Gwyneth Anne Delos Santos

780-566-3310 | gwynetha@ualberta.ca | linkedin.com/in/gwen-dls | github.com/gwen-dls

Education & Awards

MSc Computing Science January 2026 – Present
University of Alberta *Edmonton, AB*

BSc Computing Science with Specialization September 2021 – December 2025
University of Alberta - Graduated with Distinction *Edmonton, AB*

Awards

CRA Outstanding Undergraduate Researcher Award (Honorable Mention) - 2026
NSERC Undergraduate Student Research Award ($6000) - 2024
Dean's List - 2023/2024, 2024/2025
Jason Lang Scholarship ($1000 each) - 2021/2022, 2022/2023, 2023/2024

Work Experience

Teaching Assistant Commencing Jan. 2026
University of Alberta – CMPUT 469: Artificial Intelligence Capstone *Edmonton, AB*
- Assigned to mentor three student research capstone projects and supporting the grading of assignments and presentations

Teaching Assistant Sep. 2025 – Dec. 2025
University of Alberta – CMPUT 200: Ethics of Data Science and Artificial Intelligence *Edmonton, AB*
- Led in-class lab help sessions, guided students with their assignments, proctored exams, and graded assessments

Research Assistant May 2025 – Aug. 2025
University of Alberta *Edmonton, AB*
- Conducted research in reinforcement learning and privacy under Prof. Bailey Kacsmar; details in *Projects: Reinforcement Learning Privacy Analysis*

Teaching Assistant Jan. 2025 – Apr. 2025
University of Alberta – CMPUT 261: Introduction to Artificial Intelligence *Edmonton, AB*
- Led in-class lab help sessions, guided students with their assignments, proctored exams, and graded assessments

Research Assistant May 2024 – Sep. 2024
University of Alberta *Edmonton, AB*
- Conducted research in reinforcement learning under Prof. Michael Bowling; details in *Research Projects: Toward Agents That Reason About Their Computation*

Summer Camp Instructor Jun. 2023 – Aug. 2023
Telus World of Science Edmonton *Edmonton, AB*
- Taught computer science fundamentals and introductory Python to students aged 6–16 in a summer camp setting
- Developed new camp activities tailored to specific age groups

Skills

Coding/Markup Languages: Python, SQLite, MongoDB, R, Shell, Java, XML, C, CSS, HTML
Developer Tools: Git, Visual Studio, Android Studios, Vim
Libraries: Numpy, Pandas, Matplotlib, PyTorch, Scikit-Learn, Gymnasium
High-Performance Computing: Alliance Canada

Projects

Reinforcement Learning Privacy Analysis May 2025 – Sep. 2025
Research Assistant *University of Alberta — Edmonton, AB*

- Analyzed reinforcement learning system components (observations, rewards, policies) to identify potential privacy risks
- Synthesized privacy considerations to inform the design of privacy-conscious RL-based systems

Active Learning for Ultrasonic Animal Sound Detection Jan. 2025 – Apr. 2025
AI Capstone Project *University of Alberta — Edmonton, AB*

- Collaborated with a biology domain expert to design an AI-assisted pipeline for extracting ultrasonic rat vocalizations from noisy audio data
- Processed and analyzed 700+ GB of unlabeled audio recordings spanning three years to isolate candidate signals from complex acoustic environments

Toward Agents That Reason About Their Computation May 2024 – Sep. 2024
NSERC USRA *University of Alberta — Edmonton, AB*

- Designed and executed reinforcement learning experiments to evaluate Deep Q-Network (DQN) performance across multiple configurations
- Explored action repetition as a learnable parameter to reduce decision frequency and improve computational efficiency of RL agents

Human-in-the-Loop RL with Suboptimal Data Sep. 2023 – Dec. 2023
Undergraduate Research Project *University of Alberta — Edmonton, AB*

- Conducted data collection and analysis to evaluate how labeling suboptimal actions affects reinforcement learning performance
- Contributed early experimental evidence supporting the feasibility of a human-in-the-loop RL approach prior to large-scale benchmarking

Volunteer & Leadership Experience

Chair of Innovations, TeamUP Science Board of Governors 2025–Present
Created new initiatives and expanded partnerships with additional universities

Undergraduate Research Lead, Youreka 2025
Mentored a team of high school students through a semester-long research project leading to a symposium

Lab Activity Lead, WISEST Choices Conference 2025
Led the "Turing Tumbles" activity, introducing grade 6 students to computing logic

Director at Large, TeamUP Science Board of Governors 2024–2025
Served as liaison between directors and Board members

Director of Computer Science, Interdisciplinary Science Competition (ISC) 2024–2025
Developed lesson and lab to teach computer science foundations to high school students

Director of Workshop, ISC 2024–2025
Organized a solar/star-gazing workshop with the Undergraduate Astronomy Society

Assistant Director, Computer Science Workshop 2024–2025
Helped organize a weekend event introducing high school students to computer science

Lead TA of CS Lab, ISC 2024
Instructed competition participants in Python programming and computing foundations

Lab Activity Assistant, WISEST Choices Conference 2024
Supported the "Little Bits" activity, introducing students to electrical engineering

Task Facilitator, Youth STEAM Innovation Challenge 2022
Moderated challenges for junior high students, fostering problem-solving in STEAM