

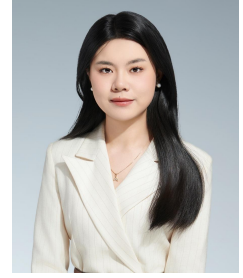
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EDUCATION

- 2016–2021 **Ph.D. in Computer Applied Technology**, Peking University
Advisor: Prof. Siwei Ma
- 2012–2016 **B.E. in Digital Media Technology**, Communication University of China

ACADEMIC EMPLOYMENT

- 2025–present **Professor**, Communication University of China
- 2023–2025 **Associate Professor**, Communication University of China
- 2021–2023 **Lecturer**, Communication University of China

RESEARCH VISITS

- Sep–Dec 2024 **Visiting Scholar**, Microsoft Research Asia
- Oct 2023–Apr 2024 **Visiting Scholar**, National University of Singapore Show Lab
- Oct 2019–Oct 2020 **Visiting Ph.D. Student**, University of California Merced
Host: Prof. Ming-Hsuan Yang

SELECTED PUBLICATIONS

* Co-first author. † Qi Mao is the corresponding author.

1. **Qi Mao†**, Hao Cheng, Tinghan Yang, Libiao Jin, and Siwei Ma. “Generative Neural Video Compression via Video Diffusion Prior.” *IEEE/CVF Conference on Computer Vision and Pattern Recognition CVPR*, 2026
2. Yuanhang Li, **Qi Mao†**, Lan Chen, Zhen Fang, Lei Tian, Xinyan Xiao, Libiao Jin, and Hua Wu. “StarVid: Enhancing Semantic Alignment in Video Diffusion Models via Spatial and Syntactic Guided Attention Refocusing.” *IEEE Transactions on Multimedia*, 2026
3. **Qi Mao†** and Siwei Ma. “Enhancing Style-Guided Image-to-Image Translation via Self-Supervised Metric Learning.” *IEEE Transactions on Multimedia*, vol. 25, pp. 8511–8526, 2023
4. Junlong Gao, Zhimeng Huang, **Qi Mao†**, Siwei Ma, and Chuanmin Jia. “Exploring Multimodal Knowledge for Image Compression via Large Foundation Models.” *IEEE Transactions on Image Processing*, vol. 34, pp. 5904–5919, 2025
5. **Qi Mao**, Chongyu Wang, Meng Wang, Shiqi Wang, Ruijie Chen, Libiao Jin, and Siwei Ma. “Scalable Face Image Coding via StyleGAN Prior: Toward Compression for Human-Machine Collaborative Vision.” *IEEE Transactions on Image Processing*, vol. 33, pp. 408–422, 2024
6. Jianhui Chang, Zhenghui Zhao, Chuanmin Jia, Shiqi Wang, Lingbo Yang, **Qi Mao**, Jian Zhang, and Siwei Ma. “Conceptual Compression via Deep Structure and Texture Synthesis.” *IEEE Transactions on Image Processing*, vol. 31, pp. 2809–2823, 2022
7. **Qi Mao**, Hung-Yu Tseng, Hsin-Ying Lee, Jia-Bin Huang, Siwei Ma, and Ming-Hsuan Yang. “Continuous and Diverse Image-to-Image Translation via Signed Attribute Vectors.” *International Journal of Computer Vision*, vol. 130, pp. 517–549, 2022
8. Hsin-Ying Lee*, Hung-Yu Tseng*, **Qi Mao***, Jia-Bin Huang, Yu-Ding Lu, Maneesh Singh, and Ming-Hsuan Yang. “DRIT++: Diverse Image-to-Image Translation via Disentangled Representations.” *International Journal of Computer Vision*, vol. 128, pp. 2402–2417, 2020
9. Jianhui Chang, Jian Zhang, Jiguo Li, Shiqi Wang, **Qi Mao**, Chuanmin Jia, Siwei Ma, and Wen Gao. “Semantic-Aware Visual Decomposition for Image Coding.” *International Journal of Computer Vision*, vol. 131, pp. 2333–2355, 2023
10. Ze Chen, Lan Chen, Yuanhang Li, and **Qi Mao†**. “FlowAnchor: Stabilizing the Editing Signal for Inversion-Free Video Editing.” *ACM International Conference on Multimedia ACM MM*, 2026
11. Haobo Hu, Xiangwu Guo, Zhiheng Chen, Difei Gao, Haotian Liu, Libiao Jin, and **Qi Mao†**. “CutVerse: A Compositional GUI Agents Benchmark for Media Post-Production Editing.” *ACM International Conference on Multimedia ACM MM*, 2026
12. **Qi Mao†**, Lan Chen, Yuchao Gu, Zhen Fang, and Mike Zheng Shou. “MAG-Edit: Localized Image Editing in Complex Scenarios via Mask-Based Attention-Adjusted Guidance.” *ACM International Conference on Multimedia ACM MM*, 2024
13. Yuanhang Li, **Qi Mao†**, Xinyan Xiao, Libiao Jin, and Siwei Ma. “HD-Custom: Efficient Hierarchical Disentanglement for Coarse-to-Fine Concept Customization in Subject Video Generation.” *IEEE Transactions on Circuits and Systems for Video Technology*, 2026
14. **Qi Mao†**, Haobo Hu, Yujie He, Difei Gao, Haokun Chen, and Libiao Jin. “EmoAgent: A Multi-Agent Framework for Diverse Affective Image Manipulation.” *IEEE Transactions on Affective Computing*, 2026
15. Jiangkai Wu, Yu Guan, **Qi Mao**, Yong Cui, Zongming Guo, and Xinggong Zhang. “ZGaming: Zero-Latency 3D Cloud Gaming by Image Prediction.” *ACM SIGCOMM*, 2023

16. **Qi Mao**, Hsin-Ying Lee, Hung-Yu Tseng, Siwei Ma, and Ming-Hsuan Yang. "Mode Seeking Generative Adversarial Networks for Diverse Image Synthesis." *IEEE/CVF Conference on Computer Vision and Pattern Recognition CVPR*, 2019

GRANTS

- **National Natural Science Foundation of China General Program**. Theory and Methods of Extreme Coding Based on Discrete Feature Representation and Generative Models. Principal Investigator.
- **National Natural Science Foundation of China Young Scientists Fund**. Human-Machine Collaborative Video Coding Based on Hierarchical Feature Representation. Principal Investigator.
- **National Key Research and Development Program of China**. Integrated Technologies and Scenario Innovation for Immersive Cultural Tourism Experiences. Subproject Leader.
- **State Key Laboratory of Multimedia Information Processing Open Project**. Text-Driven Diffusion Video Editing with Spatiotemporal Semantic Control. Principal Investigator.
- **Baidu University Collaboration Project**. Baidu NLP Academic Collaboration. Principal Investigator.
- **Communication University of China Research Innovation Team**. Cognition-Guided Controllable Content Generation. Principal Investigator.

HONORS AND AWARDS

- Young Talent Support Project, Beijing High-level Innovation and Entrepreneurship Program, 2026.
- Most Beautiful Female Science and Technology Worker, Beijing Society of Image and Graphics, 2026.
- Second Prize, VCIP Grand Challenge on Ultra-Low-Bitrate Video Coding, 2025.
- Microsoft Research Asia Rising Star, 2024.
- Young Innovation Talent, National Radio and Television and Online Audiovisual Industry, 2023.
- Outstanding Doctoral Dissertation Award, Beijing Society of Image and Graphics, 2023.
- Third Prize, Video Restoration Technology Application Track, Second Radio and Television and Online Audiovisual AI Application Innovation Competition.

ACADEMIC SERVICE

- Area Chair: CVPR 2025; ICCV 2025; WACV 2026 and 2027; ICML 2026; ECCV 2026; ICLR 2027.
- Senior Program Committee Member: AAAI.
- Meta-Reviewer: IEEE Visual Communications and Image Processing VCIP.
- Poster and Demo Co-Chair: ACM Multimedia Asia 2025.
- Member: IEEE Circuits and Systems Society Multimedia Systems and Applications Technical Committee.
- Committee Member: China Society of Image and Graphics Multimedia Technical Committee; Women in Graphics Committee; Beijing Society of Image and Graphics Youth Committee.

PATENTS AND STANDARDIZATION

- More than ten granted Chinese invention patents in generative compression, controllable image editing, video generation, and media forensics.
- Multiple technical proposals adopted by the Audio Video Coding Standard Workgroup of China AVS.