Haomeng Zhang

(+1) 734-730-8364
haomengz99@gmail.com
https://haomengz.github.io/

Research Interests

I am broadly interested in Computer Vision, Machine Learning, and Robotics, with a focus on **3D Vision** and **Multi-modal Learning**. I currently work on problems related to **affordance**. Previously, I have also worked on the following fields: (i) 3D visual grounding, (ii) 3D visual question answering, (iii) point cloud completion, (iv) trajectory prediction.

Education

Purdue University *2023 - 2028 (expected)*
Ph.D. in Computer Science Advisor: Prof. Raymond A. Yeh

University of Illinois at Urbana-Champaign (UIUC) *2021 - 2023*
M.S. in Computer Science Advisor: Prof. Liangyan Gui

University of Michigan *2019 - 2021*
B.S.E. in Data Science GPA: 3.96/4.00

Shanghai Jiao Tong University (SJTU) *2017 - 2021*
B.E. in Electrical and Computer Engineering GPA: 3.79/4.00

Publications

1. Multi-Object 3D Grounding with Dynamic Modules and Language Informed Spatial Attention
   Haomeng Zhang, Chiao-An Yang, Raymond A. Yeh
   Neural Information Processing Systems (NeurIPS), 2024.
2. Hyperspherical Embedding for Point Cloud Completion
   Junming Zhang, **Haomeng Zhang**, Ram Vasudevan, Matthew Johnson-Roberson
   IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.
3. Abrasion Status Prediction with BP Neural Network Based on an Intelligent Tire System
   Haomeng Zhang, Shiwen Zhang, Yue Zhang, Xiaojing Huang, Yi Dai
   International Conference on Vehicular Control and Intelligence (CVCI), 2020.

Services

Reviewer: NeurIPS, ICLR, ICML

Teaching Experiences

- CS 47100 Introduction to Artificial Intelligence, Purdue *SP25, FA24, SP24, FA23*
- CS 444 Deep Learning for Computer Vision, UIUC *SP23*
- CS 441 Applied Machine Learning, UIUC *FA22, SP22, FA21*
- VP 140 Physics I, SJTU *SU19*

Awards and Honors

- NeurIPS Top Reviewers *2024*
- Outstanding Graduate *2021*
- James B. Angell Scholar *2021*
- National Scholarship *2019*
- Undergraduate Excellent Scholarship *2018, 2019*
- Outstanding Student *2018*

Skills

Languages: Chinese-native, English-proficient.
Programming: `Python`, `C++`, `C`, `MATLAB`.
Framework/Tools: `Pytorch`, `Tensorflow`, `OpenCV`, `ROS`.