Jie An

jan6@cs.rochester.edu · +1 585-285-2273 · https://www.cs.rochester.edu/u/jan6/

Education

University of Rochester, *Rochester, US* *Aug. 2019 - Present*

Ph.D. in Computer Science. Adviser: *Prof. Jiebo Luo*.

Peking University, *Beijing, China* *Sep. 2016 - Jun. 2019*

M.S. in Applied Mathematics. Adviser: *Prof. Jinwen Ma*.

Peking University, *Beijing, China* *Sep. 2012 - Jun. 2016*

B.S. in Applied Mathematics.

Published Papers

- **Jie An**⋆, Songyang Zhang⋆, Sonal Gupta, Jia-Bin Huang, Jiebo Luo and Xi Yin. *Latent Diffusion with Temporal Shift for Efficient Text-to-Video Generation*. [Under review].
- Siyu Huang⋆, **Jie An**⋆, Donglai Wei, Jiebo Luo and Hanspeter Pfister. *QuantArt: Quantizing Image Style Transfer Towards High Visual Fidelity*. [Under review].
- Junyu Chen⋆, **Jie An**⋆, Hanjia Lyu⋆ and Jiebo Luo. *Improving Visual-textual Sentiment Analysis by Fusing Expert Features*. [Under review].
- Uriel Singer⋆, Adam Polyak⋆, Thomas Hayes⋆, Xi Yin⋆, **Jie An**, Songyang Zhang, Qiyuan Hu, Harry Yang, Oron Ashual, Oran Gafni, Devi Parikh, Sonal Gupta, Yaniv Taigman. *Make-A-Video: Text-to-video Generation Without Text-video Data*. [Under review].
- Siyu Huang⋆, **Jie An**⋆, Donglai Wei, Zudi Lin, Jiebo Luo and Hanspeter Pfister. *Domain-Scalable Unpaired Image Translation via Latent Space Anchoring*. [Under review].
- **Jie An**, Tao Li, Haozhi Huang, Jinwen Ma and Jiebo Luo. *Is Bigger Always Better? An Empirical Study on Efficient Architectures for Style Transfer and Beyond*. WACV-2023.
- Zhaoyi Wan, Haoran Chen, **Jie An**, Wentao Jiang, Cong Yao, and Jiebo Luo. *Facial Attribute Transformers for Precise and Robust Makeup Transfer*. WACV-2022.
- **Jie An**⋆, Siyu Huang⋆, Yibing Song, Dejing Dou, Wei Liu and Jiebo Luo. *ArtFlow: Unbiased Style Transfer with Reversible Neural Flows*. CVPR-2021.
- **Jie An**, Tianlang Chen, Songyang Zhang and Jiebo Luo. *Global Image Sentiment Transfer*. ICPR-2020.
- **Jie An**⋆, Haoyi Xiong⋆, Jun Huan and Jiebo Luo. *Ultrafast photorealistic style transfer via neural architecture search*. AAAI-2020 [Oral].
- Hanchao Li, Pengfei Xiong, **Jie An**, and Lingxue Wang. *Pyramid attention network for semantic segmentation*. BMVC-2018.
- Mengdi Zhao, **Jie An**, Haiwen Li, Jiazhi Zhang, Shang-Tong Li, Xue-Mei Li, Meng-Qiu Dong, Heng Mao, and Louis Tao. *Segmentation and classification of two-channel C. elegans nucleus-labeled fluorescence images*. BMC bioinformatics 18, no. 1 (2017): 412.

Work & Internship

Meta FAIR *research intern* *May. 2022 - Present*

- Research on text-to-video generation.

Tencent AI Lab *research intern* *Sep. 2020 - Jul. 2021*

- Research on image style transfer based on Flow models.

StylingAI Inc. *research engineer* *Apr. 2020 - Sep. 2020*

- Work on deep fakes generation for images, videos, and live streams.

Tencent AI Lab *research intern* *Jul. 2019 - Mar. 2020*

- Work on Chinese calligraphy generation/translation.
- Research on real-time neural style transfer.

Baidu Big Data Lab *research intern* *Jan. 2019 - Jul. 2019*

- Research on style transfer and neural architecture search.

Megvii Inc. (Face++) *research intern* *Oct. 2017 - Jun. 2018*

- Research on portrait segmentation, portrait matting and semantic segmentation.

Projects & Experiences

Deep fakes generation on images and videos. *Apr. 2020 - Sep. 2020*

- We develop a deep fakes generation system for portrait images, videos, and live streams, where I am in charge of the face blending, harmonization, and post-processing.

AI spring festival couplets. *Jul. 2019 - Feb. 2020*

- We develop an AI system to automatically generate spring festival couplets and write them by imitating the writing style of famous Chinese calligraphers.
- I am in charge of the vision part and develop a Chinese calligraphy generation algorithm.
- The project has been made online in the spring festival of 2021. Please search "用 AI 写春联小程序" on WeChat.

Cloud segmentation based on semantic segmentation algorithms. *Mar. 2017 - Nov. 2018*

- We construct a new network to make cloud segmentation on very large remote-sensing images.
- We develop a web application to control and visualize the cloud segmentation on remote-sensing images.

Optical diffraction tomography holographic image reconstruction. *Jun. 2015 - Oct. 2016*

- We propose a 3D image reconstruction algorithm for holographic imaging based on the electromagnetic wave propagation theory and Fourier spectrum analysis method.
- We develop a fast 3D image reconstruction algorithm for microscopic imaging systems based on CUDA C.
- The proposed algorithm in together with the optical hardware are used by many biomedical labs.

Skills

- Programming Languages: Python > C++/C/Matlab > Web > CUDA C.
- Deep Learning: PyTorch > TensorFlow.

Honors & Awards

- Outstanding Graduate, *Beijing* *Jun. 2019*
- Second Prize, *Challenge cup academic competition, Peking University* *Sep. 2018*
- Third Prize, *IBM PowerAI programming marathon competition* *Dec. 2017*
- Second Prize, *"Jiang Ze Han" cup mathematical modeling competition, Peking University* *Jun. 2015*
- Graduate student scholarship, *Peking University* *Oct. 2018*
- Graduate student scholarship, *Peking University* *Oct. 2016*
- "Guang Hua" scholarship, *Peking University* *Jun. 2015*