Piotr Wiatr

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HIGHLIGHTS OF QUALIFICATIONS

- Enrolled in level 3 of the 4-year Honours Computer Science Co-op program at McMaster University
- Strong programming and problem-solving skills established through rigorous coursework and research opportunities
- Excellent communication, organizational, and teamwork skills developed through volunteer and internship placements

EDUCATION

McMaster University   Hamilton, ON
Bachelor of Applied Science in Computer Science   *Sept. 2022 – Present*
- CGPA - 11.5/12.0
- Awarded Provost Honour Roll for having a perfect cumulative GPA during first year
- Awarded Dean's List Honour Roll for having a high GPA (9.5+/12) during second year

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, C, Java, SQL, JavaScript, HTML/CSS, Haskell, ELM
Frameworks: IHP, Flask, Qiskit, React.js, Node.js, Express.js
Developer Tools: Git, VSCode, IntelliJ, SQLite, DBeaver, Visual Studio, Linux