

ARTUR KURAMSHIN

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SKILLS

Tools: PyTorch, ROS, OpenCV, Isaac Gym, Docker, ClearML, Jira, Git, Linux

Software: Python, C++, C, TypeScript, Java, HTML/CSS

PUBLICATIONS

Yoshikawa, N., Skreta, M., Darvish, K. et al. Large Language Models for Chemistry Robotics, Auton Robot (2023). <https://doi.org/10.1007/s10514-023-10136-2>. [[project page](#)]

EXPERIENCE

Junior DataOps Engineer, Sanctuary AI March 2024 - Sept 2024

- Develop and maintain pipelines for capturing and processing robotic teleoperated data in both simulation and real for downstream machine learning model training.
- Provide support to ML engineers on training automation on the MLOps platform ClearML.
- Added features to our Asset Service for versioning and provisioning of company wide assets.

Software Co-op ML Team, Sanctuary AI Summer 2022, Summer + Fall 2023

- Designed and developed a modular computer-vision data processing pipeline for generating pseudo ground truth information for SLAM deployed on *ClearML*.
- Developed and deployed a semi-automated, web-based 6D object pose annotation tool using *AngularJS* and *python*.
- Developed end-to-end pipeline for generating optimization-based dexterous grasping of objects.
- Set up massively parallel experiments in *Isaac Gym* to evaluate the robustness of object grasps.

Robotics Research Intern, Robot Vision and Learning Lab Summer 2021, Spring 2023

- Optimised the constrained motion planning procedure of OMPL with a Franka Emika Panda arm and improved planning success rate by ~20%.
- Conducted large scale experiments and analysed resulting data of constrained motion planning performance of a 8 DoF vs 7 DoF robotic arm.
- Developed the ROS infrastructure, Bayesian Optimization for waypoint assignment, *Gazebo* simulation and a web interface for real-time 2D Gaussian Process visualisation.

Teaching Assistant, University of Toronto Jan 2021 - May 2023

- Planned and hosted tutorial sessions to present students with supplementary material.
- Invigilated and marked tests and major assignments.
- Provided the instructor with feedback on course material and student evaluations.

EDUCATION

Mila & University of Montréal Sept 2024 - **Present**

Master of Science in Computer Science (Artificial Intelligence and Robotics)

- **Supervisor:** Prof. Glen Berseth co-director of the Robotics and Embodied AI Lab, Core Mila Member, CIFAR AI Chair.

University of Toronto - St. George Campus Sept 2018 - May 2023

Honours Bachelor of Science in Computer Science, CGPA: 3.70

- **Activities:** Member of the University College Sustainability Committee.
- **Awards:** Ted Mossman Scholarship