

Andrew Garneau

Computer Science and Geography Student at Carleton University

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HIGHLIGHTS OF QUALIFICATIONS AND SKILLS

- Diverse array of skills in full stack web development with JavaScript and React JS through experience with Ross Video, Macadamian Technologies, and Statistics Canada
- Leadership skills developed through time as a co-lead of cuHacking, Ottawa's largest annually run student hackathon
- Excellent ability to understand and develop technical solutions that fit the needs of end users and customers through experience building custom COVID-19 screening software for customers at Macadamian
- Thorough understanding of full stack development workflows, from pipelines and databases, to UI development

EDUCATION

Bachelor of Computer Science Honours, Software Engineering, Geography Minor
Carleton University, Ottawa, Ontario

September 2018 – Present

- 3rd Year Undergraduate (Co-op), GPA 11.7/12, Dean's Honour List
- Expected Graduation April 2023

WORK EXPERIENCE

Software Developer (Co-op)
Ross Video

May 2021 – Present

- Created new web user interfaces using Java for Ross Platform Manager (RPM) allowing administrative users to easily access and view their organization's licenses, user information, and settings via a browser
- Developed a heartbeat service to verify and update user permissions in real time, reducing security vulnerabilities and out-of-date role based access control (RBAC) settings in live event production software
- Refactored JUnit tests in 5 plugin libraries to reduce unit run test time by an average of 80% while not reducing test coverage
- Created presentations for internal shareholders about the technical features, architecture, and use cases of the RPM Orchestration feature, resulting in multiple teams agreeing to support it in their products

Web Developer (Co-op)
Macadamian Technologies

September 2020 – April 2021

- Working in ReactJS, developed new features on the HealthQ Covid-19 screening tool used by businesses, schools, and health organizations
- Using React and Material UI, added new data visualizations to administrative user interfaces to view data results and trends from user's screening results
- Developed custom front end user inputs to accept various kinds of inputs including international phone number text input, and managing address validation via the Google Maps Geocoding API

Software Application Developer (Co-op)
Statistics Canada

June 2020 – August 2020

- Using ReactJS and GraphQL, implemented various features and fixes for data models on an open data platform serving the Government of Canada
- Created interactive web pages using Material UI for React, allowing users to track their own projects, sort various kinds of input data, and manage user groups by dynamically rendering data retrieved by GraphQL queries
- Improved the user experience for administrators on the product by creating custom components and menus for admin-only use cases

Undergraduate Teaching Assistant
Faculty of Computer Science, Carleton University

September 2019 – April 2020

- *Introduction to Mobile Development (Winter 2020)*
Instructing students building mobile applications for both Android (Java) and iOS (Swift). Helped students debug problems, improve development skills, and answer varied questions in tutorials
- *Introduction to Computer Science (Fall 2019)*
Helped teach the basics of computer science and programming in Python in tutorials. Gave instruction to new students in tutorials and graded midterm, tests, assignments and tutorials.

Software Developer (Intern)
CAE (Canadian Aviation Electronics)

May 2019 – August 2019

- Used C#, WPF, and XAML to design applications with Model-View-ViewModel (MVVM) design pattern to implement various features on the Naval Training Centre project
- Implemented a suite of tools to configure the Electronic Support Measures (ESM) simulation and library, with emitter audio playback features to the ESM student interface
- Created a graphic editor for a Combat Management System, allowing students to mark points, axes, and shapes on a tactical map with geometric drawings to simulate real life naval use cases

EXTRACURRICULAR EXPERIENCE

Co-Lead, Former Director and Coordinator
cuHacking

November 2018 – Present

- Lead a team of 32 students to host Ottawa's largest annual hackathon
- Provided leadership and a concrete direction for the organization's vision and actions while transitioning our organization into a large school community with over 600 members, hosting events throughout the year in addition to a flagship event
- Co-ordinated with various event sponsors, including private companies, faculties, student clubs, and government organizations to ensure all promises and perks exceeded the quality expected from our event
- Organized a plan for registration and event workflow, including creating requirements for our digital mobile application, website, and physical check ins at the event which had to happen synchronously with our schedule and volunteers
- Responsible for the finances to run a hackathon with 12 companies, and 700 students attending in a virtual format

Student Mentor, Former Computer Science Team Lead
Science Student Success Centre (SSSC), Carleton University

September 2018 – Present

- Helping undergraduate students in the Faculty of Science define and achieve their academic, career, and social goals at university
- Meeting with students in one on one mentoring sessions to discuss and find solutions and pathways for the challenges they are facing
- As a member of the Computer Science team, planned engaging workshops on computer science skills and industry information to deliver to students of various backgrounds
- In 2019-2020 as one of the team leads, organized team wide tasks, and ensured team members were successfully completing their responsibilities and enjoying their time as mentors

APPLIED PROJECTS

Team Member, Android Developer
Science Student Success Centre (SSSC) Android Application

September 2019 – February 2020

- Worked with the SSSC Computer Science Team to develop and maintain the SSSC's Android student-facing app, using Java and
- Implemented an assignment grades tab on the application for users to add course assignments to, to track due dates and calculate final grades for enrolled courses