

PUBLICATIONS Google Scholar: <https://goo.gl/s8NYw3>

- Chong Xiang, **Charles R. Qi**, Bo Li, "Generating 3D Adversarial Point Clouds", arXiv preprint.
- **Charles R. Qi***, Xingyu Liu*, and Leonidas J. Guibas, "Learning Scene Flow in 3D Point Clouds", arXiv preprint.
- Zhihao Jia, Sina Lin, **Charles R. Qi**, Alex Aiken, "Exploring Hidden Dimensions in Parallelizing Convolutional Neural Networks", International Conference on Machine Learning (ICML) 2018. *Long talk*
- **Charles R. Qi**, Wei Liu, Chenxia Wu, Hao Su, and Leonidas J. Guibas, "Frustum PointNets for 3D Object Detection from RGB-D Data", Conference on Computer Vision and Pattern Recognition (CVPR) 2018. Our method ranked at **first place** on KITTI 3D object detection benchmark for all object categories (12/3/2017).
- **Charles R. Qi**, Li Yi, Hao Su, and Leonidas J. Guibas, "PointNet++: Deep Hierarchical Feature Learning on Point Sets in a Metric Space", Conference on Neural Information Processing Systems (NIPS) 2017.
- **Charles R. Qi***, Hao Su*, Kaichun Mo, and Leonidas J. Guibas, "PointNet: Deep Learning on Point Sets for 3D Classification and Segmentation", Conference on Computer Vision and Pattern Recognition (CVPR) 2017. *Oral presentation*
- Angela Dai, **Charles R. Qi**, Matthias Niessner, "Shape Completion using 3D-Encoder-Predictor CNNs and Shape Synthesis", Conference on Computer Vision and Pattern Recognition (CVPR) 2017. *Spotlight oral presentation*
- **Charles R. Qi***, Hao Su*, Matthias Niessner, Angela Dai, Mengyuan Yan, and Leonidas J. Guibas, "Volumetric and Multi-View CNNs for Object Classification on 3D Data", Conference on Computer Vision and Pattern Recognition (CVPR) 2016. *Spotlight oral presentation*
- Yangyan Li, Soeren Pirk, Hao Su, **Charles R. Qi**, Leonidas J. Guibas, "FPNN: Field Probing Neural Networks for 3D Data", Conference on Neural Information Processing Systems (NIPS) 2016.
- Hao Su, Yangyan Li, **Charles R. Qi**, Leonidas Guibas, "Joint Embeddings of Shapes and Images via CNN Image Purification", ACM Transactions on Graphics, Proceedings of SIGGRAPH Asia 2015.
- **Charles R. Qi***, Hao Su*, Yangyan Li, Leonidas Guibas, "Render for CNN: Viewpoint Estimation in Images Using CNNs Trained with Rendered 3D Model Views", International Conference on Computer Vision (ICCV) 2015. *Oral presentation*
- Fernando A. Mujica, William J. Esposito, Alex Gonzalez, **Charles R. Qi**, Chris Vassos, Maisy Wieman, Reggie Wilcox, Gregory T. A. Kovacs, and Ronald W. Schafer, "Teaching Digital Signal Processing with Stanford's Lab-In-a-Box", IEEE Signal Processing and Signal Processing Education Workshop 2015.

TALKS

- Frustum PointNets for 3D Object Detection from RGB-D Data
 - Invited talk at SAIC USA, San Jose, January 2018
 - Invited talk at Uber ATG, San Francisco, December 2017
 - Invited talk at Jingchi Inc., Sunnyvale, December 2017
- Deep Learning on 3D Point Cloud with PointNet and PointNet++

- Invited talk at Drive.ai, Mountain View, October 2017
- 3D Deep Learning Tutorial at CVPR'17, Honolulu, July 2017
- PointNet: Deep Learning on Point Sets for 3D Classification and Segmentation
 - Oral presentation at CVPR 2017, Honolulu.
 - Invited talk at Autodesk, San Francisco, June 2017
 - Invited talk at TuSimple, San Diego, June 2017
- Render For CNN: Viewpoint Estimation in Images Using CNNs Trained with Rendered Model Views
 - Oral presentation at ICCV 2015, Santiago, Chile.
 - Invited talk at DeepMap, Palo Alto, April 2017
- Introduction to Deep Learning
 - Invited lecture for CS468 Machine Learning on 3D Data, Stanford, May 2017

AWARDS

Research Awards

- Star of Tomorrow, Microsoft Research Asia May 2013
- First Prize of Student Research Training projects, Tsinghua May 2012

Fellowships

- Stanford EE PhD Fellowship, Stanford 2013
- National Scholarship, China (highest prize. won twice) 2010, 2012
- Comprehensive Excellence Scholarship, Tsinghua 2011
- Freshman Scholarship (3rd place in NCEE, Zhejiang), Tsinghua 2009

ACADEMIC SERVICES

Course Assistant

- Digital Signal Processing (EE264) Winter 2014

Conference and Journal Reviewer

- CVPR, ICCV, 3DV, SIGGRAPH, Eurographics, TVCG, TVCJ, TITS

COURSES

- *Systems*: Operating Systems and Systems Programming (CS140), Introduction to Database (CS145), Parallel Computing (CS149)
- *AI*: Mining Massive Data Sets (CS246), Artificial Intelligence: Principles and Techniques (CS221), Machine Learning (CS229), Natural Language Processing (CS224N), Convex Optimization (EE364A), Convolutional Neural Networks for Visual Recognition (CS231N), Modern Applied Statistics: Data Mining (STATS315B)

SKILLS

Programming

- Over 10,000 lines: Python, C/C++, Matlab
- Over 1,000 lines: Java, C#, Shell, SQL, Verilog, CUDA, R, \LaTeX

Machine Learning Toolkits

- liblinear, xgboost
- Tensorflow, Caffe, Torch, Theano

System Tools

- Unix, MapReduce, Hadoop, AMT, AS3

LINKS

- Personal homepage: <http://charlesrqi.com>
- GitHub page (1,600+ stars): <http://github.com/charlesq34>