

EDUCATION

University of Toronto, St. George Campus

Computer Science Specialist, Artificial Intelligence Focus Area; Graduate With Distinction

Sep 2015 - Feb 2020

WORK EXPERIENCE

TD Canada Trust iOS Engineer Co-op

July 2018 - July 2019

- Increased the user base of iOS App's Quick Access feature 67x to 50K+, by designing, implementing, and optimizing it using Swift and Objective-C
- Streamlined user experience by developing RESTful APIs to synchronize user preferences with backend PostgreSQL
- Allowed for advanced data analytics and predictive models by building and testing Omniture tagging functionality to track user actions using Charles Proxy
- Improved code coverage by 5% through automating UI testing in XCode
- Spearheaded cross-functional collaboration and provided transparency into team's progress by leading agile meetings as scrum master
- Presented team projects to VP of Engineering; received TD Appreciation Award

PROJECTS

Face Recognition

- Developed a single-hidden-layer neural network model with a custom loss function using PyTorch to classify faces extracted from 100,000 images
- Tuned and optimized the model to beat benchmark accuracy by 7.5% through experimenting with learning rate, batch normalization, dropout, and various optimizers
- Visualized results and the learning process using matplotlib

Weather Forecast Website

- Led a team of 4 to build a weather forecast website, with the capabilities of registration, search, visualization, and providing clothing recommendations
- Created a dynamic web UI using HTML, CSS, jQuery, and ReactJS

Fake News

- Coded three fake news classifiers using Decision Tree, Logistic Regression, and Naive Bayes in Python
- Optimized machine learning models written in sklearn to outperform the benchmark by 7%

Grading Platform

- Supported professors to grade homework online by writing a PostgreSQL backend
- Implemented Java Database Connectivity tools to run SQL queries and manipulate database records

EXTRACURRICULAR ACTIVITIES

Planting Trees in Inner Mongolia

- Planted over 50 trees on the barren land in the high-degree desertification area with teammates.
- Cooperated with teammates to build a Green Ring of grass and plants to commemorate this activity.

Volunteer Teaching in Dabie Mountain

- Participated in volunteer teaching in the impoverished mountain area.
- Taught Mathematics, Music and Drawing in Grade 3, using self-compiled materials and achieved favourable feedback.

TECHNICAL SKILLS

Languages: Python, Java, C, R, Javascript, Objective-C, Swift, HTML, CSS, React, XML, Shell, Matlab

Web Development: Node.JS, JavaScript, jQuery, CSS, HTML, React

Database Management: SQL, PostgreSQL, MongoDB, Relational Databases

Machine Learning: Pytorch, Tensorflow, Scikit-learn, Numpy, Matplotlib, OpenCV

Version Control: Git, SVN

Operating System: Linux, Windows, MacOS

Others: Agile, Scrum, Jenkins, Charles Proxy, Jira, Confluence