

Ottawa, Canada github.com/egao8 eddiegao8@gmail.com eddiegao.netlify.app

Skills

Programming Languages/Tools: Python, Ruby, Java, JavaScript, TypeScript, CSS, HTML, C# **Libraries and Frameworks:** Ruby on Rails, GraphQL, Pandas, NumPy, Matplotlib, TensorFlow, Docker, Bootstrap, WPIlib

Education

Carleton University | BSc Computer Science Honours | Shopify Dev Degree

Sep. 2024 - May. 2028

• Specialty: 1 of 15 globally selected for a 4-year joint employment program at Shopify.

Work Experience

Nokia | Future Tech Intern

Jul. 2023 – Aug. 2023

- Performed with the AIMS team at **Bell Labs** quality control of Scandit image algorithm detection to determine an automatic product classification **accuracy of 90%**.
- Deployed data processing and visualization scripts through Pandas and Matplotlib to automate analytical findings on drone image collection.
- Addressed errors in flight analysis through plotted JSON data for Graybar to increase yield certainty by 43%.

Carleton University | Machine Learning Research Internship

Jun. 2022 – Aug. 2022

- Leveraged algorithmic solutions and heterogeneous recommendation systems with Python from the Swiss Federal
 Institute of Technology (EPFL) to facilitate replication of a large-scale X-MAP recommender based on artificial
 AlterEgos and Apache Spark.
- Extracted an updated Amazon reviews dataset (2018) with metadata from **15.5 million** products to generate precise **MAE** results akin to heterogeneous recommendation systems.

Projects

The Automaton Horror Game | Software Coordinator

C#

- Lead the implementation of **pathfinding AI** systems in C# through waypoints and navigation meshes to predict player movements.
- Project awarded 1st place at Carleton University VV contest (2021-22).

Gender Prediction Neural Network | Software Developer

Python

- Utilized NumPy to develop a neural network which predicts gender using datasets of heights and weights.
- Applied **stochastic gradient descent** and backpropagation to train the network and produce an outputted gender prediction with **95%** median accuracy.

Extracurricular

SYRC Robotics Team | Software Developer

Jul. 2022 - Aug. 2024

• Deployed WPILIB obstacle-detection scripts in Java for international tournaments, resulting in a **14% increase** in global ranking (41st during 2023) and **56%** reduction of autonomous collisions.