

Zhenjia Xu

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Education

Columbia University

Ph.D. in Computer Science

Advisor: [Shuran Song](#)

New York, NY, USA

September 2019 - present

Shanghai Jiao Tong University

B.Eng. in Computer Science (Zhiyuan Honors Degree), ACM class

Total GPA: 3.94/4.3; Major GPA: 4.10/4.3; Ranking: 3rd/24

Shanghai, China

September 2015 - June 2019

Publications

Learning 3D Dynamic Scene Representations for Robot Manipulation

Zhenjia Xu*, Zhanpeng He*, Jiajun Wu, and Shuran Song

Conference on Robot Learning (CORL) 2020.

[PDF](#) / [Webpage](#) / [Code](#)

DensePhysNet: Learning Dense Physical Object Representations via Multi-step Dynamic Interactions

Zhenjia Xu, Jiajun Wu, Andy Zeng, Joshua B. Tenenbaum, and Shuran Song

Robotics: Science and Systems (RSS) 2019.

[PDF](#) / [Webpage](#) / [Code](#)

Unsupervised Discovery of Parts, Structure, and Dynamics

Zhenjia Xu*, Zhijian Liu*, Chen Sun, Kevin P. Murphy, William T. Freeman, Joshua B. Tenenbaum, and Jiajun Wu

International Conference on Learning Representations (ICLR) 2019.

[PDF](#) / [Webpage](#) / [Code](#)

Research Experiences

Columbia University

Graduate Research Assistant, Advised by [Shuran Song](#)

New York, NY, USA

September 2019 - present

Massachusetts Institute of Technology

Research Intern, Advised by [Joshua B. Tenenbaum](#)

Cambridge, MA, USA

July 2018 - January 2019

Honors and Awards

- Outstanding Graduate of Shanghai Jiao Tong University. 2019
- Zhiyuan Outstanding Graduate Scholarship 2019
- Chinese National Scholarship 2016, 2017
- Rongchang Scholarship of Shanghai Jiao Tong University 2016
- 2nd Place in ACM-ICPC Regional, Greater NY site 2019
- 3rd Place in ACM-ICPC Regional, Beijing Site 2016
- Gold Medal in ACM-ICPC China Final 2016
- Gold Medal in ACM-ICPC Regional, Beijing Site 2015
- 3rd Place in Chinese Collegiate Programming Contest 2016
- Meritorious Winner in Mathematical Contest in Modeling 2017

Teaching Experiences

- **Teaching Assistant** of COMS6998 *Topics in Robot Learning* at Columbia University Fall 2019
- **Teaching Assistant** of MS105 *Data Structure* at Shanghai Jiao Tong University Spring 2017
- **Assistant Coach** of ACM-ICPC Team at Shanghai Jiao Tong University 2017 - 2018

Technical Strengths

Programming Languages: Python, C/C++, Java, JavaScript, MATLAB.

Toolkits / Software: Pytorch, Tensorflow, MXNet, Torch, Pybullet.