

Richie Shi

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SKILLS

- **Languages:** Python, C++, JavaScript, Java, SQL, Objective-C, C#, HTML, CSS, PHP
- **Technologies:** Caffe, OpenCV, React, Flux, Node.js, jQuery, Git, Docker

WORK EXPERIENCE

NXP Semiconductors

May – Aug 2017

Embedded Vision Software Developer

Ottawa, ON

- Implemented kernel functions for processing convolutional neural network (CNN) operations in parallel using C++ on the S32V234 processor, speeding up the operations by 64x
- Improved performance of kernel functions by 25% by optimizing order of compiled instructions
- Modeled and trained CNN for image semantic segmentation using Caffe and achieved 71% accuracy
- Increased efficiency of development process by automating the deep learning environment setup using Docker

D2L

Sept – Dec 2016

Software Developer

Kitchener, ON

- Created backend service in C# and MSSQL to automatically pace teaching schedules
- Reduced app load times by 95% by significantly minimizing the number of necessary API calls
- Delivered significant portions of a brand new, high visibility product and received outstanding reviews from C-level executives in bi-weekly demos
- Improved automated test coverage by 20% by writing unit and integration tests

360 Education Labs

Jan – Apr 2016

Software Developer

Toronto, ON

- Reduced codebase size of main web app by 40% by migrating UI components to React
- Developed a video content management system using React, Flux, Java, and MySQL
- Created OS X video and desktop recording software and then integrated it with AWS and the YuJa web platform

Suretap Wallet

Apr – Aug 2015

Quality Assurance Analyst

Toronto, ON

- Led the QA team's communication with developers to improve collaboration and speed up workflow
- Drafted new test cases, tracked test results, and logged bugs to maximize coverage of requirements

PROJECTS

Yelp Review Classifier (Python, scikit-learn)

Jan 2017

- Trained a NLP classifier that categorizes the sentiment of Yelp reviews with an accuracy of 84%

YouTube Music Player (React, Redux, Python, MySQL)

Nov – Dec 2016

- Desktop application for creating, saving, and playing music playlists

EDUCATION

University of Waterloo, Bachelor's in Software Engineering

2014 – 2019