613-447-5080 tmao042@uottawa.ca timothy.zy.mao@gmail.com Ottawa, ON https://www.linkedin.com/in/the-offliner https://github.com/perditi https://www.timothymaowebsite.com/

Technical Skills

Languages :: Java, Python, C#, Go, JavaScript, HTML, CSS, C++, R

Databases :: PostgreSQL, MySQL, Firebase

Other :: Windows, Microsoft Office, Google Workspace, Git, Figma, JIRA, Android Studio

Projects

Object Recognition Algorithms (Java)

Developed and implemented optimized advanced algorithms for object detection and dominant plane identification, utilizing cutting-edge techniques such as **DBSCAN** and **RANSAC**.

Meme Machine (Python)

Implemented a **machine-learning model**, trained on a small dataset of memes from 2012, whose purpose is to recognize what month of 2012 a given meme originated from. Submitted during uOttaHack 6.

Education

University of Ottawa / Honours BSc in Computer Science (CO-OP)

SEPT 2021 - PRESENT (EXPECTED 2025)

CGPA 9.36/10 (to date)

Relevant Courses: Introduction to Computing I & II, Linear Algebra I, Multivariable Calculus, Probability and Statistics for Engineers, Design and Analysis of Algorithms I, Introduction to Software Engineering, Programming Language Concepts, Discrete Structures, Programming Paradigms, ...

Work Experience

Computer Science Student Association @ uOttawa (CSSA) / Vice President Logistics

OCT 2022 - PRESENT

Duties involve maintaining an accurate record of all 500+ merchandise items in stock, ensuring that inventory levels were accurately reflected at all times. Additional duties include monitoring incoming and outgoing items and enforcing effective measures to prevent loss or damage to assets.

Hack the Hill (HtH) / Community Coordinator

MAY 2023 - PRESENT

Duties involve organizing The Hacker Series (a monthly community engagement event), creating and communicating a detailed schedule for all events, and managing participant applications. Also managing equipment and resources, encouraging attendance, and interfacing with hackers for feedback. Additionally, setting up and engaging with members on a Discord server.

Immigration, Refugees and Citizenship Canada (IRCC) / Junior Programmer

JAN 2024 - APRIL 2024

Worked with the Advanced Analytics team in developing a Python script to automate certain processes. Also assisted with maintaining a current roster of stakeholders engaged with our SPSS and SAS services.

uOttawa / Research Assistant

MAY 2023 - AUGUST 2023

Diligently followed instructions, developed a traffic simulation using Python to test an experimental intersection algorithm designed for self-driving cars. Worked closely with two PhD students, gaining fundamental knowledge in machine learning.