Romina Mahinpei

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EDUCATION

University of British Columbia (UBC)   **09/2020 – 05/2024**
B.Sc. in Honours Computer Science with a minor in Mathematics.   Cumulative GPA: **94.9%**

RESEARCH EXPERIENCE

Research Assistant | UBC Scientific Computing Group   **05/2023 – Present**
- Investigating the potential of mixed precision arithmetics in speeding up numerical algorithms as a part of my undergraduate thesis project.
- Advised by Dr. Chen Greif of UBC's Computer Science Department.

Research Assistant | UBC Systopia Lab   **02/2022 – 01/2023**
- Conducted a user study to understand the current state of data workflows and identified potential applications of data provenance in simplifying those workflows.
- Designed, implemented, and tested the Model Card package for Tribuo, Oracle's open-source Java ML library, to allow users to create partially automated machine learning model documentations.
- Advised by Dr. Margo Seltzer of UBC's Computer Science Department.

Research Assistant | UBC Quantum Matter Institute   **05/2021 – 08/2021**
- Created heterostructures for longitudinal resistance measurements.
- Automated the visualization and categorization of the collected measurements within my team's data pipeline.
- Advised by Dr. Joshua Folk of UBC's Physics Department.

Research Assistant | UBC Undergraduate Research Opportunities   **10/2020 – 03/2021**
- Coded a Python implementation of the most recent deterministic model of weight loss, collected data by running simulations, and analyzed the data to investigate the effects of restricted caloric intakes on body weight.
- Presented my findings at the Multidisciplinary Undergraduate Research Conference (MURC 2021).
- Advised by Dr. Leah Edelstein-Keshet of UBC's Mathematics Department.

TEACHING EXPERIENCE

Operating Systems Teaching Assistant | UBC   **09/2023 – Present**
- Assisting students in CPSC 313, UBC's computer hardware and operating systems course, by running tutorials, hosting office hours, and grading exams.

Software Engineering Teaching Assistant | UBC   **09/2022 – 04/2023**
- Assisted students in CPSC 210, UBC's software construction and development course, by running labs, hosting office hours, and grading exams.

Calculus Teaching Assistant | UBC   **09/2021 – 04/2022**
- Assisted students in calculus as a part of UBC's Science One program, an immersive program ranking as UBC's highest level of first-year science, by running review sessions, hosting office hours, and grading exams.

WORK EXPERIENCE

Software Engineering Intern | Microsoft Redmond Campus   **05/2023 – 08/2023**
- Interned as a software engineer for one of Xbox's data engineering teams.
- Defined metrics to track the availability of core streams owned by the data engineering team.
- Implemented the pipelines and Power BI reports to summarize and visualize the defined metrics.

Explore Intern | Microsoft Redmond Campus   **05/2022 – 08/2022**
- Interned as a program manager and software engineer for one of Xbox's services and operations teams.
- Defined a new feature aimed at improving the user experience and conducted a user study to collect feedback.
- Implemented and tested the data model, the backend infrastructure, and the API supporting the new feature.

COMMUNITY INVOLVEMENT

Internal Events Director | Women in Computer Science (WiCS)   **05/2023 – Present**
- Planning and organizing internal events, including study sessions and networking roundtables, for students who identify as women and are interested in CS.

Student Ambassador | Canadian Mathematical Society (CMS)   **08/2021 – 04/2022**
- Collaborated with selected mathematics students from across Canada and hosted online math-focused activities, including the semi-annual CMS Meetings and panel discussions.

Student Interviewer | SciSection Podcast   **07/2020 – 01/2021**
- Conducted interviews with scientists from various backgrounds to discuss the daily applications of science and edited the interviews before publishing to the podcast.

HIGHLIGHTED AWARDS

Trek Excellence Scholarship
- Recipient of UBC's Trek Scholarship in 2021, 2022, and 2023.
- Awarded every year to domestic students in the top 5% of their undergraduate year, faculty, and school.

Schulich Leader Scholarship
- Recipient of Canada's most coveted undergraduate STEM scholarship in 2020.
- Awarded every year to a total of 100 Canadian students based on academic performance and leadership.

UNDERGRADUATE ARTICLES

Mahinpei, R. (2020a). **Minimizing the use of Polyethene Inside Paper Coffee Cups**. *STEM Fellowship Journal*, *6*(1), 60–68. https://doi.org/10.17975/sfj-2020-011.

Mahinpei, R. (2020b). **A Comparative Analysis of the Gini index**. *STEM Fellowship Journal*, *6*(1), 34–52. https://doi.org/10.17975/sfj-2020-010.