firebase that makes calls to emergency services, providing users with a discrete way to report crimes

Education

University of Waterloo - Candidate for BCS

Expected Graduation: 2022

Courses: OOP, Data Structures and Algorithms, Concurrency, OS, Compilers