

## EDUCATION

### University of Chinese Academy of Sciences

*Institute of Information Engineering*

- Doctor of Cyberspace Security, Research interests include computer vision, generative models, image and video synthesis, especially in face reenactment and talking head generation.

Beijing, China

Sep.2018 - present

### Beijing Jiaotong University

*School of Computer and Information Technology*

- Bachelor of Information Security (Security Technology), CET-6: 533

Beijing, China

Sep.2014 - Jun.2018

## PUBLICATIONS

- [1] **Liu J**, Wang X, Fu X, et al. [MFR-Net: Multi-faceted Responsive Listening Head Generation via Denoising Diffusion Model](#) (**MM 2023, CCF-A**, Using denoising diffusion model and designed Feature Aggregation Module to achieve the responsive listening head generation task.)
- [2] **Liu J**, Wang X, Fu X, et al. [FONT: Flow-guided One-shot Talking Head Generation with Natural Head Motions](#) (**ICME 2023, CCF-B**, Improving the naturalness and diversity of talking head generation using a CVAE-based pose prediction module and a flow-guided generator.)
- [3] **Liu J**, Wang X, Fu X, et al. [OPT: One-shot Pose-Controllable Talking Head Generation](#) (**ICASSP 2023, CCF-B**, Designing the Audio Feature Disentanglement Module to solve the identity mismatch problem and achieve explicit pose control over generated talking head videos. )
- [4] **Liu J**, Chen P, Wang X, Fu X M, Dai J and Han J Z. 2022. [Critical review of human face reenactment methods](#). (**Journal of Image and Graphics 2022, CCF-B**, Chinese review about face reenactment, introducing current works, analyzing existing problems and summarizing future development direction. )
- [5] **Liu J**, Chen P, Liang T, et al. [Li-Net: Large-Pose Identity-Preserving Face Reenactment Network](#) (**ICME 2021, CCF-B**, Solving the identity mismatch and visual artifact problem in large-pose scenarios by proposing the Landmark Transformer and generating face pose and expression separately.)
- [6] Chen P, **Liu J**, Liang T, et al. [Dlfnnet: End-to-end detection and localization of face manipulation using multi-domain features](#) (**ICME 2021, CCF-B**, Proposing an end-to-end framework for detection and localization of face manipulation, avoiding intermediate processes like image cropping and feature re-extraction.)
- [7] Chen P, **Liu J**, Liang T, et al. [Fsspotter: Spotting face-swapped video by spatial and temporal clues](#) (**ICME 2020, CCF-B**, Proposing the Spatial Feature Extractor and the Temporal Feature Aggregator to explore rich spatial and temporal information in the video simultaneously for deepfake detection.)

## COMPETITIONS

### Deepfake Detection Challenge

Dec.2019 - Apr.2020

- Introduction: organized by Facebook at a cost of 10 million US dollars. It built a super-large-scale deepfake video dataset, attracting 2,265 teams from all over the world to participate, so as to promote the research of related deepfake detection technologies.
- Rank: 9/2265 in the public list, 81/2265 in the private list.
- Main work: Data pre-processing, data augmentation, deepfake work survey, and model construction.

## MISCELLANEOUS

- 2020, 2022 Outstanding student leaders of the University of Chinese Academy of Sciences
- 2019, 2020, 2021, 2022, 2023 Merit Student of University of Chinese Academy of Sciences
- 2018, Excellent Scholarship for Undergraduates, University of Chinese Academy of Sciences
- 2018, Outstanding Graduates of Beijing, Ministry of Education of China
- 2014, National Scholarship (top 1%), Ministry of Education of China