Chao Tang (唐潮)

Homepage: mkt1412.github.io Email: tangc2021@mail.sustech.edu.cn TEL: (+86) 158-5071-8066

EDUCATION

Southern University of Science and Technology, Shenzhen, China Sept.2021 – Jun.2025(expected)

Doctor of Philosophy (Robotics) GPA: 3.79

Georgia Institute of Technology, Atlanta, USA Aug.2018 - May.2020

Master of Science (Electrical and Computer Engineering) GPA: 3.90

Nanjing Tech University, Nanjing, China Aug.2014 — Jun.2018

Bachelor of Engineering (Automation) GPA: 3.80 Ranking: 1/123

RESEARCH INTERESTS

My research interests involve robotic manipulation and grasping, mobile manipulation, human-robot interaction, and semantic reasoning for robots. The ultimate goal is to develop autonomous agents that can perceive, understand, and interact with the physical world with the same level of intelligence as humans.

PUBLICATIONS

- ♦ Dehao Huang, Chao Tang, and Hong Zhang, "Efficient Object Rearrangement vai Multi-view Fusion", accepted to IEEE ICRA 2024.
- Chao Tang, Dehao Huang, Wenqi Ge, Weiyu Liu and Hong Zhang, "GraspGPT: Leveraging Semantic Knowledge from a Large Language Model for Task-Oriented Grasping", accepted to IEEE Robotics and Automation Letters.
- Chao Tang, Dehao Huang, Lingxiao Meng, Weiyu Liu and Hong Zhang, "Task-Oriented Grasp Prediction with Visual-Language Inputs", accepted to IEEE IROS/RSJ 2023.
- Chao Tang, Jingwen Yu, Weinan Chen, Bingyi Xia and Hong Zhang, "Relationship Oriented Semantic Scene Understanding for Daily Manipulation Tasks", accepted to IEEE IROS/RSJ 2022.
- Weinan Chen, Hanjing Ye, Changfei Fu, Chao Tang, Lei Zhu and Hong Zhang, "Keyframe Selection with Information Occupancy Grid Model for Long-Term Data Association", accepted to IEEE/RSJ IROS 2022.
- Yunzhi Lin, Chao Tang, Fu-Jen Chu, Ruinian Xu and Patricio A. Vela, "Primitive Shape Recognition for Object Grasping", under review.
- Fu-Jen Chu, Ruinian Xu, Chao Tang and Patricio A. Vela, "Recognizing object affordance to support scene reasoning for manipulation tasks", under review.
- Ruinian Xu, Fu-Jen Chu, Chao Tang, Weiyu Liu and Patricio A. Vela, "An Affordance Keypoint Detection Network for Robot Manipulation", accepted to IEEE Robotics and Automation Letters (RA-L) & ICRA 2021.
- Yunzhi Lin*, Chao Tang*, Fu-Jen Chu and Patrxicio A. Vela, "Using Synthetic Data and Deep Networks to Recognize Primitive Shapes for Object Grasping", accepted to IEEE ICRA 2020. (*-equal contribution)
- Chao Tang, Yifei Fan and Anthony J. Yezzi, "An Adaptive View of Adversarial Robustness from Test-time Smoothing Defense", accepted to NeurIPS 2019 workshop.
- Cuimei Bo, Wei Gao, Chao Tang, Jun Li and Xiaohua Lu, "Dynamic Control Design and Simulation of Biogas Pressurized Water Scrubbing Process", accepted to 10th IFAC Symposium on Advanced Control of Chemical Process ADCHEM 2018.

INTERNS

♦ Southern University of Science and Technology, Shenzhen, China
Mar.2021 – Aug.2021

Research assistant at Shenzhen Key Laboratory of Robotics and Computer Vision supervised by Prof. Hong Zhang

♦ Georgia Institute of Technology, Atlanta, USA
May.2020 – Jan. 2021

Research assistant at Intelligent Vision and Automation Lab supervised by Prof. Patricio Vela

Fibrant Co. Ltd, Nanjing, China
 Jun.2017 − Aug.2017

Process control engineer with Mr. Li Liu

Homepage: mkt1412.github.io Email: tangc2021@mail.sustech.edu.cn TEL: (+86) 158-5071-8066

HONORS AND AWARDS

- President Scholarship (2015, 2018), Nanjing Tech University
- ♦ 2nd Prize, NXP Intelligent Vehicle Contest, National Level
- ♦ 1st Prize, NXP Intelligent Vehicle Contest, East China Level
- ♦ 3rd Prize, Siemens Intelligent Manufacturing Contest Challenge
- ♦ Outstanding Graduate Horner, Nanjing Tech University

ACTIVITIES & SERVICES

- \diamond IEEE Transactions on Industrial Informatics (TII) Reviewer
- ♦ IEEE Robotics and Automation Letters (RA-L) Reviewer
- ♦ IEEE ICRA Reviewer
- ♦ IEEE/RSJ IROS Reviewer
- ♦ WRC SARA Reviewer
- ♦ IEEE ICRA 2021 Organizing Committee & Outstanding Volunteer

MENTORSHIP

- ♦ Chenhao Ma, Undergraduate Student at SUSTech -> Master Student at SUSTech