

Shanna Hollingworth

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EDUCATION

- **Master of Science in Computer Science (Thesis-Based)** Calgary, Canada
University of Calgary (Human Computer Interaction under Dr. Wesley Willett) Jan. 2024 - Dec. 2025
- **Bachelor of Science in Computer Science** Calgary, Canada
University of Calgary (With Honours, Minor in Data Science) Sept. 2018 - June. 2023
 - **President's Award Nominee:** Nominated by the Department of Computer Science upon graduation for demonstrating academic achievement with outstanding co-curricular contributions to the university.
- **Semester Exchange** Singapore, Singapore
National University of Singapore January 2020 - May 2020

RELEVANT WORK EXPERIENCE

- **Memory Anchor** Calgary, Canada
Data+AI Specialist Oct 2023 - Feb 2024
 - **Vector Search:** Improved performance and matching accuracy from computer vision output to csv datapoints by refactoring the internal search engine to utilize NLP vector search (*OpenAI Embeddings API*)
 - **Dashboard Development:** Provided customers with insight into interesting data trends by developing impactful and dynamic data visualizations for a web based data dashboard (*JavaScript, React*)
 - **Augmented Reality Development:** Developed mobile Augmented Reality features to be compatible with a new version of the app by shifting from Unity to a more native approach. (*React Native, Viro*)
- **Cisco** Calgary, Canada
QA Software Engineer Intern May 2021 - August 2022
 - **Automated Testing:** Minimized potential issues in code before release to public by triaging and debugging regression tests, smoke testing on Mac and Linux platforms, writing continuous integration pipelines, and writing tests for the unit testing suite. (*Jenkins, Ruby, RSpec*)
 - **Web Scraping:** Ensured timely platform releases by automating the daily scraping of Apple/Linux distribution websites and sending mass notifications via email and Webex. (*Ruby, BASH*)
 - **Database Management:** Stored and visualized daily database information about product performance (*SQL, Ruby and RESTful API*)
- **University of Calgary** Calgary, Canada
Teaching Assistant Jan 2023 - Present
 - **Duties:** Teaching fundamental computer science and coding concepts, grading assignments and exams, and assisting students with coursework.
 - * **Winter 2025:** CPSC 481 (Human Computer Interaction 1)
 - * **Fall 2024:** CPSC 583 (Intro to Information Visualization)
 - * **Winter 2024:** CPSC 233(Intro to Computer Science 2 for Majors - Java)
 - * **Winter 2023:** CPSC 217(Intro to Computer Science 1 for Non-Majors - Python)

EXTRACURRICULARS

- **Women in Computer Science** University of Calgary
President + CoFounder Oct 2023 - Feb 2024
 - **Club Formation:** Spearheaded the formation of the organization by gathering information, delegating to peers and faculty members, authoring the club constitution, and securing \$1000 annual funding from a local company.
 - **Hiring:** Interviewed and hired several executive members to form the first board.
 - **Events:** Ran social and personal development events with guest speakers on topics such as a web development series, HR and interviewing tips, financial literacy night and industry networking events.
- **Chinese Language Conversation Club** University of Calgary
President, previously VP Events May 2020 - April 2022

- **Events:** Planned and hosted weekly 1.5 hour educational online events through COVID-19 which maintained 15-20 participants a week, and up to 50 participants for special events, and oversaw the transition back to in person.
- **Finance:** Increased club budget by 300% through implementation of club membership, and a sponsorship from a local language learning company

PROJECTS

- **FluencyAR: Augmented Reality Language Immersion:** An undergraduate honours research project for an AR language learning system which studies the combination of generative AI, object recognition and AR visualization to improve conversational fluency for intermediate level language learners. (*Unity, Microsoft Azure Speech Services, and ChatGPT API*)
 - **Poster publication at UIST 2023 San Francisco:** <https://dl.acm.org/doi/10.1145/3586182.3616670>
- **ComeUp:** HackTogether Alberta 2021 1st Place Winner: Android app which allows users to find relevant resources such as scholarship opportunities and local personal development events. (*Android Studio, Java, Firestore/Firebase*)
- **Mass-Spring System:** Application of mass-spring systems to efficiently simulate a simple mass on spring, a pendulum chain of masses connected by springs, a cube of jelly, and a hanging cloth falling. (*OpenGL, C++*)
- **Artificial Intelligence For Public Health:** Part of a program partnered with the data science for social good program in Seattle, involving working in a team to design a artificial intelligence solution for health care routing in Malawi.
 - **Contribution:** I led a sub-project to implement our solution into a VR training environment, where we imported GIS data from the city into the scene, and programmed an immersive driving experience through the city based on a path defined by the AI team. (*Unity, GIS*)

PROGRAMMING SKILLS

- **Languages:** Java, Ruby, Bash, Python, C++, C#, JavaScript, HTML, CSS
- **Technologies:** React Native, React, Unity, Firebase, Android Studio, Jenkins, Github