# Haoxuan You

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#### **EDUCATION:**

## **Xidian University**

Aug. 2014 – July. 2018

Bachelor Degree

School of Electronic Engineering

Major: Electronic Information Engineering

GPA: 3.77/4.0 GRE: 324 (V:157 Q:167) + 3.5 TOEFL: 101 (R27 L27 S23 W24)

#### **PUBLICATION:**

[1] **Haoxuan You,** Yifan Feng, Xibin Zhao, Changqing Zou, Rongrong Ji, Yue Gao. "PVRNet: Point-View Relation Neural Network for 3D Shape Recognition." **Submitted** to AAAI2019.

- [2] Yifan Feng\*, **Haoxuan You\***, Zizhao Zhang, Yue Gao. "Hypergraph Neural Networks." **Submitted** to AAAI2019. (\* Equal Contribution)
- [3] Yutong Feng, Yifan Feng, **Haoxuan You**, Xibin Zhao and Yue Gao. "MeshNet: Mesh Neural Network for 3D Shape Representation." **Submitted** to AAAI2019
- [4] **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** (~8.5% acceptance rate) by ACM International Conference on Multimedia 2018.

### PROFESSIONAL EXPERIENCE:

School of Software, Tsinghua University, China

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 relationbased 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 submitted two papers to *AAA12019*.
- 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.
  - Submitted a paper to AAAI2019.

#### Video & Image Processing System Laboratory, Xidian University, China

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.

#### **HONORS & AWARDS:**

The First Prize Scholarship (5%)	2015
The Second Prize Scholarship (15%)	2016
The Second Prize Scholarship (15%)	2017
Outstanding Student Cadres	2016

## **SKILLS:**

Computer Programming: C, C++, MATLAB, Python

Tools: Tensorflow, Pytorch, Keras.