

# YUNHAI HAN

(858)214-4416 ♦ yhan389@gatech.edu ♦ <https://y8han.github.io>

## EDUCATION BACKGROUND

---

**Georgia Institute of Technology**

*Ph.D. in Robotics*

06/2022 - present

*GPA: 4.00/4.00*

· **Advisor:** Harish Ravichandar

**University of California, San Diego (UCSD)**

*M.S. in Mechanical Engineering*

09/2019 - 06/2021

*GPA: 3.846/4.00*

· **Relevant Course:** Robotics

**Yanshan University**

*B.S. in Mechanical Engineering*

09/2015 - 07/2019

*GPA: 3.761/4.5, Major GPA: 3.804/4.5*

· **Relevant Course:** Mechatronics

*Ranking: 2<sup>nd</sup> of 594 (First six semesters)*

## FILED OF INTERESTS

---

Learning for robotic manipulation, Robot learning

## PUBLICATIONS

---

- Yu. K\*, **Han. Y**, Zhu. M, Zhao. Y, “MimicTouch: Learning Human’s Control Strategy with Multi-Modal Tactile Feedback”, CoRL 2023 Deployable Workshop

\* Yu is my master student advisee.

- **Han. Y**, Xie. M, Zhao. Y, Ravichandar. H, “On the Utility of Koopman Operator Theory in Learning Dexterous Manipulation Skills”, **Oral Presentation** at CoRL 2023 (acceptance rate: 6.6%)
- **Han. Y**, Yu. K, 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”, SSRN, 2022
- **Han. Y**, Boyd. N, Ni. Xinpei, Zhao. Y, “Multi-Robot Collaboration with Heterogeneous Capabilities”, ACC, 2022
- **Han. Y** and Martínez. S, “A Numerical Verification Framework for Differential Privacy in Estimation”, L-CSS & ACC, 2022
- 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
- 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”, ICRA, 2021
- **Han. Y**, Liu. Y, Paz. D, and Christensen. I. H, “Auto-calibration Method Using Stop Signs for Urban Autonomous Driving Applications”, ICRA, 2021
- **Han. Y**, Liu. F and M. C. YIP, “A 2D Surgical Simulation Framework for Tool-Tissue Interaction”, IROS 2020 Workshop

## 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
ICRA 2024	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, L <sup>A</sup> T <sub>E</sub> X
Language	Proficient in English and Chinese