Dylan TURPIN

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EDUCATION

JAN 2021-PRESENT | PhD in Cor

PhD in Computer Science

University of Toronto

Supervised by Sven Dickinson and Animesh Garg.

SEP 2019-DEC 2020

MSc in Computer Science

University of Toronto

Supervised by Sven Dickinson and Animesh Garg.

SEP 2015-APR 2019

BSc in Computer Science University of Toronto

WORK EXPERIENCE

JUL 2022-APR 2023

NVIDIA, Toronto, ON, Canada

Research Intern

Mentor: Miles Macklin. Worked on the *Warp* differentiable simulator and human/robotic hand-object interaction. Resulted in the *Grasp'D* and *Fast-Grasp'D* papers below.

SEP 2019 - PRESENT

University of Toronto, ON, Canada

Graduate Research Assistant

Supervised by Sven Dickinson and Animesh Garg. Working at the intersection of robotics, simulation and computer vision.

RESEARCH

ICRA 2023

Fast-Grasp'D: Dexterous Multi-finger Grasp Generation Through Differentiable Simulation

Dylan Turpin, Tao Zhong, Shutong Zhang, Guanglei Zhu, Jingzhou Liu, Ritvik Singh, Eric Heiden, Miles Macklin, Stavros Tsogkas, Sven Dickinson, Animesh Garg IEEE International Conference on Robotics and Automation (ICRA) 2023

ECCV 2022

Grasp'D: Differentiable Contact-rich Grasp Synthesis for Multi-fingered Hands

Dylan Turpin, Liquan Wang, Eric Heiden, Yun-Chun Chen, Miles Macklin, Stavros Tsogkas, Sven Dickinson, Animesh Garg

European Conference on Computer Vision (ECCV) 2022

★ Oral Presentation

CVPR 2022

Neural Shape Mating: Self-Supervised Object Assembly with Adversarial Shape Priors

Yun-Chun Chen, Haoda Li, **Dylan Turpin**, Alec Jacobson, and Animesh Garg Conference on Computer Vision and Pattern Recognition (CVPR) 2022

RSS 2021

GIFT: Generalizable Interaction-aware Functional Tool Affordances without Labels

Dylan Turpin, Liquan Wang, Stavros Tsogkas, Sven Dickinson, Animesh Garg Robotics: Science and Systems (RSS) 2021

AWARDS

2023	Vector Institute Research Grant	
2022	Vector Institute Research Grant	
2021	Healthcare Robotics (HeRo) NSERC CREATE Fellow	
2021	Vector Institute Research Grant	
2020	Vector Institute Research Grant	
2017	NSERC Undergraduate Student Research Award	