Il Gyu(Gil) Hwang

il.hwang@mail.utoronto.ca 437-216-9037 Toronto, ON
github.com/gilhwang linkedin.com/in/gil-hwang

EDUCATION

University of Toronto — September 2018 - Present

Major in Computer Engineering

Bachelor of Applied Science, 3rd year

CGPA: 3.87/4.0, Dean's List all semesters

Relevant Coursework

- Applied Fundamentals of Deep Learning
- Software Design and Communications
- Computer Fundamentals
- Operating Systems
- Programming Fundamentals
- Computer Organization

SKILLS

- **C**
- **C++**
- **Python**
- **ARM Assembly**
- **PyTorch**
- **Git**

WORK EXPERIENCE

General Member — August 2022 – Present

University of Toronto Autonomous Rover Team (UTRA ART) *Toronto, ON*

- Contributed into **Computer Vision** area of the autonomous rover using **Python** and **PyTorch**
- Tested the application of pretrained **YOLOPv2** model on lane detection for the competition

Computer Technician — July 2020 – March 2022

Republic of Korea Navy *Republic of Korea*

- Assisted satellite communication between warships by receiving and sending confidential military documents
- Lead IT support team that troubleshoots general network, software, and hardware issues such as network disruption or computer/printer malfunction.

Office Assistant — February 2017 – June 2017

MD Financial Management *Ottawa, ON*

- Verified client application forms to detect incorrect or missing information, discovering a total of five errors during the work term.
- Reviewed whether funds are correctly distributed to clients through software that manages fund distribution.

PROJECTS

Waste Classification using Deep Learning — September 2022 – December 2022

- Developed a deep learning model performing waste classification on waste image into 5 waste categories using **Python** and **PyTorch**
- Implemented **transfer learning** for feature extractor using pretrained ResNet-152, and applied data augmentation and dropout techniques to regularize the model
- Achieved **final accuracy of 84%** for the testing data, and received grade of 100% for the final presentation

Open Street Map (OSM) Mapper — January 2020 – April 2020

- Developed a graphical and interactive map application with **C++**, which displays streets, intersections, and other features of various cities based on the OSM data
- Applied **path-finding algorithms**, such as Breath-first search, Dijkstra and A* search, to compute shortest path between intersections