MIKE ZHANG

(617) 359 7957 | mike.zhang.619@gmail.com | Webpage: mikez.xyz | Citizenship: Canada

Education

ETH Zurich (Swiss Federal Institute of Technology Zurich) — Zurich, Switzerland
Master of Science in Robotics, Systems and Control - *With distinction* (Grade 5.93/6.00) — 2020 - 2023

University of Toronto — Toronto, Canada
Bachelor of Applied Science in Mechanical Engineering - *With high honors* (Top 5%) — 2014 - 2019

Professional Experience

Robotics and AI Institute — Cambridge, USA
Applied Scientist — Mar. 2025 - Present

- Develop robust whole-body control policies for humanoid robots using Reinforcement Learning.
- Led development of a steerable natural locomotion policy for the Boston Dynamics Atlas humanoid robot. The policy was demonstrated live at the 2026 CES Boston Dynamics presentation.

Robotic Systems Lab, ETH Zurich — Zurich, Switzerland
Research Engineer — Apr. 2024 - Dec. 2024

- Led research on the topics of:
  - Map representations for high-level robotic task planning with Large Language Models.
  - Mobile manipulation through reinforcement learning in simulation and imitation learning from demonstrations.
  - Terrain reconstruction using self-supervised learning from semantic point clouds.
- Developed robotics software tools including behavior trees and sensor calibration packages.

Verity AG — Zurich, Switzerland
Part-time Student Software Engineer — Jan. 2022 - Sep. 2022

- Contributed to the development of an in-house C++ API to map warehouses for navigation by autonomous drones along with GUI tools to assist the map engineering team and on-site personnel.

Flyability SA — Paudex, Switzerland
Junior Robotics Engineer — Sep. 2019 - Jul. 2020

- Implemented a lidar-inertial SLAM localization algorithm for Flyability's next-generation inspection drone.
- Assisted with projects for the DARPA Subterranean Challenge as part of team CERBERUS.

Publications

First Author

- Tag Map: A Text-Based Map for Spatial Reasoning and Navigation with Large Language Models. In *Proceedings of the 8th Annual Conference on Robot Learning (CoRL)*, 2024.
  Paper: https://arxiv.org/abs/2409.15451 Project webpage: tag-mapping.github.io
- Learning to Open and Traverse Doors with a Legged Manipulator. In *Proceedings of the 8th Annual Conference on Robot Learning (CoRL)*, 2024.
  Paper: https://arxiv.org/abs/2409.04882 Project video: youtu.be/tQDZXN_k5NU

Co-Author

- ZEST: Zero-shot Embodied Skill Transfer for Athletic Robot Control. *arXiv preprint*, 2026.
  Paper: https://arxiv.org/abs/2602.00401

Competencies

Robotics: Robot Operating System (ROS), Optimization (YALMIP, CVXPY, CasADi), Simulation (MuJoCo, IsaacGym, IsaacLab).
Machine Learning: PyTorch, Scikit-Learn.
Programming: C++, Python, Bash.
Software Development: Linux, Git, CMake, Bazel, Docker, Singularity Containers.

Teaching Experience

- Robot Dynamics (Head TA) - Fall 2024, ETH Zurich
- Advanced Model Predictive Control - Spring 2023, ETH Zurich
- Programming for Robotics (ROS) - Spring 2023, ETH Zurich
- Robot Dynamics - Fall 2021, ETH Zurich