

# Linyi Jin

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## Education

### University of Michigan

*Ph.D. in CSE, advised by David Fouhey*

**Michigan, USA**

2021–

### University of Michigan

*M.S. in Robotics*

**Michigan, USA**

2019–2021

### University of Michigan

*B.S.E. in Computer Science, Summa Cum Lauda*

**Michigan, USA**

2017–2019

### Shanghai Jiao Tong University

*B.S.E. in Mechanical Engineering.*

**Shanghai, China**

2015–2019

## Publication (\* indicates equal contribution)

### Planar Surface Reconstruction from Sparse Views

*Linyi Jin, Shengyi Qian, Andrew Owens, David F. Fouhey*

arXiv 2021

◦ Project Page: <https://jinlinyi.github.io/SparsePlanes/>

◦ Given two RGB images with an unknown relationship, our system produces a coherent planar surface reconstruction of the scene in terms of 3D planes, plane correspondence, and relative camera pose.

### Associative3D: Volumetric Reconstruction from Sparse Views

*Shengyi Qian\*, Linyi Jin\*, David F. Fouhey*

ECCV 2020.

◦ Project Page: <https://jasonqsy.github.io/Associative3D/>

◦ Proposed a new approach that estimates reconstructions, distributions over the camera/object and camera/camera transformations, as well as an inter-view object affinity matrix.

### Inferring Occluded Geometry Improves Performance When Retrieving an Object from Dense Clutter

*Andrew Price\*, Linyi Jin\*, Dmitry Berenson*

ISRR, 2019

◦ Project Page: <https://jinlinyi.github.io/mps.html>

◦ Augmented a manipulation planner for cluttered environments with a state-of-the-art RGB-D segmentation and constructed a 3D reconstruction perception pipeline to reduce the amount of occluded space to explore.

## Work Experience

### Adobe Research

*Research Intern in Computer Vision*

**San Jose, CA**

2021.5–

### YITU Technology

*Research Intern in Computer Vision*

**Shanghai, China**

2019.5–2019.8

### University of Michigan

*Instructional Aide for EECS 442 Computer Vision*

**Ann Arbor, MI**

2019.1–2019.4

## Research Experience

### Fouhey AI Lab, University of Michigan

*Graduate Student Research Assistant (GSRA), Advisor: Prof. David Fouhey.*

**Ann Arbor, MI**

2019.5–2021.4

### Autonomous Robotic Manipulation Lab (ARM Lab), University of Michigan

*Independent researcher, Advisor: Prof. Dmitry Berenson, Sponsor: Toyota Research Institute.*

**Ann Arbor, MI**

2018.4–2019.4

### Michigan Vision & Learning Lab (UMich-vl), University of Michigan

*Undergraduate research assistant, Advisor: Prof. Jia Deng.*

**Ann Arbor, MI**

2018.5–2018.8