#### Yishan Li

Email: <u>a356li@uwaterloo.ca</u> Cell: (613) 770-8458 portfolio: https://liyishanamy.github.io/portfolio/

#### **OBJECTIVE:**

A thorough and detail-oriented graduate student seeking a challenging yet rewarding coop in a progressive company that provides an opportunity to utilize my technical skills and integrate my experience for the betterment of the organization.

# **EDUCATION:**

Queen's University Bachelor of computer science with professional internship University of Waterloo Master of Data Science and Artificial Intelligence GPA: 4.14/4.3

Anticipated graduation: 2021.12

#### SKILL:

- Programming Languages: Java, Junit, Python, TensorFlow, PHP, React, React native, SQL, C, Bash, Haskell, Prolog, MATLAB, Scala
- Operating Systems: Windows & Mac OS & Linux.
- Tools: Eclipse, Selenium automation tool, Unity, Git, MySQL, MongoDB, Express.js, Hadoop, Spark, Microsoft Office, Wireshark.

# **WORK EXPERIENCE:**

# IBM, Markham, Canada.

Software Developer Intern

May 2018 - Aug 2019

- Worked under IBM hybrid cloud team focusing on Business Automation, familiar with scrum methodology and software development process.
- Actively engaged in bringing up innovative ideas of new features and constantly offering suggestions of optimizing the user experience for the product.
- Extensively utilized Eclipse to develop the Selenium and RESTAPI project, which automated the process of testing all
  the possible features of the product.
- Strictly followed the best practice of coding guideline and conducted detailed-orientated code review for other interns.
- Maintained and Monitored product quality performance to enable problem-free operation and analyzed the issues of the product based on the automation test suites.
- Collaborated with other developers to identify and alleviate number of bugs and errors in software.
- Thoroughly developed test plans and test cases and carefully conduct test executions, opening more than 300 defects during internship.
- The only intern who was responsible of quality assurance of E-commerce story and assisted the full-time developer to develop E-commerce story.
- Carefully documented technical workflows and knowledge in private wiki for education of newly hired interns.

# Queen's University, Kingston, Canada

Jan 2020 - April 2020

Teaching Assistant of human-computer interaction

- Having weekly meetings with each group and provide guidance and feedback on the project.
- Working effectively with all group of students and provide helpful assistance to improve their project design
- Mark the project efficiently and discussing the feedback with professor and other TA before uploading the students' grades.
- Having monthly meetings with the professor and other TAs and reflect the teaching strategies.
- Supported instructor with curriculum development, guiz and assignment grading.

# Queen's University, Kingston, Canada

Sept 2017 - April 2018

ASUS Tutoring/Teaching Assistant of software specification

 Provided guidance to the tutees for course assignment by answering questions and assisted in debugging code, resulting in students achieving higher marks on tests and assignments.

#### PERSONAL PROJECT:

# "Health Track" Web application project (React + Express.js + MongoDB)

A personal project developed during the summer to ease the strain of the COVID19 situation. Health Track is an online management system which was developed using React, a solution for doctors to keep track of the daily health status of the COVID19 confirmed patients, check the overall statistic of the patients so that the doctor can care for the patients more efficiently. The data is efficiently managed and stored in MongoDB, while the RESTAPI service is performed using Express.js, where the function of the access token and the refresh token is effectively implemented to authenticate and authorize users. The API documentation is clearly documented for the purpose of efficient development.

# "Movie theatre" database project (PHP+MYSQL)

Database Design Project developed a management system for cinema to store and manipulate movies and search movies or ticket by customers. Firstly, XAMPP was installed to grant the local server setup. Then I designed an ER-model and translated the model to relational schema. Based on the schema, the database structure can be clearly established in phpMyAdmin. I implemented the movie theatre website using PHP and performed a quality assurance after the implementation.

# Music genre classification models (TensorFlow)

Worked with my team to preprocess the music data to spectrogram using Fourier transform and deploy deep learning models (VGG16, convolutional neural network, recurrent neural network) to classify the music genres on TensorFlow. Predicted the music genre correctly with around 82% accuracy after training and optimizing our models using GTZAN and benchmark dataset.

#### **RELEVANT COURSES:**

Data-Intensive distributed system, machine learning, statistical concept for data science, computer architecture, digital system, software specification, database, artificial intelligence, cybersecurity, neural network and computer network.

#### **AWARDS AND ACTIVITY:**

Recipient of 2015 - 2020 Dean's Honor Roll.
Participated Canadian computing conference for Women in Technology.
ONPS Summer school program campus representative.
Peer tutoring coordinator in Computing student association.
Volunteered in the campus career fair.
Volunteered in the Kingston movie festival.