Rachel Ellis

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EDUCATION

University of Alberta Class of 2025

Computer Software Engineering, BSc (Co-op Program) - Cumulative GPA: 3.7/4.0

Awarded 8 scholarships for academic excellence or leadership/extracurricular activities

TECHNICAL SKILLS

Languages: Python, Java, JavaScript/TypeScript, SQL, MQL, C++, GraphQL

Technologies: Git, Amplitude, React, Jest, MongoDB, SQLite, Figma, Splunk, Jenkins, Applitools, HTML/CSS

WORK EXPERIENCE

Software Developer Co-op

January 2022 - Present

Intuit - Worked on a cross-functional team to develop onboarding experiences and a schema-driven framework to accelerate the creation of user experiences

- Collaborated with Product Managers and Designers to develop smoother product experiences for 5.5 million QuickBooks Online (QBO) customers by contributing to a no-code capability, facilitating lean development
- Implemented support for React component pre-selection within existing architecture to recommend the most common option to customers when setting up QBO
- Migrated automation tests from Cypress to Playwright to decrease retries due to flakiness, leading individual tests to run up to 12 times faster, thereby improving deployment speed
- Created additional and updated 10+ Playwright tests for different user experiences using Applitools as well as unit tests for key components and utility classes with Jest and the React Testing Library to increase code coverage
- Monitored customer feedback and behaviour using Splunk, and directly interacted with customers to empathize with their struggles and determine how QBO can better solve their problems

Undergraduate Teaching Assistant (CMPUT 274)

September - December 2021

University of Alberta - Held 5 office hours per week to assist students with course material and assignments

- Demonstrated expertise in the course material (Procedural Programming, Object Oriented Programming, basic Data Structures and Algorithms) by quickly resolving errors in student's code in Python
- Exhibited problem solving skills by finding innovative ways to explain complex concepts

Software/Data Intern

May - November 2021

Stratuscent Inc. - Worked with AI developers on internal and client facing projects with data from chemical sensors

- Transformed clients' raw data into meaningful insights through data processing and experimentation with classification models (using NumPy, Sci-Kit Learn, TensorFlow and Pandas); crafted proof of concept by documenting observations and results, which was presented to justify the potential of ML for their use case
- Created semi-automated scripts to adjust discrepancies with labeling from manual data collection in Python, ensuring high data quality for model training
- Refactored existing plotting scripts for better readability and maintainability; trained employees with no coding background to run and adapt these scripts

PROJECTS

CompE+ | Github

- Co-developed a frontend application to facilitate resume reviews and mock technical interviews using TypeScript, Material-UI and React to help Computer Engineering students land internships on a team of 5
- Launched for the Fall 2021 semester with 52 total sign-ups (including 10 volunteers) and 40 resume reviews
- Worked effectively by following agile/scrum methodologies through tools like Figma and GitHub

LEADERSHIP EXPERIENCE

Co-VP ExternalComputer Engineering Club

May 2022 - Present

- Enhanced Career Fair-specific website's readability and mobile friendliness (Website and Github)
- Reviewed 10+ fellow students' resumes to help them stand out for internship applications

Female Engineering Mentor

September 2020 - April 2022

Faculty of Engineering FEM+ Program

- Mentored 2 prospective high school students interested in engineering each year to address any of their concerns about engineering to empower individuals from underrepresented groups
- Presented on what to expect in first year to bridge the gap from high school and ensure that future students are aware of different opportunities within engineering, thereby making the most out of their degree

ADDITIONAL INFO

Achievements: Amii ML Foundations 1 and 2 (2021), Women in STEM Award (2021), Dean's Research Award (2021) Volunteer/Extracurriculars: Bridge2Engg Guest Python Lecturer, Autonomous Robotic Vehicle Project Admin Co-Lead, TeamUp Science Engineering Workshop Co-Director, Engineering Outreach Student Leader Interests/Hobbies: Chess, Classical piano, German (fluent), French (beginner), Traveling, Hiking, Badminton