YUNHAI HAN

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EDUCATION BACKGROUND

Georgia Institute of Technology 06/2022 - present
Ph.D. in Robotics *GPA: 4.00/4.00*

· **Advisor:** Harish Ravichandar

University of California, San Diego (UCSD) 09/2019 - 06/2021
M.S. in Mechanical Engineering *GPA: 3.846/4.00*

· **Relevant Course:** Robotics

Yanshan University 09/2015 - 07/2019
B.S. in Mechanical Engineering *GPA: 3.761/4.5, Major GPA: 3.804/4.5*

· **Relevant Course:** Mechatronics *Ranking:* 2^{nd} of 594 (First six semesters)

FILED OF INTERESTS

Learning for robotic manipulation, Robot learning

PUBLICATIONS

- **Han. Y**, Liu. Y, Paz. D, and Christensen. I. H, "Auto-calibration Method Using Stop Signs for Urban Autonomous Driving Applications", International Conference on Robotics and Automation, 2021
- Christensen. I. H, Paz. D, H. Zhang, D. Meyer, Hao. X, **Han. Y**, Liu. Y, Andrew. L , Z. Zhong, S. Tang, "Autonomous Vehicles for Micro-Mobility", Autonomous Intelligent System
- **Han. Y**, Liu. F and M. C. YIP, "A 2D Surgical Simulation Framework for Tool-Tissue Interaction", International Conference on Intelligent Robots and Systems, 2020, Workshop
- Liu. F, Li. Z, **Han. Y**, J Lu, F Richter and M. C. YIP, "*Real-to-Sim* Registration of Deformable Soft Tissue with Position-Based Dynamics for Surgical Robot Autonomy", International Conference on Robotics and Automation, 2021
- **Han. Y** and Martínez. S, "A Numerical Verification Framework for Differential Privacy in Estimation", IEEE Control Systems Letters
- **Han. Y**, Batra. R, Boyd. N, Zhao. T, She. Y, Hutchinson. S, Zhao. Y, "Learning Generalizable Vision-Tactile Robotic Grasping Strategy for Deformable Objects via Transformer", arXiv:2112.06374
- M. E. Cao, J. Warnke, **Han. Y**, Ni. Xinpei, Zhao. Y, Coogan. S, "Leveraging Heterogeneous Capabilities in Multi-Agent Systems for Environmental Conflict Resolution", International Symposium on Safety, Security, and Rescue Robotics, 2022
- **Han. Y**, Boyd. N, Ni. Xinpei, Zhao. Y, "Multi-Robot Collaboration with Heterogeneous Capabilities", American Control Conference, 2022
- **Han. Y**, Xie. M, Zhao. Y, Ravichandar. H, "On the Utility of Koopman Operator Theory in Learning Dexterous Manipulation Skills", arXiv:2303.13446

AWARDS & HONORS

AWARDS

- *06/2016* China Undergraduate Mathematical Contest in Modelling (CUMCM) — *Second Prize*
- *03/2017* Zhou Peiyuan Mechanics Competition — *National Excellence Award*
- *05/2017* National Undergraduate Electronic Design Contest — *Successful Entry Certificate*
- *09/2017* Asia-Pacific Mathematical contest in modeling (APMCM) — *Second Prize*
- *01/2018* Mathematical Contest in Modeling (MCM/ICM) — *Honorable Mention*
- *08/2018* RM RoboMasters — *Second Prize*

HONORS

- *11/2017* National Scholarship from Chinese Ministry of Education
- *07/2018* Certificate for Attendance of CDIO 2018 Academy (Japan)
- *06/2019* Certificate of Excellent Graduate in Hebei Province
- *09/2022* Georgia Tech IRIM Robotics PhD Fellowship

PROFESSIONAL SERVICE

ICRA 2021	Reviewer
AIM 2021	Reviewer
ICRA 2022	Reviewer
IROS 2022	Reviewer
ACC 2022	Session Chair
SSRR 2022	Reviewer
ICRA 2023	Reviewer

TEACHING EXPERIENCE

MAE145: Robotic Estimation & Planning — Winter. 2021
Teaching Assistant

MAE146: Introduction to ML Algorithms — Spring. 2021
Teaching Assistant

WORKING EXPERIENCE

Georgia Institute of Technology — Summer. 2021 - Spring. 2022
Research Assistant

TECHNICAL SKILLS

Programming	C/C++, Python, MATLAB/Simulink
Tool	STM32, ROS, Drake, Git, Linux, LaTeX
Language	Proficient in English and Chinese