

Xiangzhu Lu

1508-85 Duke St W, Kitchener, ON | (519) 729-2790 | x244lu@uwaterloo.ca

SUMMARY OF QUALIFICATIONS

- Cultivated strong **JavaScript, Java, C, C++, Python, Node.js, Racket, VBA** and **SQL** skills through projects
- Proficient in **Angular, RESTFUL API, Git, Docker, Linux/Bash** and **PyTorch**
- Energetic, efficient, self-motivated, and eager to learn, quick adaption to new environment and technologies

EDUCATION

Master of Applied Science in Electrical and Computer Engineering, University of Waterloo, Specialization in Communication and Information System Sep 2022 – present

- Relevant Courses: Methods and Tools for Software Engineering, Algorithm Design and Analysis

Bachelor of Mathematics in Computational Mathematics, University of Waterloo, Minors in Computing, Combinatorics and Optimization, Economics Sep 2017 – Apr 2022

- Relevant Courses: Objected-Oriented Software Development, Data Types and Structures, Elementary Algorithm Design and Data Abstraction, Logic and Computation, Computer Applications in Business: Databases
- Awards: Ranked top 13.7% in the University of Waterloo Euclid Mathematics Contest

PUBLICATIONS

- Y. Jiao, P. -H. Ho, X. Lu, J. Tapolcai and L. Peng, "A Novel Framework of Failure Localization in Optical Transport Network," in *IEEE Communications Magazine*, vol. 61, no. 12, pp. 142-147, December 2023, doi: 10.1109/MCOM.006.2300243
- Y. Jiao, P. -H. Ho, X. Lu, K. Liang, Y. You, J. Tapolcai, *et al.*, "On Real-time Failure Localization via Instance Correlation in Optical Transport Networks," *2023 IFIP Networking Conference (IFIP Networking)*, Barcelona, Spain, 2023, pp. 1-9, doi: 10.23919/IFIPNetworking57963.2023.10186406.

PROFESSIONAL EXPERIENCES

Web Developer, Chengdu Daaisi Electronics Co., Ltd., Chengdu, China Jul 2021 – Aug 2021

- Maintained and improved the official website of company using **Angular**
- Researched web technology and improved the functionality of the front-end page using deep learning

Mobile Test Engineer, Dayforce, Toronto, Ontario May 2019 – Aug 2019; Jan 2020 – Apr 2020

- Wrote, updated and maintained UI (**Junit** and **Cucumber**) and **API** automation tests to increase test coverage
- Developed and maintained automation infrastructure to support feature testing using **Java** and **TestNG**
- Analyzed daily automation results and investigated product failures

Data Scientist, MindBeacon Software Inc, Toronto, Ontario Sep 2018 – Dec 2018

- Created a CMS board using **Angular** for therapists to efficiently manage and manipulate information
- Implemented frontend and backend tests by using Mocha, Jest and Jasmine
- Established a prediction model to predict the protocols of clients by using Machine Learning Studio

PROJECT EXPERIENCES

OTN-based failure/alarm propagation simulator, Waterloo, Ontario Sep 2022 – present

- Designed and developed an
- Implemented and trained a binary classifier to measure the correlation between instances
- Extracted and analysed the network topology information using **ArangoDB**

C++ Projects, Toronto, Ontario Sep 2019 – Dec 2019

- Implemented the game of Reversi using Observer pattern
- Produced a two-player version Tetris game with two other group members
- Implemented an image processing package using Decorator pattern with functions including flip, rotate and sepia

Content Management System, Waterloo, Ontario Sep 2018 – Dec 2018