

Zixuan Huang

E-mail: zixuanh@gatech.edu

Education

Georgia Institute of Technology

2020 – 2025 (expected)

PhD in Computer Science

- Advisor: James M. Rehg
- GPA to date: 4.0/4.0

University of Wisconsin-Madison

2018 – 2020

Master of Science in Computer Science

- Advisor: Yin Li
- Core Curricula: Computer Vision, Machine Learning, HPC, Non-linear Optimization
- GPA: 3.93/4.0

University of Science and Technology of China

2014 – 2018

Bachelor of Engineering in Information Security

- Core Curricula: Signals and Systems, Stochastic Processes, Introduction to Algorithms, Operating Systems, Digital Image Analysis, Mathematical Analysis, Cryptography
- Special Class for the Gifted Young
- GPA: 3.87/4.30 (overall); 3.92/4.30 (major)
- Ranked 2/66 in my major

Publication

[1] Anonymous Submission on Scalable Shape Learning

Zixuan Huang, Varun Jampani, Anh Thai, Yuanzhen Li, Stefan Stojanov, James M. Rehg
In submission to CVPR 2023

[2] Planes vs. Chairs: Category-guided 3D Shape Learning without Any 3D Cues

Zixuan Huang, Stefan Stojanov, Anh Thai, Varun Jampani, James M. Rehg
ECCV 2022

[3] The Surprising Positive Knowledge Transfer in Continual 3D Object Shape Reconstruction

Anh Thai, Stefan Stojanov, Zixuan Huang, James M. Rehg
3DV 2022

[4] Learning Dense Object Descriptors from Multiple Views for Low-shot Category Generalization

Stefan Stojanov, Anh Thai, Zixuan Huang, James M. Rehg
NeurIPS 2022

[5] Interpretable and Accurate Fine-grained Recognition via Region Grouping

Zixuan Huang, Yin Li
CVPR, oral presentation, 2020

[6] HMS-Net: Hierarchical Multi-scale Sparsity-invariant Network for Sparse Depth Completion

Zixuan Huang, Junming Fan, Shenggan Cheng, Shuai Yi, Xiaogang Wang, Hongsheng Li
IEEE Trans. on Image Processing (TIP), 2019

Research Experiences

Research Assistant | Rehg Lab, Georgia Tech

Sept. 2020 – current

Advisor: James M. Rehg, Professor, Georgia Tech

Collaborator: Varun Jampani, Research Scientist, Google Research

- Scalable learning of 3D object shapes via off-the-shelf semantic and geometric cues [1]
- Single-view supervised 3D reconstruction through category contrast [2]

Student Researcher | Google Research

Feb. 2022 – May 2022

Manager: Yuanzhen Li, Senior Staff Software Engineer, Google Research

- 3D shape inference in the wild

Research Assistant | Yin's Group, UW-Madison

Sept. 2018 – May 2020

Advisor: Yin Li, Assistant Professor, UW-Madison

- Interpretable visual recognition via region grouping and a part-occurrence prior [5]

Research Intern | Research Center, Sensetime Inc.

Feb. 2018 – June 2018

Advisor: Hongsheng Li, Assistant Professor, Chinese University of Hong Kong

Manager: Shuai Yi, Research Director, Sensetime

- Multi-scale sparsity-invariant network for monocular depth completion [6]

Teaching Experiences

- Teaching Assistant | CS534 @ UW-Madison (Computational Photography)
- Teaching Assistant | CS838 @ UW-Madison (Learning Based Methods for Computer Vision)

Selected Honors and Awards

UW-Madison CS Scholarship Sept. 2018, Feb. 2019

- Awarded to outstanding students admitted in Fall 2018

Outstanding Student Scholarship of University of Science and Technology of China Oct. 2017

- Gold, Top 4% of cohort

Institute of Electronics of Chinese Academy of Sciences Scholarship Dec. 2016

- Top 5% of cohort

Special Class for the Gifted Young Sept. 2014

- 1 of 43 young talented students selected nationally

Skills & Others

- Proficient in Python and C, familiar with C++ and Matlab
- Proficient in PyTorch and familiar with other deep learning frameworks (e.g. Caffe, TensorFlow)