

CV **Zhenyu Zhang** PhD Candidate of Pattern Recognition and Intelligent System

Date of Birth: 30 June 1992
Phone: (+86) 15195752410
E-Mail: zhangjesse@njust.edu.cn, zhangjesse@foxmail.com.
Address: Tencent Youtu Lab, Cao He Jing A1, Shanghai, China, 200000

EDUCATION

2020.06 – present Research Scientist
Tencent Youtu Lab

2015.09 – 2020.12 PhD Candidate
Pattern Recognition and Intelligent System
Supervised by Prof. Jian Yang
Nanjing University of Science and Technology

2018.12 - 2019.09 Visiting Scholar
Supervised by Prof. Nicu Sebe
Multimedia and Human Understanding Group
University of Trento, Italy

2011.09 - 2015.06 Bachelor of Science
Information and Computing Science
Supervised by Prof. Jian Yang
Nanjing University of Science and Technology

RESEARCH INTEREST

My research interests are in computer vision, graphics and machine learning. Specially:

- 3D Face Reconstruction
- Depth Estimation
- Multi-task Learning for Scene Understanding
- Domain Adaptation

PUBLICATIONS

- “Regularizing Nighttime Weirdness: Robust Self-supervised Monocular Depth Estimation in the Dark”, Kun Wang, **Zhenyu Zhang**, Zhiqiang Yan, Xiang Li, Baobei Xu, Jun Li and Jian Yang, **ICCV 2021**
- “Learning to Aggregate and Personalize 3D Face from In-the-Wild Photo Collection”, **Zhenyu Zhang**, Yanhao Ge, Renwang Chen, Ying Tai, Yan Yan, Jian Yang, Chengjie Wang, Jilin Li, Feiyue Huang, **CVPR 2021 Oral**.
- “Online Depth Learning against Forgetting in Monocular Videos”, **Zhenyu Zhang**, Yan Yan, Stephane Lathuiliere, Nicu Sebe, Elisa Ricci and Jian Yang, **CVPR 2020**.
- “Pattern-Structured Diffusion Network for Multi-task Learning”, Ling Zhou, **Zhenyu Zhang**, Chunyan Xu, Zhen Cui, Jian Yang, **CVPR 2020**.

- “Pattern-Affinitive Propagation across Depth, Surface Normal and Semantic Segmentation”, **Zhenyu Zhang**, Zhen Cui, Chunyan Xu, Nicu Sebe, Yan Yan and Jian Yang, **CVPR, 2019**
- “Joint Task-Recursive Learning for RGB-D Scene Understanding”, **Zhenyu Zhang**, Zhen Cui, Chunyan, Zequn Jie, Xiang Li and Jian Yang, **TPAMI, 2019**
- “Cross-Modal Attention Network for Temporal Inconsistent Audio-Visual Event Localization”, Hanyu Xuan, **Zhenyu Zhang**, Yan Yan, **AAAI 2020**.
- “Joint Task-Recursive Learning for Semantic Segmentation and Depth Estimation”, **Zhenyu Zhang**, Zhen Cui, Chunyan Xu, Zequn Jie, Xiang Li and Jian Yang, **ECCV 2018**.
- “Progressive Hard-mining Network for Monocular Depth Estimation”, **Zhenyu Zhang**, Chunyan Xu, Jian Yang, Junbin Gao and Zhen Cui, **IEEE Transactions on Image Processing, 2018**.
- “Deep Hierarchical Guidance and Regularization Learning for End-to-end Depth Estimation”, **Zhenyu Zhang**, Chunyan Xu, Jian Yang, Ying Tai and Chen Liang, **Pattern Recognition, 2018**

Project Experience

- HuaWei Project on ToF Depth Camera Completion for Mobile Phones, 2019.11-present.
Project Responsibilities: [Developing algorithms on depth completion for mobile phone ToF camera.](#)
- Deep Vision Saliency based Video Scene Recognition, 2016.10-2017.10, CCF-Tencent AGR20160101, Tencent Research Foundation.
Project Responsibilities: [Pixel-wise depth estimation from monocular images.](#)
- Study on Recursive Modeling and Its Applications to Facial Analysis. National Natural Science Foundation of China under Grant No. 61772276.
Project Responsibilities: [Recursive modeling on multi-task learning.](#)
- Initiative Scene Understanding and Object Action Recognition on Service Robot. National Natural Science Foundation of China under Grant No.U1713208
Project Responsibilities: [Deep 3D scene perception.](#)

Honors and Awards

1. 2017~2018 National Scholarship for PhD (top 2%).
2. 2018~2019 National Scholarship for PhD (top 2%).