Edmond Tong

ekjtong@gmail.com LinkedIn Personal Scholar

Education

2025 – 2028 **PhD Robotics** Queensland University of Technology, Brisbane, Australia
Intended Thesis: *Human-to-Robot Learning from Demonstration by Shaping Latent Spaces*
Primary Supervisor: *Prof. Niko Sünderhauf*, Associate Supervisor: *Prof. Jonathan Roberts*

2022 – 2024 **MS Robotics** University of Michigan, Ann Arbor, Michigan. **GPA: 3.98/4.00**

2015 – 2018 **BS Mechanical Engineering**, Brigham Young University, Provo, Utah. **GPA: 3.80/4.00**

Research Publications

1 E. Tong, A. Balaji, A. Opipari, S. Lewis, and Zhen, "Oval-grasp: Open-vocabulary affordance localization for task oriented grasping," in *19th International Symposium on Experimental Robotics*, 2025.

Work Experience

2023 – 2024 **Graduate Student Instructor, University of Michigan**, Ann Arbor, MI
Teaching: Taught graduate courses (Programming for Robotics, Deep Learning for Robotic Perception) and led weekly labs for 30+ students, boosting C++ and Python skills.
Curriculum Development: Developed PyTorch-based project modules to apply deep learning techniques to robotic perception tasks.

2023 – 2023 **Intern – Data Science and Autonomy, PacMar Technologies**, Ann Arbor, MI
Model Analysis & Optimization: Analyzed reinforcement learning (RL) data to mitigate uncertain state spaces and improve model robustness.
Tool Development: Developed a GUI for rapid visualization of *ROS2* bottlenecks and wrote *Python* scripts for real-time trend identification in large datasets.

2018 – 2021 **Application Engineer, In-Position Technologies**, Kaysville, UT
Sales & Design: Closed *$500,000 in sales* using rapid prototyping and robotic simulations. Engineered electrical/mechanical CAD schematics for multirobot work cells.
Automation & Integration: Created custom robotics solutions for *120+ clients* and developed *bash/python* packages for automation software communication.
Performance Improvement: Programmed machine vision systems, increasing defect detection accuracy by *30%*.

2016 – 2018 **Linux System Engineer, Brigham Young University**, Provo, UT
System Efficiency: Automated maintenance/upgrades, reducing server downtime by *100 hours* annually and decreasing deployment build time by *15%*.
Infrastructure Support: Managed and supported Red Hat Linux infrastructure for over *250 web servers*.

Skills

Software SolidWorks, NX, Fusion360, Microsoft Office
Operating Systems Linux, Windows
Programming C++, Python, Pytorch, TensorFlow, MATLAB, ROS/ROS2, Git