Youan Cong

y.cong@mail.utoronto.ca • Toronto, Canada

Education

University of Toronto *Sep 2018–current*

Bachelor of Science in Computer Science Specialist, Statistics Major

- Annual GPA: 3.74/4.00
- Cumulative GPA: 3.51/4.00

Working Experience

Application Programmer Analyst: Ministry of Education *May 2021–current*

Community Services I&IT Cluster

- Obtained a strong knowledge of Java, Spring framework by involving in various software development projects.
- Gained an insight into modern software development infrastructure and methodologies for rapidly-moving project requirements.
- Conducted stress tests on servers through automation tools and shell scripts.

Work Placement Program: Royal Bank of Canada *January 2021–May 2021*

Mentor: Raymond Dela Paz

- Collaborated with senior manager mentor Raymond Dela Paz from RBC to design wealth management strategies and solutions to increase the HENRY client base at RBC.
- Applied SWOT analysis on RBC's current wealth management solutions and developed an implementation plan and recommendations for RBC to expand its market share through the improvement of current services.

Technical Projects

Predicting Human Perception of Street View Images: *Jan 2022–current*

Deep Learning Project for Independent Studies Course, Supervisor: Lisa Zhang

- Worked on "predicting and evaluating human perceived safeness of street view images" with Professor Lisa Zhang.
- Proposed deep learning model using ViT and ResNet based Siamese networks.

WebSphere Configuration Tool: *Nov 2021*

A web configuration management tool for IBM WebSphere application server

- Contributed to automated configuration file fetching and deserialization, using Spring boot and Spring MVC to construct the web application for details presentation.
- Applied Bootstrap framework for responsive web page design.
- Implemented configuration upload, update, filter and comparison modules based on Spring and JavaScript.

Ridesharing App: *Mar* 2021

Final Project for CSC301: Introduction to Software Engineering

- Created an Uber-like ridesharing web app that matches user with nearby driver to safely take them to their destination.
- Programmed multiple backend microservices providing RESTful API endpoints to support CRUD operations for location, travel and user information respectively using Java, Docker, Neo4J, MongoDB and PostgreSQL.

HTTP Proxy Server: *Feb* 2021

In-Course Assignment for CSC358: Principles of Computer Networks Assignment

- Developed an HTTP proxy server based on Python that supports HTTP request and web content forwarding as well as caching.
- Achieved stable and continuous socket reading and writing within a reasonable time interval.

2D Fortnite Web Game: *Mar* 2021

Final Project for CSC309: Programming on the Web

- Designed a 2D third-person online Battle Royal shooter game website that supports login, stats, profile, leaderboard, and authentication via WebSocket, NodeJS, React framework and MongoDB database.

EXT2 File System APIs: *Dec* 2021

Final Project for CSC369: Operating Systems

- Constructed a set of Ext2 APIs that performs the byte-wise file operations to EXT2 ISO files through reasonable use of C language.

Spreadsheet Application with Static Type Inference: *Nov* 2021

Final Project for CSC324: Principles of Programming Languages

- Produced an evaluation tool for specific spreadsheets language with static type based on Racket and logical programming language MiniKanren to solve logical queries using backtracking and relations.
- Generated an interpreter for a simple language that supports lambda calculus and basic math operations.

Othello Game: *Nov* 2019

In-course Assignment for CSC207: Software Design

- Coded an Othello game application based on Java and JavaFx library, supporting PVP mode as well as PvE mode with different strategies.
- Utilized multiple design patterns such as MVC, Factory, Observer/Observable, Strategy and Singleton.

HONORS & AWARDS

Dean's List Scholar: University of Toronto 2021-2022

SUMMARY OF SKILLS

- **Programming Languages:** Python, C, Java, JavaScript, PHP, Racket, Haskell
- **Languages:** Fluent in English and Mandarin
- **Framework, Software and Others:** NumPy, Pandas, Scikit-Learn, Matplotlib, SQL, NodeJS, React, HTML, CSS, Linux, Git, Anaconda, Photoshop, Premiere, Audition