Riley Eaton

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EDUCATION

The University of British Columbia

Sep 2024 – Aug 2026, expected

Master of Science in Computer Science; GPA: 4.20 on 4.33 scale

Kelowna, BC

- Awarded the UBC Okanagan Graduate Research Scholarship in recognition of academic achievement
- Notable coursework: Software Engineering, Modelling and Simulation, Computer Vision, Deep Learning, Data Wrangling in Medical Imaging for AI Applications

Trent University

Sep 2019 – Apr 2023

Bachelor of Science Honours in Computer Science; GPA: 3.70 on 4.33 scale

Peterborough, ON

- Named to the Dean's Honour Roll
- Notable coursework: Advanced Algorithms, Data Mining, Digital Logic, High-Performance Computing, Human-Computer Interaction, Comparative Programming Languages, Automata Theory, Operating Systems, Computer Crime and Forensics

EXPERIENCE

Graduate Student, Software Engineering and Data Science

Sep 2024 - Present

BC Cancer

Kelowna, BC

- Conducting research in medical imaging analysis for early detection of lung and breast cancer
- Focusing on building pipelines to de-identify patient data to enable future ML model development

Solutions Architect, Data and AI

Jun 2023 – Aug 2024

Toronto, ON

IBM

- Developed technical solutions (demos, proof of concepts, workshops, MVPs) for clients, presenting to teams in HR, finance, research, development, and many individual executives. Covered data management, data fabric, and generative AI portfolios
- Exceeded 2023 quota by over 450%, achieved top 1% for yearly learning hours, and invited to IBM's Golden Circle 2024
- Promoted after 9 months to oversee territory outside of Ontario (MB, SK, NS, NB, NL, and P.E.I.)

Software Engineering Intern, Full-Stack

May 2020 - May 2023

Toronto, ON

• Collaborated in an Agile development team to build automation and productivity tools for sales enablement

- Began first full-time internship in summer 2020 and subsequently **asked to return** for student-on-call positions and **two**
- additional summer internships, working with larger teams each term
 Work from 2020 to 2022 culminated in an application that now serves as IBM's learning platform, adopted by over 14,000 sales professionals and 800 executives worldwide

Undergraduate Grader, Computer Science

Jan 2022 – Apr 2022

Trent University

Peterborough, ON

- Graded assignments for 200 undergraduate students in C# programming
- Provided detailed, constructive feedback to help students improve coding practices, and offered individual help upon request

PROJECTS

Avionics System, SRAD Flight Computer | C++, Arduino, ICs, Git

Oct 2024 - Present

- Subteam of the UBC Aerial Robotics and Rocketry Club, convening weekly to plan and solve new problems collaboratively
- Developing a custom avionics system from the ground-up using integrated circuit components and prototyping platforms
- Integrating COTS flight computer into student-built high-powered hybrid rocket for telemetry and descent control during Launch Canada 2025

Weather Web Application - SkySage O | Python, JavaScript, RestAPIs, MySQL, GCP, Git

Nov 2024 – Dec 2024

- Final project for UBC's Software Engineering course: provides current weather and forecasts trends using LLMs
- Worked cohesively as a team of four, implementing Agile practices to develop the project in six weeks, producing over 80 Git branches, 1,050 commits, and 120 source code files totaling 17,000 lines of code. The project earned a final grade of 99%

Interactive Shell - IntelliShell $\mathbf{O} \mid C$, Unix, LLMs, Git

Sep 2024

- A Unix shell written in C with all standard features, augmented with generative AI to help users learn the command line linterface. Invalid commands are processed by a large language model, which summarizes errors and suggests fixes.
- Won 3rd place at UBC's AI for Social Good Hackathon

Reinforcement Learning Tutorial ▶ | Python

 ${\rm Oct}\ 2019$

- Developed a Q-learning program for pathfinding in first-year university, along with a tutorial video to educate others
- Used no ML libraries: the algorithm and underlying equations were implemented manually

PROFICIENCIES

Technical Skills: Avionics, Fault Tolerance, Telemetry, Deep Learning Techniques, Relational Databases, NoSQL Databases (MongoDB), Data Pipelines, Medical Informatics, DICOM Standard, Unix/Linux

Software Engineering: Version Control (Git), Agile, Kanban, Cloud Deployment, Backend, MLOps, CI/CD, REST APIs Languages: Python, MATLAB, R, C, Arduino, C#, Java, JavaScript, HTML, CSS, PHP, SQL, MIPS Assembly, LaTeX

Developer Tools: Docker, GitHub Actions, AWS, IBM Cloud, .NET Framework, Jupyter, Jira, Trello

Soft Skills: Technical Writing, Technical Sales, Client Relations, Public Speaking, Teaching, Mentorship, Adaptability