

# Miaosen Zhou

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## EDUCATION

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**Toronto Metropolitan University (Formerly: Ryerson University)**, Toronto, Canada

Electrical and Computer Engineering MAsc (Accelerated)

Estimated Graduate: April 2023

GPA: 4.33/4.33;

**Toronto Metropolitan University (Formerly: Ryerson University)**, Toronto, Canada

Bachelor of Engineering Degree - Computer Engineering

Graduate: April 2022

GPA: 3.86/4.33;

**George Brown College**, Toronto, Canada

Bachelor of Applied Technology Degree - Construction Science and Management

Graduated in April 2012

## RESEARCH INTERESTS

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- Machine Learning
- Quantum Computing
- System Modeling
- Signal Processing

## WORK EXPERIENCE

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### Graduate Research

**Toronto Metropolitan University (Formerly: Ryerson University) SIP Lab**, Toronto, ON.

Summer 2022 - present

- Experimental design and develop a one bit Lightbeam Qubit, which will randomly generate two stages.
- Performed a qualitative study on the performance of the one bit Qubit to determine the possible background noise.
- Proposed a new hypothetical research direction and developing new research explored possible quantum denoising based on the quantum random walk.
- Gained experience with the entire research process.

## **AI Research Assistant**

**Toronto Metropolitan University (Formerly: Ryerson University), Toronto, ON.**

Summer 2021

- Working with PhD candidates from University of Toronto exploring the literature explored the limitations of current Machine Learning algorithms.
- Proposed a new algorithm to optimize the AI model's hyper parameter.
- Collection research data for Machine Learning algorithms experiment.
- Performed a qualitative study on new algorithm mathematical modeling and data analysis on the trained model based on the collected data .
- Gained experience with the entire research process including developing new research.
- The Co-author journal paper is ready for publication.

## **SoC Verification Engineer**

**Co-OpLT (Canada Specific) RTG SOC CA, AMD, Markham, ON.**

2020 – 2021

- Experience with Software programming;
- Use command line Linux/MacOS terminal;
- Operation Data analysis;
- Knowledge of Digital Logic Circuits and CPU Architectures;
- Strong communication and teamwork during Covn19 period;

**NYGH Volunteer, North York General Hospital, North York, ON**

2019 – present

- NYGH Volunteer Spotlight

## **Construction Estimator**

Mazzad Drywall, Toronto, ON.

2016 – 2017

Grizzly Door System, Toronto, ON.

2015 – 2016

ASN Inc. ,Toronto, ON.

2012 – 2015

- Perform detailed quantity take-offs using Excel spreadsheet.
- Review drawings with the Project Management team and highlight areas of concern.
- Review job costs with the Project Management team and highlight any issues.
- Review tender documents, plans and specifications.
- Strong communication and teamwork.

## **AWARDS**

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- 2021-2022 Ryerson Graduate Fellowship (RGF);
- NYGH Volunteer Spotlight 2022;
- Accelerated Master Tuition Grad 2021-2022;
- Undergraduate Student Research Award 2021;

- Award: \$5,000 Ryerson Bursaries(2018);
- Dean's list 2017-2018, 2018-2019, 2019-2020; 2020-2021;

## **HIGHLIGHT OF QUALIFICATIONS**

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- Machine Learning programming experience write in coding language Python;
- Excellent at Machine Learning Python Library: TensorFlow, Sklearn, Opencv etc. ;
- Software programming experience could read and write in coding language C & Java;
- Fully understand Linux/MacOS terminal system and Shell scripting;
- Fully understand Digital Logic Circuits and CPU & GPU Architectures;
- Fully understood Data Structure & Algorithms;
- Desire to learn and grow as an engineering research profession;
- Excellent communication, organizational and interpersonal skills;