HAONAN CHEN

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EDUCATION

Ph.D. in Electrical and Computer Engineering

University of Illinois Urbana-Champaign

08/2020 - Present

B.Sc. in Electrical Engineering with Highest Honors

University of Illinois Urbana-Champaign

09/2016 - 05/2020

GPA: 3.98/4.0

B.Eng. in Electrical Engineering and Automation

Zhejiang University

09/2016 - 06/2020

GPA: 3.99/4.0 (Rank: 1/30)

PUBLICATIONS AND PREPRINTS

- [Under Review] H. Chen, J. Xu*, L. Sheng*, T. Ji, S. Liu, Y. Li, K. Driggs-Campbell. "Learning Coordinated Bimanual Manipulation Policies using State Diffusion and Inverse Dynamics Models." Under Review, 2024.
- [JATS'24] A. Hasan, N. Chakraborty, <u>H. Chen</u>, J.-H. Cho, C. Wu, K. Driggs-Campbell. "Cooperative Advisory Residual Policies for Congestion Mitigation." *ACM Journal on Autonomous Transportation Systems*, 2024. [pdf]
- [Under Review] A. Hasan, N. Chakraborty, <u>H. Chen</u>, J.-H. Cho, C. Wu, K. Driggs-Campbell. "Lessons in Cooperation: A Qualitative Analysis of Driver Sentiments towards real-time Advisory Systems through a Focus Group User Study." Under Review, 2024. [pdf]
- [CoRL'23] H. Chen, Y. Niu*, K. Hong*, S. Liu, Y. Wang, Y. Li, K. Rose Driggs-Campbell. "Predicting Object Interactions with Behavior Primitives: An Application in Stowing Tasks." 2023 Conference on Robot Learning. [pdf] [Project & Video]

 Finalist Best Paper/Best Student Paper Awards
- [CASE'23] Z. Huang, Y. Mun, H. Chen, Y. Xie, Y. Niu, X. Li, N. Zhono, H. You, D.L. McPherson, K. Driggs-Campbell. "Towards Safety of Multi-Level Human-Robot Interaction in Industrial Tasks." IEEE Conference on Automation Science and Engineering (CASE), Special Session on Cyberphysical Manufacturing Networks, 2023.
- [CASE'23] H. Chen*, Y. Mun*, Z. Huang, Y. Niu, Y. Xie, D.L. McPherson, K. Driggs-Campbell. "Learning Task Skills and Goals Simultaneously from Physical Interaction." *IEEE Conference on Automation Science and Engineering (CASE)*, Special Session on Cyberphysical Manufacturing Networks, 2023.
- [ITSC'23] A. Hasan, N. Chakraborty*, <u>H. Chen</u>*, J-H. Cho, C. Wu, K. Driggs-Campbell. "PeRP: Personalized Residual Policies For Congestion Mitigation Through Co-operative Advisory Systems." *IEEE International Conference on Intelligent Transportation Systems*, 2023. [pdf] [Website]

 Best Presentation Award at CSLSC 2024 [Link]
- [ITSC'22] H. Chen, T. Ji, S. Liu, K. Driggs-Champbell. "Combining Model-Based Controllers and Generative Adversarial Imitation Learning for Traffic Simulation." *IEEE International Conference on Intelligent Transportation Systems (ITSC 2022).* [pdf]

[ICRA'22] S. Liu, P. Chang, <u>H. Chen</u>, N. Chakraborty, K. Driggs-Champbell. "Learning to Navigate Intersections with Unsupervised Driver Trait Inference." *IEEE International Conference on Robotics and Automation*, 2022. [pdf] [Website] [Video]

[IROS'20] P. Chang, S. Liu, <u>H. Chen</u>, K. Driggs-Campbell. "Robot Sound Interpretation: Combining Sight and Sound in Learning-Based Control." *IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2020. [pdf] [Video]

TEACHING & ADVISING

Undergraduate Teaching Assistant

• ZJU-UIUC Institute Math 241 – Calculus III	Fall 2018
• ZJU-UIUC Institute ECE 310 – Digital Signal Processing	Fall 2019
• ZJU-UIUC Institute ECE 311 – Digital Signal Processing Lab	Fall 2019

AWARDS AND HONORS

Conference Travel Award, Graduate College, University of Illinois Urbana-Champaign	2023
Finalist - Best Paper/Best Student Paper Awards, Conference on Robot Learning	2023
Bronze Tablet Award, University of Illinois Urbana-Champaign	2020
Excellent Graduate, Zhejiang University	2020
Student Speaker at Graduation, ZJU-UIUC Institute	2020
Provincial Government Scholarship, Zhejiang Province, China (Top 3%)	2019
Dean's List, University of Illinois Urbana-Champaign	2019
National Scholarship, China (Top 1.8%)	2018
Excellent Undergraduate Scholarship, Zhejiang University (Top 3%)	2018-2019
Academic Excellence Scholarship Award, ZJU-UIUC Institute	2017-2019
Top Ten Social Practice, Zhejiang University (Top 1.5%)	2017

SERVICE AND LEADERSHIP

• Robotics Seminar @ Illinois Organizer

August 2023 - Present

• Coordinated Science Laboratory Student Conference Organizer

2024

PROFESSIONAL SERVICE

- Session Chair:
 - CASE IEEE Conference on Automation Science and Engineering, 2023
- Reviewer:
 - CoRL Conference on Robot Learning
 - ICRA IEEE International Conference on Robotics and Automation
 - ITSC IEEE International Conference on Intelligent Transportation Systems
 - CASE IEEE Conference on Automation Science and Engineering

EXTRA-CURRICULAR SERVICE