

Chuanbin Liu (Associate Researcher, University of Science and Technology of China)

PERSONAL STATEMENT

Chuanbin Liu is currently a **visiting scholar** at **Nanyang Technological University**, and an **associate researcher** at the **University of Science and Technology of China (USTC)**. He obtained his PhD degree in Information and Communication Engineering from USTC in 2021, under the guidance of Professor **Yongdong Zhang** and Professor **Weiping Li**. His research interests include **computer vision**, **large model reasoning**, **medical image analysis**, and other fields. Currently, he has published over 20 high-level academic articles. He has won several awards, such as the **President's Special Award from the Chinese Academy of Sciences**, **Outstanding Doctoral Dissertation from the Chinese Institute of Electronics**, National Postgraduate Scholarship, and Outstanding Graduate of USTC. He also chaired a number of projects including the **National Natural Science Foundation of China**, the Anhui Provincial Natural Science Foundation, and the China Postdoctoral Science Foundation. In addition, he possesses diverse abilities and experience, and served as an assistant in the Ministry of Science and Technology, and is responsible for the high-performance computing clusters in his team.

PERSONAL INFORMATION

Phone:	+86-13155167692	Email:	liuchuanbin1992@gmail.com
Homepage:	https://liuchuanbin.com/	Birth:	02/1992
Address:	High-tech Campus USTC, No.100, Fuxing Road, Hefei, Anhui, 230027, P. R. China		

WORKING EXPERIENCE

06/2023-Present	Associate Researcher	University of Science and Technology of China
09/2021-05/2023	Post Doctor	University of Science and Technology of China

EDUCATION EXPERIENCE

09/2015-06/2021	Doctor of Information and Communication Engineering University of Science and Technology of China (USTC)
09/2011-06/2015	Bachelor of Applied Physics University of Science and Technology of China (USTC)

SOCIAL EXPERIENCE

09/2022-Present *Assistant Judge of the Ministry of Science and Technology*

- Assistant judge expert for the National Key Research and Development Program of the **Ministry of Science and Technology**. Participating in project review and performance evaluation.

09/2014-07/2017 *Teaching Assistant of Design Innovation*

- Teaching Assistant in **USTC Design Innovation Course** as well as **Stanford University Global Alliance for Redesign**. Master the skill of project management, team collaboration and leadership.

09/2012-01/2015 *Volunteer Assistant of Psychotherapists*

- Assist the psychotherapist to help the student with psychological problem. Master the skill of listening, observing and **psychological counseling**.

PUBLICATIONS

- Yifan Gao, Jinpeng Lin, Min Zhou, **Chuanbin Liu***, Hongtao Xie, Tiezheng Ge, Yuning Jiang: TextPainter: Multimodal Text Image Generation with Visual-harmony and Text-comprehension for Poster Design. ACM MM 2023
- Wanting Yin, Hongtao Xie, Lei Zhang, Jiannan Ge, Pandeng Li, **Chuanbin Liu***, Yongdong Zhang: Frequency-

based Zero-Shot Learning with Phase Augmentation. ACM MM 2023

- Zhiying Lu, Hongtao Xie*, **Chuanbin Liu***, Yongdong Zhang: Bridging the Gap Between Vision Transformers and Convolutional Neural Networks on Small Datasets. NeurIPS 2022
- **Chuanbin Liu**, Hongtao Xie, Sicheng Zhang, Zhendong Mao, Jun Sun, Yongdong Zhang: Misshapen Pelvis Landmark Detection With Local-Global Feature Learning for Diagnosing Developmental Dysplasia of the Hip. IEEE Trans. Medical Imaging 39(12): 3944-3954 (2020)
- **Chuanbin Liu**, Hongtao Xie, Zhengjun Zha, Lingyun Yu, Zhineng Chen, Yongdong Zhang: Bidirectional Attention-Recognition Model for Fine-Grained Object Classification. IEEE Trans. Multim. 22(7): 1785-1795 (2020)
- **Chuanbin Liu**, Hongtao Xie, Zheng-Jun Zha, Lingfeng Ma, Lingyun Yu, Yongdong Zhang: Filtration and Distillation: Enhancing Region Attention for Fine-Grained Visual Categorization. AAAI 2020: 11555-11562
- **Chuanbin Liu**, Hongtao Xie, Yunyan Yan, Zhendong Mao, Yongdong Zhang: Learning Rich Attention for Pediatric Bone Age Assessment. MICCAI (1) 2020: 232-242
- **Chuanbin Liu**, Youliang Tian, Hongtao Xie: Law Is Order: Protecting Multimedia Network Transmission by Game Theory and Mechanism Design. MMM (2) 2020: 651-668
- **Chuanbin Liu**, Hongtao Xie, Yizhi Liu, Zheng-Jun Zha, Fanchao Lin, Yongdong Zhang: Extract Bone Parts Without Human Prior: End-to-end Convolutional Neural Network for Pediatric Bone Age Assessment. MICCAI (6) 2019: 667-675
- **Chuanbin Liu**, Hongtao Xie, Sicheng Zhang, Jingyuan Xu, Jun Sun, Yongdong Zhang: Misshapen Pelvis Landmark Detection by Spatial Local Correlation Mining for Diagnosing Developmental Dysplasia of the Hip. MICCAI (6) 2019: 441-449
- Yiwei Sun, Zhihang Liu, **Chuanbin Liu***, Bowei Pu, Zhihan Zhang, Hongtao Xie: Hallucination Mitigation Prompts Long-term Video Understanding //Arxiv 2024
- Lingfeng Ma, Hongtao Xie, **Chuanbin Liu**, Yongdong Zhang. Learning Cross-Channel Representations for Semantic Segmentation. IEEE Trans. Multim. 25: 2774-2787 (2023)
- Jingyuan Xu, Hongtao Xie, Qingfeng Tan, Hai Wu, **Chuanbin Liu**, Sicheng Zhang, Zhendong Mao, Yongdong Zhang: Multi-task hourglass network for online automatic diagnosis of developmental dysplasia of the hip. World Wide Web (WWW) 26(2): 539-559 (2023)
- Xuran Deng, **Chuanbin Liu**, Zhiying Lu: Recombining Vision Transformer Architecture for Fine-Grained Visual Categorization. MMM (2) 2023: 127-138
- Fanchao Lin, Hongtao Xie, **Chuanbin Liu**, Yongdong Zhang: Bilateral Temporal Re-Aggregation for Weakly-Supervised Video Object Segmentation. IEEE Trans. Circuits Syst. Video Technol. 32(7): 4498-4512 (2022)

FUNDS

[1] National Natural Science Foundation of China, General Project, 62272436, Research on Key Technologies of Small Data Driven Visual Recognition Cognitive Model, RMB 570,000.

[2] China Postdoctoral Science Foundation, General Project, 2021M703081, Weak supervised fine-grained image recognition for complex scenes, RMB 80,000.

[3] Anhui Natural Science Foundation Committee, Youth Project, 2208085QF190, Research on Key Technologies for Fine Recognition of Complex Scene Images Based on Weak Labeling, RMB 100,000.

HONORS & AWARDS

06/2024	3rd place in the CVPR 2024 Long-Term Video Question Answering Challenge
02/2022	Outstanding Doctoral Dissertation from the Chinese Institute of Electronics
05/2021	President's Special Award from the Chinese Academy of Sciences
04/2021	Outstanding Graduates of China University of Science and Technology
10/2020	National Postgraduate Scholarship