

Daniela Gallegos Dupuis


 <https://danigallegdup.github.io/>  [danigallegdup](#)  [danigallegdup](#)


Education

University of Victoria Sept 2020 – Aug 2025
B.Sc. in Computer Science ([NSERC Undergraduate Student Research Award Winner](#) )

National University of Singapore Aug 2024 – Dec 2024
Computer Science Exchange Student ([One World Scholarship Winner](#) )

Experience

Research Assistant Victoria, BC
[VIXI](#)  Lab, University of Victoria Jan 2024 – Jul 2024

- Produced and designed experimental materials; contributed substantially to the design and execution of an academic Human-Computer Interaction experiment exploring visualization of Excel-based data tables.
- Developed and optimized experiment control scripts; engineered seamless integration of eye-tracker hardware with real-time data logging pipelines, resolving hardware-software integration challenges.
- [GitHub Repository](#) 

Teaching Assistant, CSC110 Victoria, BC
University of Victoria Sept 2023 – Dec 2023

- Tutored and debugged students' Python programming assignments; reinforced essential programming concepts in weekly labs.
- Graded and provided feedback on 300+ student submissions using automated Python tools.


Teaching Assistant, CSC106 Victoria, BC
University of Victoria Jan 2023 – Apr 2023

- Taught core computer concepts including: binary logic, circuits design, algorithms, data structures, fundamentals of Python and SQL, Human-Computer Interaction.
- Presented my first academic guest lecture on Web Development.


Firmware Engineering Co-op Victoria, BC
Schneider Electric May 2022 – Dec 2022

- Built automated firmware validation tests using Pytest.
- Conducted hardware integration work in the laboratory, including CPU replacement and system wiring.


Google Software Product Sprint (SPS) Remote
Google May 2022 – Aug 2022

- Designed and developed a full-stack portfolio web app, using java and Google Datastore, and deployed on Google Cloud Platform. [GitHub Repository](#) 


MIT Reality Hackathon Competitor Boston, MA
Massachusetts Institute of Technology Jan 2023

- Co-created Quest2 VR application in C#, addressing mental health challenges. [Devpost Submission](#) 


Projects

Scalable Stock Trading System [GitHub Repository](#) 

- Collaboratively built a distributed day trading platform capable of handling 17,000+ simulated users.

Wave Rider: Music-Driven Rhythm Game [GitHub Repository](#) 

- Collaboratively developed a rhythm game in Godot, synchronized with beat and onset detection using custom MIR scripts.
- Enabled custom song imports and automated beat/chroma/onset extraction via Python (Librosa).

Stock Pulse: Machine Learning Project [GitHub Repository](#) 

- Collaboratively implemented Random Forest, SVM, and LSTM models for stock trend forecasting; performed time-series feature engineering and investment strategy evaluation.