# 郭 建 珠



# Institute of Automation Chinese Academy of Sciences

### 基本信息

**手机:** +86-15600118066

邮箱: guojianzhu1994@foxmail.com

GitHub: https://github.com/cleardusk (5,300+ ★, 620+ Followers)

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

地址: 北京市海淀区中关村东路 95 号

研究方向: Face Analysis: Face Recognition, 3D Face, Anti-Spoofing, Attribute.

Learning methods: Meta-Learning and Deep Learning.



### 教育背景 \

2016.09-2021.06 | 博士 | 导师: **李子青 (Stan Z. Li)** 、雷震 | 中科院自动化研究所,模式识

别国家重点实验室

2012.09-2016.06 | 学士学位 | 东南大学 交通学院 地理信息系统

■ 专业排名 2/28, 2015.7 夏令营保研进入自动化所模式识别实验室

# 论文发表

- [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 (**WACV**), 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 (**WACV**), 2021
- [14] Zicheng Liu, Siyuan Li, Di Wu, Zhiyuan Chen, Lirong Wu, **Jianzhu Guo**<sup>†</sup>, Stan Z. Li, "AutoMix: Unveiling the Power of Mixup", Under Review, 2021

# 项目&竞赛&经历

2018-至今 3D 人脸 (稠密点回归), 独立完成人

3DDFA: 实时 3D 人脸稠密点回归 →https://github.com/cleardusk/3DDFA,

影响力: 3.1K ★, 600 Forks, 新智元报道, twitter of PyTorch;

3DDFA\_V2: 3DDFA 拓展工作,被 ECCV-20 接收 → https://github.com/cleardusk/3DDFA\_V2,

影响力: 1.8K ★, 280+ Forks, 量子位报道, twitter;

2019: 近红外场景大姿态人脸 3D 稠密点回归

- 2016-2020 人脸识别 (\*独立完成人)
  - 2016 人脸修复\*:设计了基于分割、回归二步伐的策略去除证件照网纹,辅助人脸识别,性能提升 10 个点以上
  - 2017-2018 人证识别: 千万人级别的人证识别,单模型百万分之一误识率下识别率为93%,千万分之一为85%
  - 2017-2018 异质人脸识别\*:可见光-近红外异质人脸识别在学术界取得最好的性能,实际场景百万分之一超过90%
  - 2018 网纹人脸识别\*:实际场景的百万人级别的网纹人证识别,百万分之一超过85%
  - 2019 表情识别\*: 监控场景人脸表情识别, Top1 准确率~70%
  - 2020 人证识别\*: 口罩遮挡人证识别, 十万分之一误识率下准确率提升 30 个点

#### 竞赛

- 2017 华为软件挑战赛精英赛:京津东北区域赛决赛二等奖(排位:5/64)
- 2017 人脸分析: FG2017 **国际人脸微表情识别比赛冠军**, 比第二名准确率高 5 个百分点 (第一作者)
- - 基于元学习的域自适应人脸识别 202011517834.1 (pending)
- - 2020.10-2021.3 西湖大学访问



## 技能

语言&框架: Python, C/C++, PyTorch, Matlab, Caffe

环境: Linux & macOS

● ♡: Coding & Researching, ♡, 🏚 | 自动化所乒乓球比赛团体、单打冠军,国科大团体冠军

### 其它

- 2015 三宝科技奖学金
- 2015 交通设计院奖学金
- 2015 第十四届挑战杯智慧城市专项赛国际特等奖 (队长,排位1/807)
- 2014 美国大学生数学建模二等奖,全国大学生数学建模省一等奖
- 2013&2014 国家励志奖学金 2014 程序设计竞赛校三等奖,短码竞赛一等奖(预决赛均排位第一)
  - 2013 交通科技竞赛校二等奖,测绘实践技能竞赛校二等奖