Haoxuan You

Contact Information

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Education

Sep. 2014 - Jun. 2018 **Xidian University (XDU)**, Xi'an, Shaanxi, China

- Bachelor of Engineering in Electronic Information Engineering
- Overall GPA: 3.77/4.0
- Rank: 13/205
- GRE: 324 (V:157 Q:167) + 3.5
- TOEFL: 101 (R27 L27 S23 W24)

Publication

[1] **Haoxuan You**, Yifan Feng, Rongrong Ji, Yue Gao. "PVNet: A Joint Convolutional Network of Point Cloud and Multi-View for 3D Shape Recognition". **Accepted** as **Oral** by *ACM International Conference on Multimedia, 2018.*

[2] **Haoxuan You**, Yifan Feng, Xibin Zhao, Changqing Zou, Rongrong Ji, Yue Gao. "PVRNet: Point-View Relation Neural Network for 3D Shape Recognition". **Accepted** by *The Thirty-Third AAAI Conference on Artificial Intelligence (AAAI2019)*

[3] Yifan Feng*, **Haoxuan You***, Rongrong Ji, Yue Gao. "Hypergraph Neural Networks". **Accepted** by *The Thirty-Third AAAI Conference on Artificial Intelligence (AAAI2019) (*Equal Contribution)*

[4] YuTong Feng, Yifan Feng, **Haoxuan You**, Xibin Zhao, Yue Gao. "MeshNet: Mesh Neural Network for 3D Shape Representation". **Accepted** by *The Thirty-Third AAAI Conference on Artificial Intelligence (AAAI2019)*

Research Experience

School of Software, Tsinghua University.

Research Assistant *Feb. 2018 - Present*

- Advisor: Prof. Yue Gao
- Deep Learning on Multi-view/Point Cloud in 3D Shape Representation.
  - Proposed PVNet, the first framework to jointly employ multi-view data and point cloud data for 3D shape recognition by a novel attention fusion mechanism.
  - Designed a framework PVRNet to explore the relation between point cloud and multi-view data, and further fuse them by an effective relation-based fusion module.
  - Introduced the first network to learn 3D shape representation from mesh data by exploiting the structural feature (corner feature and normal feature) and spatial feature (center point feature) of mesh.

  - Achieved significant performance on ModelNet40 in the task of classification and retrieval.
  - Published a paper(oral) in ACM MM2018 and two papers in AAAI2019.
- Graph-based Neural Networks.
  - Generalized the convolution operation to the hypergraph learning process and proposed the first neural networks on hypergraph-Hypergraph Neural Networks (HGNN).
  - Provided solid proof and validated HGNN in the dataset of citation and visual recognition with considerable improvements.
  - Published a paper in AAAI2019.

Video & Image Processing System Laboratory, Xidian University.

Research Intern *Jan. 2017 - Dec. 2017*

- Advisor: Prof. Xinbo Gao
- Generalization Ability of Deep Generative Models.
  - Designed a training strategy with relaxation regularizer to alleviate the instability and missing-mode problems in the optimization of GANs.
- Decoding of Visual Stimuli.
  - Introduced visual representation to guide EEG data classification and applied GAN to reconstruct visual stimuli from EEG data.

Awards & Honors

2015 First-prize scholarship in XDU (Top 5%)
2016 Second-prize scholarship in XDU (Top 10%)
2017 Second-prize scholarship in XDU (Top 10%)
2016 Outstanding Student Cadres in XDU

Computer Programming

Computer Programming: C, C++, MATLAB, Python and others
Tools: Tensorflow, Pytorch, Keras.