Austine Oloo

aoloo@binghamton.edu | (845) 320-6992 | Portfolio | LinkedIn | GitHub | Binghamton, NY

EDUCATION

State University of New York, Binghamton
PhD student in Computer Science — 2026 - Present

State University of New York, Binghamton
MSc Computer Science — 2024-2025

Gretsa University
BS Computer Science (First Class Honors) — 2021-2023

Research Interest: Embodied AI, Model-based reinforcement learning, Foundation models for decision making, Task and Motion Planning, Robotics

Selected Coursework: Machine Learning, Artificial Intelligence, Intelligent Mobile Robotics, Data Mining, Computer Vision, System Architecture,Operating System, Multimodal AI and Machine Learning, Design and Analysis of Algorithms, Data Structure, Programming, Stochastic Process & Probability

EXPERIENCE

Binghamton University Autonomus Intelligent Robotics Research Lab
Researcher — Aug 2024 – Present

- Intelligent Mobile Robotics research advised by Prof. Shiqi Zhang
- Research focus: Generative world model, Visual grounding for Large Language Model, Model-based RL, Embodied AI, Foundation models for decision making, Robotics.

Turing
Machine Learning Engineer — May 2024 – Aug 2024

- Built back-end infrastructure, data pipelines, and machine learning models for our AI-backed product.
- Implemented the entire data synthesis pipeline

SKILLSET

Language & Tools: Python, C++/C, PyTorch, Jax, Tensorflow, ROS, OpenCV, TensorRT, ZeroMQ, Sim2Real
Machine Learning: Deep Reinforcement Learning, Generative Models, Variational Inference, Time Series Prediction, Planning Imitation Learning, World Model, Large Language Model, Vision Language Model, Multimodal Model, Data Synthesis, Task and Motion Planning.

PUBLICATION

Robots Actively Handling Situations using VLMs in Open Worlds — **IROS Submission 2026**
A. Oloo, Z. Altaweel, P. liu, Y. Hayamizu, C. Paxton, S. Zhang, X. Zhang

Vlm-Grounded TAMP with Uncertainity Aware Active Perception — **Masters Thesis**
A. Oloo

ACADEMIC SERVICE

Teaching Assistant, Binghamton University, Artificial Intelligence 465/565 — Aug - Dec 2025
Teaching Assistant, Binghamton University, Intelligent Mobile Robotics 424/524 — Jan - May 2026

PERSONAL PROJECTS

Semantic-Geometric Fusion for Task and Motion Planning in Dynamic Environments(Vision, Planning, ROS, Control, AI) — Jan - May 2025
Social Media Analytics with Advanced NLP(ML, NLP) — Aug - Dec 2023

HONOR

Winner, CS580 Efficient Multi-modal AI for Biomedicine — May 2025
Honor degree in CS, High honor in general scholarship, Dean's List, Gretsa University — 2021 - 2023