CHENJIE CAO

✉ ccjdurandal422@163.com   📞 (+86) 13918377193   🔗 https://ewrfcas.github.io

🎓 EDUCATION

Fudan University, Alibaba DAMO Academy, HangZhou   2024 – present
Post Doc Computer Science (Research: Generative models based on 3D priors).

Fudan University, ShangHai   2020 – 2024
Ph.D. in Statistics (Research: Computer Vision).

East China University of Science and Technology (ECUST), ShangHai   2012 – 2019
B.S. and Master in Computer Science (Research: Imbalanced Classification Problems).

⚙ WORK EXPERIENCE

Alibaba DAMO Academy   2024 – present
Algorithm Researcher (3D/multi-view/video generalization)

OneConnect AI Research Institute Department   2019 – 2020
Algorithm Engineer (Machine reading comprehension and pre-training of language models)

👥 RESEARCH

- Image inpainting, manipulation, synthesis; Multi-view synthesis; 3D/4D reconstruction; Image matching.

Related Papers   (* means equal contribution)
- **Chenjie Cao**, Chaohui Yu, Shang Liu, Fan Wang, Xiangyang Xue, Yanwei Fu. MVGenMaster: Scaling Multi-View Generation from Any Image via 3D Priors Enhanced Diffusion Model. (Under Review)
- **Chenjie Cao**, Chaohui Yu, Yanwei Fu, Fan Wang, Xiangyang Xue. MVInpainter: Learning Multi-View Consistent Inpainting to Bridge 2D and 3D Editing. NeurIPS. 2024.
- Yanqin Jiang, Chaohui Yu, **Chenjie Cao**, Fan Wang, Weiming Hu, Jin Gao. Animate3D: Animating Any 3D Model with Multi-view Video Diffusion. NeurIPS. 2024.
- Shang Liu, Chaohui Yu, **Chenjie Cao**, Wen Qian, Fan Wang. VCD-Texture: Variance Alignment based 3D-2D Co-Denoising for Text-Guided Texturing. ECCV. 2024.
- Zijie Wu, Chaohui Yu, Yanqin Jiang, **Chenjie Cao**, Fan Wang, Xiang Bai. SC4D: Sparse-Controlled Video-to-4D Generation and Motion Transfer. ECCV. 2024
- *Xinlin Ren, ***Chenjie Cao**, Yanwei Fu. Improving Neural Surface Reconstruction with Feature Priors from Multi-View Images. ECCV. 2024.
- ***Chenjie Cao**, *Xinlin Ren, Yanwei Fu. MVSFormer++: Revealing the Devil in the Transformer's Details for Multi-View Stereo. ICLR. 2024.
- **Chenjie Cao**, Yunuo Cai, Qiaole Dong, Yikai Wang, Yanwei Fu. LeftRefill: Filling Right Canvas based on Left Reference through Generalized Text-to-Image Diffusion Model. CVPR. 2024.
- ***Chenjie Cao**, *Qiaole Dong, Yanwei Fu. ZITS++: Image Inpainting by Improving the Incremental Transformer on Structural Priors. TPAMI. 2023.
- Linbo Wang, Jing Wu, Xianyong Fang, Zhengyi Liu, **Chenjie Cao**, Yanwei Fu. Local Consensus Enhanced Siamese Network with Reciprocal Loss for Two-view Correspondence Learning. ACMMM. 2023.
- **Chenjie Cao**, Yanwei Fu. Improving Transformer-based Image Matching by Cascaded Capturing Spatially Informative Keypoints. ICCV. 2023.
- *Qiaole Dong, ***Chenjie Cao**, Yanwei Fu. Rethinking Optical Flow from Geometric Matching Consistent Perspective. CVPR. 2023.
- **Chenjie Cao**, Xinlin Ren, and Yanwei Fu. MVSFormer: Multi-View Stereo by Learning Robust Image Features and Temperature-based Depth. TMLR. 2023.
- ***Chenjie Cao**, *Qiaole Dong, and Yanwei Fu. Learning Prior Feature and Attention Enhanced Image Inpainting. ECCV. 2022.
- *Chao Wen, *Yinda Zhang, **Chenjie Cao**, et al. Pixel2mesh++: 3d mesh generation and refinement from multi-view images. TPAMI. 2022.

- *Qiaole Dong, ***Chenjie Cao**, and Yanwei Fu. Incremental Transformer Structure Enhanced Image Inpainting with Masking Positional Encoding. CVPR. 2022.
- Chengrong Wang, **Chenjie Cao**, et al. High-Fidelity Portrait Editing Via Exploring Differentiable Guided Sketches from the Latent Space. ICASSP. 2022.
- **Chenjie Cao**, Yuxin Hong, Xiang Li, Chengrong Wang, Chengming Xu, Yanwei Fu, Xiangyang Xue. The Image Local Autoregressive Transformer. NeurIPS. 2021.
- **Chenjie Cao**, and Yanwei Fu. Learning a Sketch Tensor Space for Image Inpainting of Man-Made Scenes. ICCV. 2021.
- Liang Xu, Xuanwei Zhang, Lu Li, Hai Hu, **Chenjie Cao**, et al. CLUE: A Chinese Language Understanding Evaluation Benchmark. COLING. 2020.
- Wang, Zhe, **Chenjie Cao**, and Yujin Zhu. Entropy and Confidence-based Undersampling Boosting Random Forests for Imbalanced Problems. TNNLS. 2020.
- Chen, Jiahao, **Chenjie Cao**, and Xiuyan Jiang. SiBert: Enhanced Chinese Pre-trained Language Model with Sentence Insertion. LREC. 2020.
- Wang, Zhe, and **Chenjie Cao**. Cascade Interpolation Learning with Double Subspaces and Confidence Disturbance for Imbalanced Problems. Neural Networks. 2019.
- **Chenjie Cao**, and Zhe Wang. IMCStacking: Cost-sensitive Stacking Learning with Feature Inverse Mapping for Imbalanced Problems. KBS. 2018.
- Li, DongDong, Zhe Wang, **Chenjie Cao** et al. Information Entropy-based Sample Reduction for Support Vector Data Description. ASC 2018.

♡ Honors and Awards

National Scholarship for Graduate Studies	2018
Ph.D. Named Scholarship	2021,2022,2023
1st of OMG emotion estimation (WCCI/IJCNN **in** *https://arxiv.org/abs/1805.01060)*	2018
1st of Squad2.0 reading comprehension	2018.12
1st of CMRC2019 Chinese reading omprehension	2019
1st of DROP numerical reasoning reading comprehension	2019
The annual best employee of the OneConnect AI Research Institute Department	2019
1st of CVPR2020 DocVQA Document reading comprehension	2020
1st of Tanks-and-Temples 3D Rec. leaderboard **in** https://www.tanksandtemples.org/leaderboard/	2022.5
2nd of GigaMVS 3D Rec.	2023.1
Oral of CVPR2024 Shanghai presentation	2024.5

ⓘ Miscellaneous

- Deep Learning programming: Pytorch, TensorFlow.
- ZhiHu Diffusion introduction (3200+stars) **in** Link.
- DBLP **in** Link, Google Scholar **in** Link.
- ⓞ https://github.com/ewrfcas
- The reviewer of TPAMI, IJCV, CVPR, ACMMM, NeurIPS, ICML, and ICLR.