

# SHANGJIE XUE

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## EDUCATION

**Georgia Institute of Technology**, Atlanta, GA Sept. 2021 - Present

*Ph.D. student in Computer Science*

**Massachusetts Institute of Technology**, Cambridge, MA Sept. 2021

*Master of Science in Nuclear Science and Engineering*

*Master of Science in Electrical Engineering and Computer Science*

**Peking University**, Beijing, China July 2018

*Bachelor of Science in Physics*

## EXPERIENCE

**Research Assistant** Sept. 2019 - Aug. 2021

*Department of NSE, Massachusetts Institute of Technology*

*Advisor: Lin-Wen Hu, Mingda Li*

**Research Intern** June 2020 - Dec. 2020

*Uber ATG, Toronto*

*Advisor: Raquel Urtasun, Shenlong Wang*

**Undergraduate Researcher** 2015 – 2018

*School of Physics, Peking University*

*Advisor: Yuan Li*

**Visiting Student Researcher** Summer 2017

*Department of Physics, Massachusetts Institute of Technology*

*Advisor: Riccardo Comin*

## SELECTED PUBLICATIONS

- Y. Chen\*, F. Rong\*, S. Duggal\*, S. Wang, X. Yan, S. Manivasagam, **S. Xue**, E. Yumer, R. Urtasun<sup>†</sup>, GeoSim: Photorealistic Image Simulation with Geometry-Aware Composition for Self-Driving, **CVPR** 2021 (Oral, Best paper candidate), [arxiv:2101.06543](#).
  - L. Yue\*, **S. Xue**\*, J. Li\*, W. Hu, A. Barbour, F. Zheng, L. Wang, J. Feng, S. B. Wilkins, C. Mazzoli, R. Comin<sup>†</sup> and Y. Li<sup>†</sup>, "Distinction between pristine and disorder-perturbed charge density waves in ZrTe<sub>3</sub>", **Nature Communications** 11, no. 1 (2020): 1-8.
  - W. Yao\*, C. Li\*, L. Wang\*, **S. Xue**, Y. Dan, K. Iida, K. Kamazawa, K. Li, C. Fang<sup>†</sup>, Y. Li<sup>†</sup>, "Topological spin excitations observed in a three-dimensional antiferromagnet", **Nature Physics** 14, no. 10 (2018): 1011-1015.
- (\* : Equal contribution, † : Corresponding author)

## SKILLS

- Programming: Python, C/C++, Matlab
- Tools/Software: ROS, PyTorch, Tensorflow, Keras, GTSAM, DRAKE, Arduino, PyQt, Blender, SolidWorks, L<sup>A</sup>T<sub>E</sub>X

## SELECTED AWARDS AND HONORS

- "Manson Benedict" Fellowship at MIT 2018 - 2019
- "Merit Student Award" at Peking University 2015 & 2016

- **“Wei Lin”** Scholarship at Peking University 2016
- **“Tung OOCL”** Scholarship at Peking University 2015
- **“Meritorious Winner”** in Mathematical Contest in Modeling (MCM) 2015