Hanzhe Hu

♦ hzhupku.github.io | ► hanzheh@cs.cmu.edu | ■ 412-9802456

Education

Carnegie Mellon University	Pittsburgh, USA
Ph.D. in Robotics, School of Computer Science Advisor: Shubham Tulsiani	2022 - 2027 (expected)
Peking University	Beijing, China
M.S. in Computer Science, School of EECS Advisor: Liwei Wang	2019 - 2022
Nanjing University	Nanjing, China
B.S. in Physics, Elite Class, School of Physics	2015 - 2019

Scholarships and Awards

• Award for Academic Innovation, Peking University	2021
• Merit Student of Peking University, Peking University	2021
• Top 10 Outstanding Researcher, Peking University	2021
• Scholarship for Outstanding Research, Peking University	2020
• XINGQUAN Scholarship	2018
• Outstanding Student, Nanjing University	2018

Publications

Peer-Reviewed Conferences

[1] **Hanzhe Hu**, Tianwei Yin, Fujun Luan, Yiwei Hu, Hao Tan, Zexiang Xu, Sai Bi, Shubham Tulsiani*, Kai Zhang*

Turbo3D: Ultra-fast Text-to-3D Generation arXiv, 2024

- [2] Hanzhe Hu*, Zhizhuo Zhou*, Varun Jampani, Shubham Tulsiani MVD-Fusion: Single-view 3D via Depth-consistent Multi-view Generation In Conference on Computer Vision and Pattern Recognition (CVPR), 2024.
- [3] Hanzhe Hu*, Yinbo Chen*, Jiarui Xu, Shubhankar Borse, Hong Cai, Fatih Porikli, Xiaolong Wang Learning Implicit Feature Alignment Function for Semantic Segmentation In European Conference on Computer Vision (ECCV), 2022.
- [4] Hanzhe Hu, Fangyun Wei, Han Hu, Qiwei Ye, Jinshi Cui, Liwei Wang Semi-Supervised Semantic Segmentation via Adaptive Equalization Learning In Neural Information Processing Systems (NeurIPS), 2021. (Spotlight Presentation)

- [5] Hanzhe Hu, Jinshi Cui, Liwei Wang Region-aware Contrastive Learning for Semantic Segmentation In International Conference on Computer Vision (ICCV), 2021.
- [6] Hanzhe Hu, Shuai Bai, Aoxue Li, Jinshi Cui, Liwei Wang Dense Relation Distillation with Context-aware Aggregation for Few-Shot Object Detection In Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
- [7] Deyi Ji, Haoran Wang, Hanzhe Hu, Weihao Gan, Wei Wu, Junjie Yan Context-aware Graph Convolution Network for Target Re-identification In AAAI Conference on Artificial Intelligence (AAAI), 2021.
- [8] **Hanzhe Hu**, Deyi Ji, Weihao Gan, Shuai Bai, Wei Wu, Junjie Yan Class-wise Dynamic Graph Convolution for Semantic Segmentation In European Conference on Computer Vision (ECCV), 2020.
- [9] Hanzhe Hu, Jinshi Cui, Hongbin Zha Boundary-aware Graph Convolution for Semantic Segmentation In International Conference on Pattern Recognition (ICPR), 2020.
- [10] Shuai Bai, Zhiqun He, Yu Qiao, Hanzhe Hu, Wei Wu, Junjie Yan Adaptive Dilated Network with Self-Correction Supervision for Counting In Conference on Computer Vision and Pattern Recognition (CVPR), 2020.

Physics Journal

[1] Kangning Jia, Shiyuan Liu, Haopeng Wan, Huade Mao, Xiaodong Xu, Huijun Zhou, Wenli Gao, Liping Cheng, Xuejun Yan, Shuyi Zhang, Xichen Zhang, Heng Zheng, Fenghui Li, Bo Wang, Xu Zhou, Haonan Zhao, **Hanzhe Hu**

Detecting residual stress on toughened glass surface by two complementary interferometers In Europhysics Letters, 2021.

Academic Service

Admission Committee

• CMU MSCV 2023-2025

Seminar Organizer

• CMU Computer Vision Reading Group

Journal Reviewer

- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- International Journal of Computer Vision (IJCV)
- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS)

• Neurocomputing

Conference Reviewer

• Computer Vision: CVPR, ICCV, ECCV, 3DV, BMVC, WACV

• Machine Learning: NeurIPS, ICML, ICLR, AISTATS

• Graphics: Siggraph Asia

Experience

Carnegie Mellon University

Research Assistant, Physical Perception Lab

Supervisor: Shubham Tulsiani

Oct 2022 - Present

Supervisor: Shubham Tulsiani

Adobe Research
Research Scientist Intern

San Jose, USA
May 2024 - Jan 2025

Supervisor: Kai Zhang

University of California San Diego San Diego, USA
Research Intern Mar 2021 - Dec 2021

Supervisor: Xiaolong Wang

Peking University
Research Assistant, Machine Learning Lab
Mar 2020 - Jun 2022

Supervisor: Liwei Wang

Microsoft Research Asia Beijing, China

Research Intern, Visual Computing Group

Mar 2021 - Aug 2021

Supervisor: Han Hu

SenseTime Research Institute

Research Intern, Smart City Group

Mar 2019 - Mar 2021

Supervisor: Junjie Yan

Nanjing University

Nanjing, China

Research Assistant, LAMDA Group Supervisor: Zhi-Hua Zhou

Skills

• Programming Language: C/C++, Python

• Deep Learning Framework: Pytorch, Tensorflow

• Computing Software: Matlab, Mathematica, Origin

• Languages: Chinese (Native), English (Proficient), Japanese (Limited)