Huan Lei

Curriculum Vitae

Education

2017.8–Now **PhD candidate**, *Department of Computer Science and Software Engineering*, The University of Western Australia.

Research Interests

My research interests focus on 3D vision and geometric deep learning. I am also interested in adversarial machine learning, self-supervised learning, relational networks and medical image processing.

Selected Publications

[1] **Huan LEI**, Naveed Akhtar, Ajmal Mian. Picasso: A CUDA-based Library for Deep Learning over 3D Meshes, **CVPR**, 2021.

[2] **Huan LEI**, Naveed Akhtar, Ajmal Mian. SegGCN: Efficient 3D Point Cloud Segmentation with Fuzzy Spherical Kernel, **CVPR**, 2020.

[3] **Huan LEI**, Naveed Akhtar, Ajmal Mian. Spherical Kernel for Efficient Graph Convolution on 3D Point Clouds, **TPAMI**, 2020.

[4] **Huan LEI**, Naveed Akhtar, Ajmal Mian. Octree guided CNN with Spherical Kernels for 3D Point Clouds, **CVPR**, 2019.

[5] **Huan LEI**, Guang Jiang, Long Quan. Fast Descriptors and Correspondence Propagation for Robust Global Point Cloud Registration, **TIP**, 2017.

Preprints

[1] **Huan LEI**, Naveed Akhtar, and Ajmal Mian. Spherical convolutional neural network for 3D point clouds. arXiv preprint arXiv:1805.07872, 2018.

Technical Skills

OS Linux, Windows, Mac OS

Libraries Tensorflow & Pytorch (with designing new operators), Matconvnet, Opencv, PCL, Caffe, VLfeat

Programming CUDA C, Python, C/C++, MATLAB (with mex)

Typography Overleaf, LATEX, MS Office