JIN WOOK SHIN

(734)-489-3192 jinws@umich.edu jinuk1024@gmail.com

EDUCATION

University of Michigan - Ann Arbor **Ann Arbor, MI**
B.S.E. Computer Engineering *August 2023 – Expected April 2026*

- **GPA:** 4.0
- Relevant Course Highlights:
  - Fall 2023: EECS 203, EECS 280, ROB 103
  - Winter 2024: EECS 370, EECS 281, ROB 101

EXTRACURRICULAR ACTIVITIES

Solar Car **Ann Arbor, MI**
Strategy Division, Member *August 2023 – Present*

- Designed and developed a race simulation program to analyze and optimize vehicle energy consumption and racing speed, and implemented advanced algorithms to calculate optimal racing strategies
- Currently working on a Machine Learning Optimizer project by developing a Reinforcement Learning algorithm to simulate and produce the most efficient speed incorporated with various environmental and kinematic factors for sectors of the race.

WolverBot Kickers **Ann Arbor, MI**
Technical Team *August 2023 – Present*

- Conducted small-scale projects on Raspberry Pi and ROS to acquire practical skills in robotics development
- Programmed ball-detecting CV software for the team to participate in RoboCup Humanoid League 2024-2025

PROFESSIONAL EXPERIENCE

Qeexo **San Jose, CA**
Intern *Summer 2022*

- Created a machine learning demonstration of the industrial application of Qeexo's AutoML software
- Published an instructional blog on utilizing AutoML for classifying a motor's state and detecting issues
- Currently designing a commercial humanoid robot in cooperation with a manufacturing company

RESEARCH & PROJECTS

Individual Research *August 2022 – January 2023*

- *"Optimizing the Signal Traffic Time via Simulations and Learning Approaches"*
- Conducted in-depth research on traffic signal optimization, focusing on maximizing traffic flow and minimizing wait time
- Programmed and simulated traffic intersections using agent-based modeling techniques in NetLogo
- Designed and implemented a supervised machine learning program to calculate the optimal stop signal algorithm

Individual Project *December 2023*

- *"Detecting Paraphrased AI-generated Texts Using Machine Learning Model"*
- Programmed XLM Roberta model to differentiate the texts written by Large Language Models and human writers
- Developed further to train the model on AI-generated essays that were paraphrased using online paraphraser tools

ADDITIONAL ACTIVITIES

- **USA Coding Olympiad, Platinum Division** *April 2022*
- **Coding Club, Seoul International School, President** *August 2022 – May 2023*
- **Korean International Student Association, Event Manager** *August 2023 – Present*

SKILLS

Skills: C/C++, Java, NetLogo, Python, ML (TensorFlow, PyTorch, Keras), HTML, CSS, Javascript, OpenCV, YOLO