Jianzhu Guo

Institute of Automation
Chinese Academy of Sciences

INFORMATIONS

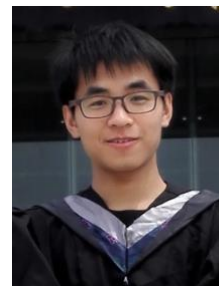**Phone:** +86-15600118066

E-mail: guojianzhu1994@foxmail.com

GitHub: **https://github.com/cleardusk** (620+ Followers，5.3K ★)

Homepage: https://guojianzhu.com | Google Scholar

Address: No. 95, Zhongguancun Road, Haidian District, Beijing, China

Interests: Face Analysis: Face Recognition, 3D Face, Anti-Spoofing, Attribute.
Learning methods: Meta-Learning and Deep Learning.

EDUCATIONS

2016.09-2021.06 | Ph.D. candidate | Supervisor: **Stan Z. Li** , Zhen Lei | National Laboratory of Pattern Recognition (NLPR), Institute of Automation, Chinese Academic of Sciences (CASIA)

2012.09-2016.06 | Bachelor degree | School of Transportation, Southeast University (SEU)

- Ranking 2/28，2015.7 enrolled to NLPR, CASIA in summer camp without entrance examination.

PUBLICATIONS

[1] **Jianzhu Guo**, Xiangyu Zhu, Zhen Lei, Stan Z. Li，"Decomposed Meta Batch Normalization for Fast Domain Adaptation in Face Recognition"，**TIFS** (SCI-I, CCF-A), 2021

[2] **Jianzhu Guo**, Xiangyu Zhu, Chenxu Zhao, Dong Cao, Zhen Lei, Stan Z. Li，"Learning Meta Face Recognition in Unseen Domains"，**CVPR** (**Oral**, acceptance rate 5%), 2020

[3] **Jianzhu Guo**, Xiangyu Zhu, Yang Yang, Fan Yang, Zhen Lei, Stan Z. Li，"Towards Fast, Accurate and Stable 3D Dense Face Alignment"，**ECCV**, 2020

[4] Dong Cao, Xiangyu Zhu, Xingyu Huang, **Jianzhu Guo**, Zhen Lei，"Domain Balancing: Face Recognition on Long-Tailed Domains"，**CVPR**, 2020

[5] Xiangyu Zhu, Fan Yang, Di Huang, Chang Yu, Hao Wang, **Jianzhu Guo**, Zhen Lei, Stan Z. Li，"Beyond 3DMM Space: Fine-grained 3D Face Reconstruction"，**ECCV**, 2020

[6] Xiaqing Xu, Qiang Meng, Yunxiao Qin, **Jianzhu Guo**, Chenxu Zhao, Feng Zhou, Zhen Lei, "Searching for Alignment in Face Recognition"，**AAAI**, 2021

[7] **Jianzhu Guo**, Xiangyu Zhu, Jinchuan Xiao, Zhen Lei, Genxun Wan, Stan Z. Li，"Improving Face Anti-Spoofing by 3D Virtual Synthesis"，**ICB** (**Oral**, acceptance rate 11%), 2019

[8] Jinchuan Xiao, Yinhang Tang, **Jianzhu Guo**, Yang Yang, Xiangyu Zhu, Zhen Lei, Stan Z. Li，"3DMA: A Multi-modality 3D Mask Face Anti-spoofing Database"，**IEEE AVSS**, 2019

[9] **Jianzhu Guo**, Xiangyu Zhu, Zhen Lei, Stan Z. Li, "Face Synthesis for Eyeglass-Robust Face Recognition"，**CCBR**, 2018 (https://github.com/cleardusk/MeGlass，280+★)

[10] **Jianzhu Guo**, Zhen Lei, Jun Wan et al，"Dominant and Complementary Emotion Recognition From Still Images of Faces"，**IEEE Access**, 2018

[11] **Jianzhu Guo**, Shuai Zhou, Jinlin Wu, Jun Wan, Xiangyu Zhu, Zhen Lei, Stan Z. Li，"Multi-modality Network with Visual and Geometrical Information for Micro Emotion Recognition"，**FG**, 2017

[12] Zelin Zang, Siyuan Li, Di Wu, **Jianzhu Guo**, Yongjie Xu, Stan Z. Li, Deep Manifold Attributed Graph Embedding with Graph Geodesic Similarity"，Under Review, 2021

[13] Jun Xia, Cheng Tan, **Jianzhu Guo**, Lirong Wu, Yongjie Xu, Stan Z. Li，"OT-Cleaner: Refurbishing Unclean Labels with Optimal Transport"，Under Review, 2021

[14] Zicheng Liu, Siyuan Li, Di Wu, Zhiyuan Chen, Lirong Wu, **Jianzhu Guo†**, Stan Z. Li，"AutoMix: Unveiling the Power of Mixup"，Under Review, 2021

PROJECTS & COMPETITIONS & EXPERIENCES

- ◆ 2018-Now   3D Dense Face Alignment
  - ● **3DDFA**: Super-realtime 3D dense face alignment →https://github.com/cleardusk/3DDFA, **Impact: 3.1K★, 600 Forks**, twitter of PyTorch
  - ● **3DDFA_V2**: The extended ECCV20 work of 3DDFA →https://github.com/cleardusk/3DDFA_V2, **Impact: 1.8K★, 280+ Forks**, twitter
  - ● 2019: 3D dense face alignment in NIR scenario across large pose.
- ◆ 2016-2020   Face Recognition
  - ● 2016 Face inpainting: Design a two-stage strategy of segmentation-regression based on CNN to remove face dense watermark, thus greatly improving the performance of face verification.
  - ● 2017-2018 IvS Face Recognition: Up to 10 million-scale identities, with the performance of **TPR=93%@FAR=1e-6**, **TPR=85%@FAR=1e-7** of single model.
  - ● 2017-2018 NIR-VIS Face Recognition: Achieving the best performace in four public academic database and reach about **95%@FAR=1e-6** in real-world scenario.
  - ● 2018 Watermark IvS Face recognition: One million-scale identities with the performance of **TPR=85%@FAR=1e-6** in real scenario applications.
  - ● 2019 Facial emotion recognition: Emotion recognition in surveillance scenario with top-1 ~70%.
  - ● 2020 IvS Face Recognition: Maks-occluded IvS face recognition, TPR improves by 30% at the FAR=1e-5.
- ◆ Competitions
  - ● 2017 HUAWEI Code Craft: **Awarded Silver Medal** (rank 5th / 64) in Beijing Site.
  - ● 2017 Face Analysis：**Win the champion of micro emotion competition in FG 2017**. (First author)
- ◆ Patent
  - ● Meta-learning Based Domain Adaptation for Face Recognition 202011517834.1 (pending)
- ◆ Experience
  - ● 2020.10-2021.3: Visiting researcher in WestLake University 西湖大學 WESTLAKE UNIVERSITY

SKILLS

- ● Programming language & Deep Learning Framework: Python, C/C++, Matlab, Caffe, PyTorch
- ● Platform: Linux & macOS
- ● ♡: Coding & Researching, 🗩, ♞ | Table tennis singles, team championships in CASIA
  & team championships in UCAS

AWARDS

- ● 2015   Sample Technology Scholarship
- ● 2015   Grand Prize (rank 1) on the 14-th National Challenge Cup Theme-Based Competition on "Smart Green Cities" (As Team Leader, rank **1st** / 807)
- ● 2015   Transportation Design Institute Scholarship
- ● 2014   National Encouragement Scholarship
- ● 2014   Honorable Mention Award for Mathematical Contest in Modeling (MCM)
- ● 2014   Provincial First Prize for China Undergraduate Mathematical Contest in Modeling
- ● 2014   Third Prize for Programming Contest
- ● 2014   First Frize (rank 1st) for Short Code Competition
- ● 2013   National Encouragement Scholarship
- ● 2013   Second Prize for Transportation Technology Competition