

# Yihan Zhu

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## EDUCATION

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### University of Toronto

Master of Engineering, Electrical & Computer Engineering  
Emphases in Analytics & Computer Engineering

**Toronto, Canada**

Sept. 2022 – Present  
(Expected Aug. 2023)

### University of Toronto

Bachelor of Applied Science, Electrical & Computer Engineering  
Minors in Robotics and Mechatronics & Artificial Intelligence Engineering

**Toronto, Canada**

Sept. 2017 – Apr. 2022

## EXPERIENCE

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### Qualcomm Canada Inc

Automotive Multimedia Software Engineer

**Markham, Canada**

May 2020 – Aug. 2021

- Developed and optimized graphics drivers in **C/C++** for **high-level operating system frameworks**, resulting in a notable computational performance enhancement in automotive multimedia products.
- Led the design and implementation of a comprehensive testing suite, expanding test coverage benchmarks by **20%** and improving product reliability while minimizing post-release issues.
- Proactively recognized and resolved intricate software issues occurring post-release during automotive tests and benchmarks, enhancing system stability and consequently boosting client satisfaction.
- Collaborated effectively with the R&D team to integrate applications such as Parasoft, achieving a milestone of **100%** code coverage and ensuring the highest level of software quality and reliability.

### University of Toronto

Research Assistant

**Toronto, Canada**

May 2019 – Aug. 2019

- Conducted in-depth research on **Ontology**, gaining insights into its practical implications for managing complex transportation data, contributing to a better understanding of its potential applications.
- Streamlined the data reading process in OpenTripPlanner (OTP) by facilitating the integration of pre-processed data from the Ontology engine **AllegroGraph**, enhancing the system efficiency by **50%**.
- Seamlessly integrated the OTP with **Apache Jena** using **Python**, improving the dynamism and standardization of the data reading process, thereby optimizing data management and usability.

### ArcSoft Inc

Machine Learning Algorithm Engineer

**Hangzhou, China**

May 2018 – Aug. 2018

- Generated 300k+ image samples from 100+ green screen footages using **Python** and **Adobe After Effects**, enriching the machine learning dataset and enhancing the training environment.
- Organized and refined 500k+ historical image samples into over 200k valuable samples with **Python**, enhancing data accessibility and usability and boosting the efficiency of future projects.
- Led cross-functional collaboration efforts, achieving a significant **20%** improvement in the accuracy of gesture recognition performance, resulting in more accurate interactions and a better user experience.

## PROJECT

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### Modular Learning Platform for the Computer Network Industry

May 2023 – Present

- Collaborating with academia to establish a secure networking framework for pedagogical purposes, focusing on instructing network components and functionalities and assessing student progress.
- Creating practical scenario-based modules for a deeper comprehension of complex network concepts.
- Tech Stack: HTML, CSS, React, JavaScript, C/C++, Express, NodeJS, AWS, MongoDB, Docker

## SKILLS

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- Programming Languages:** C/C++, Java, JavaScript, Matlab, Python, SQL
- Tools:** Apache, AWS, Docker, Express, Flask, Git, MongoDB, MySQL, NextJS, NodeJS, PyTorch, React