# Junjie Zhu

#### **CONTACT INFORMATION**

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ADDRESS: School of Software, Tsinghua University, Hai Dian, Beijing, China

#### EDUCATION

Aug. 2018 - Tsinghua University, Beijing, China

- · Ph.D Student in Software Engineering
- Advisor:Prof. Yue Gao
- Areas of interest: Medical Image Analysis & Brain Signal Analysis & Computer Vision

Sep. 2014 - Jun. 2018 Hunan University (HNU), Chang'sha, Hunan, China

• Bachelor of Control Science and Engineering

#### **PUBLICATION**

- [1] **Junjie Zhu**, Yuxuan Wei, Yifan Feng, Xibin Zhao, and Yue Gao. "Emotion Recognition with Multi-hypergraph Neural Networks Combining Multimodal Physiological Signals". Submitted to *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)*, minor revision.
- [2] **Junjie Zhu**, Yue Gao, Han Hu, Xibin Zhao and Qionghai Dai. "Emotion Recognition from Physiological Signals Using Multi-hypergraph Neural Networks". **Accepted** as **Oral** by *IEEE International Conference on Multimedia and Expo (ICME2019).*
- [3] Zizhao Zhang, Haojie Lin, **Junjie Zhu**, Xibin Zhao, Yue Gao. "Cross-Diffusion on Multi-Hypergraph for Multi-Modal 3D Object Recognition.". **Accepted** by *The Nineteenth Pacific-Rim Conference on Multimdica (PCM 2018)*. **Best Student Paper Award**

### RESEARCH EXPERIENCE

#### School of Software, Tsinghua University.

Ph.D Nov. 2017 - Mar. 2019

- Advisor: Prof. Yue Gao
- Cross Diffusion in 3D Object Recognition.
  - Designed a framework to conduct 3D object recognition using multi-modal information through a cross diffusion process on multi-hypergraph structure.
  - Published a paper(Best Student Paper Award) in PCM2018.
- Emotion Recognition from Physiological Signals.
  - Proposed multi-hypergraph neural networks (MHGNN) to recognize emotion from physiological signals and explore the latent correlation among multiple physiological signals and relationship among different subjects.
  - Designed a framework on emotion recognition which takes personal pecularities into consideration, and fuses various modes of physiological signals and personalized kernel by a multi-modal interaction scheme.

- Provided solid proof and validated MHGNN in the DEAP dataset and ASCERTAIN dataset with considerable improvements.
- Submitted a paper as oral in ICME2019 and a paper submitted to ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), minor revision..

# **AWARDS & HONORS**

2018 Best Student Paper Award in PCM 2018 Outstanding Graduate of Hunan Province 2018 Outstanding Student Cadres in HNU 2018 2016 Xiaoge-xiong scholarship in HNU (Top 0.25%) Bishuiyuan scholarship in HNU (Top 1%) 2017 First-prize scholarship in HNU (Top 5%) 2017 First-prize scholarship in HNU (Top 5%) 2016 First-prize scholarship in HNU (Top 5%) 2015

## **COMPUTER PROGRAMMING**

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