# MANYUAN ZHANG

# PERSONAL DATA

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#### WORK EXPERIENCE

since 02/2019	Researcher/Research intern at <b>SenseTime Research</b> , Base Model working on face recognition, large model and AIGC (Miaohua). The Base Model team was awarded the company's highest honor in both 2022 and 2023.
08/2018-01/2019	Research Intern at Megvii (Face++),
	working on face recognition.
05/2018-08/2018	Research Intern at Bytedance Al Lab,
	working on face recognition.

#### **EDUCATION**

09/2015-06/2019	B.Sc in Network Engineering, School of Communication
	University of Electronic Science and Technology of China
	GPA: 3.90/4
08/2021- <b>07/2025</b>	Ph.D candidate, Multimedia Laboratory
	The Chinese University of Hong Kong, Hong Kong
	Supervisor: Xiaogang Wang & Hongsheng Li

### **HONORS AND AWARDS**

- Won the 1<sup>st</sup> place in CVPR21 Masked Face Recognition Challenge (WebFace260M<sup>†‡</sup>, InsightFace Unconstrained<sup>†‡</sup>, and InsightFace glint360k\* track).
- Won the 1<sup>st</sup> place in CVPR20 ActivityNet Challenge (Kinetics700<sup>†‡</sup> and AVA \* track)
- Won the 1st place in NIST FRVT\* held by US government on both 1:1 Verification and 1:N Identification (the most authoritative face recognition competition in the world)
- Won the 1st place in ICCV19 Multi-Moments in Time (MIT) Challenge<sup>†‡</sup>
- Won the 1st place in ICCV19 Lightweight Face Recognition (LFR) Challenge\*

## **PUBLICATIONS**

• Three Things We Need to Know About Transferring Stable Diffusion to Visual Dense Prediciton Tasks

Manyuan Zhang, Guanglu Song, Yu Liu, Hongsheng Li.

European Conference on Computer Vision (ECCV) 2024

• Deep Reward Supervisions for Tuning Text-to-Image Diffusion Models Xiaoshi Wu, Yiming Hao, Manyuan Zhang, Keqiang Sun, Zhaoyang Huang, Guanglu Song, Yu Liu, and Hongsheng Li.

European Conference on Computer Vision (ECCV) 2024

<sup>†</sup> Project Lead ‡ First Contributor \* Main Contributor

 Motion-I2V: Consistent and Controllable Image-to-Video Generation with Explicit Motion Modeling

Xiaoyu Shi, Zhaoyang Huang, Fu-Yun Wang, Weikang Bian, Dasong Li, Yi Zhang, **Manyuan Zhang**, Ka Chun Cheung, Simon See, Hongwei Qin, Jifeng Dai, Hongsheng Li

**ACM SIGGRAPH 2024** 

 Decoupled DETR: Spatially Disentangling Localization and Classification for Improved End-to-End Object Detection

Manyuan Zhang, Guanglu Song, Yu Liu, Hongsheng Li

International Conference on Computer Vision (ICCV) 2023

• VideoFlow: Exploiting Temporal Cues for Multi-frame Optical Flow Estimation Xiaoyu Shi, Zhaoyang Huang, Weikang Bian, Dasong Li, Manyuan Zhang, Ka Chun Cheung, Simon See, Hongwei Qin, Jifeng Dai, Hongsheng Li

International Conference on Computer Vision (ICCV) 2023

• FlowFormer++: Masked Cost Volume Autoencoding for Pretraining Optical Flow Estimation

Xiaoyu Shi, Zhaoyang Huang, Dasong Li, **Manyuan Zhang**, Ka Chun Cheung, Simon See, Hongwei Qin, Jifeng Dai, Hongsheng Li

IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR) 2023.

- Towards Robust Face Recognition with Comprehensive Search Manyuan Zhang, Guanglu Song, Yu Liu, Hongsheng Li. European Conference on Computer Vision (ECCV) 2022.
- Switchable K-class Hyperplanes for Noise-robust Representation Learning Boxiao Liu, Guanglu Song, Manyuan Zhang, Haihang You, Yu Liu International Conference on Computer Vision (ICCV) 2021.
- Discriminability Distillation in Group Representation Learning Manyuan Zhang, Guanglu Song, Hang Zhou, Yu Liu.
   European Conference on Computer Vision (ECCV) 2020.
- Towards flops-constrained face recognition Yu Liu\*, Guanglu Song\*, Manyuan Zhang\*, Jihao Liu\*, Yucong Zhou, Junjie Yan. IEEE International Conference on Computer Vision Workshop (ICCV) 2019.
- Tensor sensing for RF tomographic imaging
  Tao Deng, Feng Qian, Xiao-Yang Liu, Manyuan Zhang, Anwar Walid.
  IEEE International Conference on Multimedia and Expo (ICME) 2018.
- Top-1 Solution of Multi-Moments in Time Challenge 2019 (top-1 solution) Manyuan Zhang, Hao Shao, Guanglu Song, Yu Liu, Junjie Yan. arXiv preprint.
- Towards Large-scale Masked Face Recognition (top-1 solution)

  Manyuan Zhang, Bingqi Ma, Guanglu Song, Yunxiao Wang, Hongsheng Li, Yu Liu. arXiv preprint.
- Searching for Parameter-Efficient Tuning Architecture for Text-to-image Diffusion Models with Multi-objective Reward Manyuan Zhang, Guanglu Song, Yu Liu, Hongsheng Li.

In submission

# **OPEN-SOURCE PROJECTS**

- X-Xemporal (0.5k+ stars) https://github.com/Sense-X/X-Temporal Easily implements SOTA video understanding methods with PyTorch on multiple machines and GPUs. Lead contributor.
- DI-drive (0.5k+ stars) https://github.com/opendilab/DI-drive Decision Intelligence Platform for Autonomous Driving Simulation. Responsible for the imitation learning module.
- DI-star (1.2k+ stars) https://github.com/opendilab/DI-star A large-scale game AI distributed training platform specially developed for the StarCraft II. Achieve 6000+ MMR for Zerg. Responsible for supervised learning.