Jianhao Zeng

jh_zeng@tju.edu.cn | zengjianhao.github.io | Google Scholar

Education

Tianjin University — Tianjin, China
M.Eng. in Electronic and Information Engineering — 2021/09 – 2024/06
Advisor: Prof. Dan Song

Tianjin University — Tianjin, China
B.Eng. in Mechanical Design & Manufacturing and Their Automation — 2017/09 – 2021/06

Publications

1. **Elucidating the SNR-t Bias of Diffusion Probabilistic Models**
   Meng Yu, Lei Sun, <u>Jianhao Zeng</u>, Xiangxiang Chu, Kun Zhang#
   IEEE/CVF Conference on Computer Vision and Pattern Recognition **(CVPR 2026)**

2. **Eevee: Towards Close-up High-resolution Video-based Virtual Try-on**
   <u>Jianhao Zeng</u>*, Yancheng Bai*, Ruidong Chen, Xuanpu Zhang, Lei Sun, Dongyang Jin, Ryan Xu, Nannan Zhang#, Dan Song, Xiangxiang Chu
   Findings of IEEE/CVF Conference on Computer Vision and Pattern Recognition **(Findings of CVPR 2026)**

3. **Layer-wise Instance Binding for Regional and Occlusion Control in Text-to-Image Diffusion Transformers**
   Ruidong Chen, Yancheng Bai, Xuanpu Zhang, <u>Jianhao Zeng</u>, Lanjun Wang, Dan Song, Lei Sun, Xiangxiang Chu, Anan Liu#
   IEEE/CVF Conference on Computer Vision and Pattern Recognition **(CVPR 2026)**

4. **Semantic Context Matters: Improving Conditioning for Autoregressive Models**
   Dongyang Jin*, Ryan Xu*#, <u>Jianhao Zeng</u>, Rui Lan, Yancheng Bai, Lei Sun, Xiangxiang Chu
   IEEE/CVF Conference on Computer Vision and Pattern Recognition **(CVPR 2026)**

5. **Group Relative Attention Guidance for Image Editing**
   Xuanpu Zhang*, Xuesong Niu*, Ruidong Chen, Dan Song, <u>Jianhao Zeng</u>, Penghui Du, Haoxiang Cao, Kai Wu#, Anan Liu#
   Findings of IEEE/CVF Conference on Computer Vision and Pattern Recognition **(Findings of CVPR 2026)**

6. **MEF-GD: Multimodal Enhancement and Fusion Network for Garment Designer**
   Dan Song, Juan Zhou, <u>Jianhao Zeng</u>, Hongshuo Tian, Bolun Zhen, Rongbao Kang, Anan Liu#
   IEEE Transactions on Circuits and Systems for Video Technology, 2025 **(TCSVT)**

7. **Robust-MVTON: Learning Cross-Pose Feature Alignment and Fusion for Robust Multi-View Virtual Try-On**
   Nannan Zhang*, Yijiang Li*, Dong Du#, Zheng Chong, Zhengwentai Sun, <u>Jianhao Zeng</u>, Yusheng Dai, Zhenyu Xie, Hairui Zhu, Xiaoguang Han#
   IEEE/CVF Conference on Computer Vision and Pattern Recognition **(CVPR 2025)**

8. **BooW-VTON: Boosting In-the-Wild Virtual Try-On via Mask-Free Pseudo Data Training**
   Xuanpu Zhang, Dan Song#, Pengxin Zhan, Tianyu Chang, <u>Jianhao Zeng</u>, Qingguo Chen, Weihua Luo, Anan Liu#
   IEEE/CVF Conference on Computer Vision and Pattern Recognition **(CVPR 2025)**

9. **Better Fit: Accommodate Variations in Clothing Types for Virtual Try-on**
Dan Song, Xuanpu Zhang, <u>Jianhao Zeng</u>, Pengxin Zhan, Qingguo Chen, Weihua Luo, Anan Liu#
*IEEE Transactions on Circuits and Systems for Video Technology, 2024 **(TCSVT)***

10. **CAT-DM: Controllable Accelerated Virtual Try-on with Diffusion Model**
<u>Jianhao Zeng</u>, Dan Song#, Weizhi Nie, Hongshuo Tian, Tongtong Wang, Anan Liu#
*IEEE/CVF Conference on Computer Vision and Pattern Recognition **(CVPR 2024)***

11. **Fashion Customization: Image Generation Based on Editing Clue**
Dan Song, <u>Jianhao Zeng</u>, Min Liu, Xuanya Li, Anan Liu#
*IEEE Transactions on Circuits and Systems for Video Technology, 2023 **(TCSVT)***

Experiences

Machine Learning Department, AMAP, Alibaba Group   Beijing, China
Algorithm Engineer   2025/06 – Current
Mentor: Dr. Lei Sun, Dr. Yancheng Bai and Mr. Xiangxiang Chu

Laboratory for MAchine Perception and LEarning (MAPLE), Westlake University   Hangzhou, China
Research Assistant   2024/06 – 2025/01
Advisor: Dr. Liyuan Ma, Dr. Zhiyang Chen and Prof. Guojun Qi (Fellow of IEEE, IAPR and AAIA)

Institute of Television and Image Information, Tianjin University   Tianjin, China
Graduate Student   2021/09 – 2024/06
Advisor: Prof. Dan Song and Prof. Anan Liu (Distinguished Young Scholars)

Competitions

- **Top 6.9%** in Jiangsu Meteorological AI Algorithm Challenge   2022/06
- **First Prize** in Tianjin University Undergraduate Physicists Tournament (TJUPT)   2019/08
- **Second Prize** in National College Students Mathematical Competition   2018/10
- **Third Prize** in Tianjin College Student Mathematics Competition   2018/05

Awards

- CVPR Registration and Travel Support   2024
- Excellent Master's Degree Thesis of Tianjin University (**Top 5%**)   2024
- Tianjin University Academic Scholarship   2021, 2022, 2023

Others

- **Reviewer**: ACM MM (2024), ICLR (2025, 2026), NIPS (2025), CVPR (2026), ECCV (2026), TCSVT
- **Teaching Assistant**: Digital Logic Circuit, Tianjin University
- **Translation**: Physically Based Rendering: From Theory To Implementation, fourth edition
- **Patent**: A Fashion Image Editing Method and Device Based on Self-Attention Mechanism (CN115082295B)

Skills

- **Programming Languages**   C, C++, Python, HTML, CSS, JavaScript
- **Frameworks**   PyTorch, PyTorch Lightning, Accelerate
- **Tools**   Linux, Git, LaTeX, Typst

- **Human Languages**   Mandarin, English (TOEFL iBT: 94)