

# Ian Leung

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## Education

### University of Waterloo

2025 - 2029

Bachelor of Computing and Financial Management - Co-op (Computer Science + Finance Double Major)

GPA: 4.0

- President's Scholarship of Distinction
- Functional Programs (Advanced), Algorithms (Advanced), Calculus, Data Analytics and Financial Markets

## Technical Skills

Languages Python, Java, C++, C#, Bash, SQL, Kotlin, Racket, LaTeX

Technologies Firebase, Render, Modal, MongoDB, Qt, Unity Game Engine, OpenCV, SQLite, PyTorch

Developer Tools Linux, Git, GitLab, GitHub, Docker, Kaggle, Colab, Jupyter, VS Code, Copilot

## Work Experience

### Waterloo Reality Labs

Waterloo, ON

Software Developer – Python, PyTorch, Unity Game Engine

Sep 2025 - Present

- Collaborating in a cross-functional team to design and build a Unity Plugin for hand pose recognition on VR headsets
- Applying industry-standard Machine Learning and AI techniques to solve extended reality challenges (**Pytorch, etc.**)

### Sunnybrook Research Institute

Toronto, ON

Software Development Intern – Python, Qt, Pydantic, VTK

Jul 2025 - Aug 2025

- Designed and built an automated UI testing tool, reducing software release testing times from **4+ hours** to **30 minutes**
- Harnessed **Python, Pydantic, and Qt** to capture and replay user interactions in focused ultrasound helmet software
- Implemented a logging API using **Python and Loguru** for quality assurance of automated tests, identifying **5+** bugs

### The STEAM Project

Richmond Hill, ON

Camp Counselor

Jun 2023 - Jan 2024

- Taught and led **50+** children aged 5 to 10 through exciting hands-on activities and STEM programs
- Developed problem-solving and adaptability skills while managing diverse group dynamics and learning styles

## Activities

### UWaterloo Data Science Club

Waterloo, ON

Hackathon Coordinator

Sep 2025 - Present

- Managing a **\$10,000+** budget and coordinating logistics for **400+** attendees at CxC - Canada's largest data hackathon

### Game Development Club

Richmond Hill, ON

President

Jun 2024 - Jun 2025

- Revamped club curriculum from Java/Swing development to **Unity Game Development** with C#
- Led a **team of 6** to create lesson plans and direct events from **game jams** to **coding workshops** for 30+ members

## Projects







### Trust No Ghost - 3D Maze Exploration Game | Unity, C#, Itch.io

- Shipped Trust No Ghost  for **60+** users at the UW Game Jam Fall 2025, placing in the **top 10** most rated games
- Utilized Unity and C# to develop expanding level designs, AI pathfinding algorithms, and dynamic moving mechanics

### PeerAssist - Full-Stack Peer Reviewing | Java, MongoDB, Apache PDFBox, Maven

- Designed and developed a full-stack Java application for 5+ students to share, review and grade the works of others
- Integrated **MongoDB** for data storage and **Apache PDFBox** for PDF manipulation, enabling seamless document handling and retrieval across devices

### Other Projects

-  Chess Engine: MCTS Chess Engine Deployed for Chesshacks . Built with PyTorch, Modal, Hugging Face
-  N-Body Simulation: Barnes-Hut Gravity Simulation/Visualization App. Built with Pyglet, NumPy, Pandas
-  K-Pop Idol Recognizer: LBPH Facial Detection and Recognition. Built with OpenCV, Kaggle, Pandas, NumPy
-  AI Name Forecasting: Predicting future outlook using AI, based on Implicit Egotism. Built with OpenAI API
-  Pinance: Financial analysis and machine learning. Built with Pandas, Beautiful Soup, Scikit-Learn, Matplotlib