

YIMING XIE

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EDUCATION

Northeastern University

- *Ph.D. Student, Khoury College of Computer Sciences*
- *Advisor: Huaizu Jiang*

Boston, MA, U.S.

Sep. 2021 - Present

Zhejiang University

- *Bachelor of Opto-Electronics Information Science and Engineering*

Hangzhou, China

Sep. 2015 - June. 2019

RESEARCH INTERESTS

My interest lies in computer vision and machine learning with a focus on 3D understanding and reconstruction with a hybrid of geometric and learning-based approaches.

RESEARCH EXPERIENCE

State Key Laboratory of CAD&CG, Zhejiang University

Research Assistant

Hangzhou, China

Mar. 2021 - Aug. 2021

Supervised by Prof. Xiaowei Zhou

Worked on Planar surface reconstruction.

MIG-3D&AR Group, SenseTime

Research Intern

Hangzhou, China

Nov. 2018 - Feb. 2021

Supervised by Jiaming Sun and Prof. Xiaowei Zhou

Worked on 3D object detection and tracking, 3D scene reconstruction.

PUBLICATIONS

- **Yiming Xie***, Jiaming Sun*, Siyu Zhang, Linghao Chen, Xiaowei Zhou.
You Don't Only Look Once: Constructing Visuospatial Working Memory for Integrated 3D Object Detection and Tracking.
International Conference on Computer Vision (ICCV), 2021.
<https://zju3dv.github.io/neuralrecon/>
- **Yiming Xie***, Jiaming Sun*, Linghao Chen, Xiaowei Zhou.
NeuralRecon: Real-Time Coherent 3D Reconstruction from Monocular Video.
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
(*Oral and Best Paper Candidate*)
<https://zju3dv.github.io/neuralrecon/>
- Linghao Chen*, Jiaming Sun*, **Yiming Xie**, Siyu Zhang, Qing Shuai, Qinhong Jiang, Guofeng Zhang, Hujun Bao, Xiaowei Zhou.
Shape Prior Guided Instance Disparity Estimation for 3D Object Detection.
IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2021.
<https://ieeexplore.ieee.org/document/9419782>
- Jiaming Sun*, Linghao Chen*, **Yiming Xie**, Siyu Zhang, Qinhong Jiang, Xiaowei Zhou, Hujun Bao.
Disp R-CNN: Stereo 3D Object Detection via Shape Prior Guided Instance Disparity Estimation.
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
<https://arxiv.org/abs/2004.03572>

Note: * above denotes equal contribution

SKILLS

Programming Languages: C, C++, Python, LaTeX

Technical: Pytorch, Git, Linux, Blender, Final cut pro

HONORS AND AWARDS

Scholarship for Excellence in Arts and Sports

Dec. 2017

Excellent Student Cadre

Jun. 2017