

# PETER WIATR

289-788-7465 | [peterwiatr@outlook.com](mailto:peterwiatr@outlook.com) | [piotrwiatr.com](http://piotrwiatr.com) | [linkedin.com/in/wiatrp](https://linkedin.com/in/wiatrp) | [github.com/piotrwiatr](https://github.com/piotrwiatr)

## HIGHLIGHTS OF QUALIFICATIONS

---

- Enrolled in year 4-of-4 of McMaster University's 4-year Honours Computer Science CO-OP program
- Strong programming and problem-solving skills established through professional software development experience and novel research opportunities
- Excellent communication, organizational, and teamwork skills developed through volunteer and internship placements

## EDUCATION

---

### McMaster University

Hamilton, ON

B.A.Sc in Computer Science | cGPA: 3.95/4.0

Sept. 2022 – Present

- Relevant Coursework: Data Structures and Algorithms, Software Development, Concurrent Systems, Operating Systems
- Awards: Provost Honour Roll (4.0/4.0 cGPA during First Year), Dean's Honour Roll (3.5+/4.0 cGPA during all four years)

## EXPERIENCE

---

### Undergraduate Research Assistant

May 2024 – Aug 2024

McMaster University

Hamilton, ON

- Collaborated on the development of a Haskell-based DSL (Coconut) with Dr. Christopher Anand by converting the RISC-V architecture into the DSL and rigorously testing instruction accuracy for assembly-level operations
- Worked in a multidisciplinary team with weekly meetings, collaborating closely with two other research assistants to meet project milestones and troubleshoot technical challenges
- Engaged in quantum computing research in collaboration with IBM, focusing on learning quantum computation principles through educational content and research papers
- Analyzed and implemented promising quantum algorithms such as variational quantum algorithms (VQAs) using IBM's python library Qiskit for execution on contemporary quantum hardware

### Teaching Assistant

Sept 2023 – Dec 2023

McMaster University

Hamilton, ON

- Helping to introduce over 200 students to computational thinking in COMPSCI 1JC3
- Teaching and aiding students understand the basics of functional programming in ELM
- Marking and grading student assignments for correctness and code readability

### Full Stack Web Developer

May 2023 – Aug 2023

McMaster University

Hamilton, ON

- Supervised under Dr. Christopher Anand and closely collaborated with several teams of 3-5 people on a dynamic booking system and extended the functionality of the online ELM IDE STaBL.Rocks that is used by 15,000+ students with over 1 million compiles
- Developed each full-stack web application using Integrated Haskell Platform (IHP) for the back-end and HTML, CSS, and JavaScript for the front-end
- Continuously integrated changes into each application through Git to ensure smooth collaboration

## PROJECTS

---

### STaBL.Rocks Assignment System

STaBL Foundation

- Expanded STaBL.Rocks to incorporate an assignment system that allows over 250 first-year students to complete programming exercises through STaBL's web IDE
- Developed the workflow using HTML/CSS, JavaScript, and Integrated Haskell Platform (IHP) for professors and teaching assistants to both create and mark assignment submissions
- Worked closely with other teams, along with 2 other teammates, to ensure proper integration of the assignment system

## TECHNICAL SKILLS

---

**Languages:** Python, JavaScript, C, SQL, HTML/CSS, Haskell, ELM

**Frameworks:** IHP, Flask, Qiskit, React.js, Node.js, Express.js, Next.js

**Tools:** Git, VSCode, SQLite, PostgreSQL, DBeaver, Visual Studio, Linux, Selenium