

Ethan Lin

☎ 647-212-2397 | ✉ e86lin@uwaterloo.ca | 🌐 ethanlin-t62a | 📺 notjing

TECHNICAL SKILLS

Languages: Java, Python, C++, C#, JavaScript, Typescript, SQL

Frameworks: React, Node.js, Express, Tensorflow, .NET, Bot Framework

Developer Tools: Azure, Git, VS Code, Visual Studio, PyCharm, Bruno, Bot Framework Emulator

EXPERIENCE

Idea Notion Development Inc.

May 2026 – Aug 2026

Software Developer

Markham, ON

- Built multi-agent CRM workflows on the OpenAI API with RAG over dealership inventory and customer records, plus agent tooling (CRM writes, inventory lookup, appointment booking) for analytics and follow-up
- Designed and Shipped an end-to-end headless **n8n** workflow platform from scratch, enabling dealerships to create, deploy, and monitor complex, multi-step automations with ease, increasing leads for dealerships by over **25%**
- Architected and led the ground-up redesign of DealerAI's largest and most critical component, the Neuron, dramatically reducing cost and complexity

Waterloo Aerial Robotics Group

Sept 2025 – April 2026

Autonomy Developer

Waterloo, ON

- Built ROS2 nodes for real-time LIDAR–Raspberry Pi communication to navigate indoor environments with SLAM
- Configured a Raspberry Pi for stereo camera integration to support depth mapping to be used in competition

LVM Tech

July 2024 – Aug 2024

Frontend Developer

Mississauga, ON

- Developed fleet-tracking logistics manager using **React** and **RESTful APIs** for a top shipping company in North America, managing 200+ trucks

PROJECTS

MarsIsRed | *Python, C++, Tensorflow*

Nov 2025 - Present

- Designed an Alpha-Zero-style chess engine using TensorFlow, combining a CNN and a Dense Neural Network with 15 million parameters trained on over 10 million positions.
- Engineered a multi-worker reinforcement learning pipeline utilizing automated scripts to actively manage training iterations, replay buffers, and model tournaments
- Optimized positional evaluation and inference times by implementing C++ bindings and Monte Carlo Tree Search with information caching to balance exploration and exploitation

Dungeon Dash | *Java*

Dec 2023 – Jan 2024

- Created a 2D platforming game with a built-in level editor using Java GUI
- Designed a collision engine supporting custom maps with a level editor and movable entities
- Supported saving levels and high scores to a file to persist between game launches

EDUCATION

University of Waterloo

Waterloo, ON

Bachelor of Computer Science (Honours)

Sept 2025 – Present

- University of Waterloo President's Scholarship of Distinction
- Coursework: Linear Algebra (Advanced), Elementary Algorithm Design and Data Abstraction (Advanced)

HONOURS AND AWARDS

Canadian Computing Competition Senior Honour Roll

February 2024

- Placed in the top 3%

Euclid Math Contest Honour Roll: 87 / 100

Apr 2024

- Placed in the top 2% of participants on one of Canada's most prestigious high school math contests

AIME Qualifier

Feb 2022, Feb 2023

- Placed in the top 2.5% on the AMC 10 and top 5% on the AMC 12