

Xinjie Li

Department of Computer Science and Engineering
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Research Interests

Broad Interests: AI for Science, Computer Vision, Neurosymbolic and Reinforcement Learning,
Program Synthesis, Foundation Models, Embodied AI

Recent Focus: Molecule in AI4S; Diffusion in CV

Education

Pennsylvania State University–University Park 2022–
Ph.D., Computer Science (University Graduate Fellowship Recipient) State College, PA
Advisor: Prof. Abhinav Verma

University of Science and Technology Beijing 2019–2022
M.S., Computer Science (GPA: 3.4/4.0) Beijing, China
Thesis title: Multi-Attribute Prediction for Vehicle Re-Identification under Surveillance Scenario
Advisor: Prof. Xu-Cheng Yin

University of Science and Technology Beijing 2015–2019
B.S., Automation (Honors College) (Ranking: 5/53) (GPA: 3.7/4.0) Beijing, China

Peer-Reviewed Conference Publications

- [1]. Repetitive Action Counting with Motion Feature Learning.
Xinjie Li, Huijuan Xu.
IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2024.
- [2]. MEID: Mixture-of-Experts with Internal Distillation for Long-Tailed Video Recognition.
Xinjie Li, Huijuan Xu.
37th AAAI Conference on Artificial Intelligence (AAAI), 2023. (Oral Presentation)
- [3]. SD-GAN: Semantic Decomposition for Face Image Synthesis with Discrete Attribute.
Kangneng Zhou, Xiaobin Zhu, Daiheng Zhou, Kai Lee, **Xinjie Li**, Xu-Cheng Yin.
30th ACM International Conference on Multimedia (ACM MM), 2022.
- [4]. DANet: Dynamic Attention to Spoof Patterns for Face Anti-Spoofing.
Chun-yu Sun, Song-Lu Chen, **Xinjie Li**, Feng Chen, Xu-Cheng Yin.
26th International Conference on Pattern Recognition (ICPR), 2022.
- [5]. Semantic Bilinear Pooling for Fine-Grained Recognition.
Xinjie Li, Chun Yang, Song-Lu Chen, Chao Zhu, Xu-Cheng Yin.
24th International Conference on Pattern Recognition (ICPR), 2020.

Journals

- [1]. Stereo CenterNet based 3D Object Detection for Autonomous Driving.
Yuguang Shi, Yu Guo, Zhenqiang Mi, **Xinjie Li**.
Neurocomputing, 2022.

Professional Activities

Conference Reviewer/Program Committee Member

- ◇ IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2023, 2024
- ◇ AAAI Conference on Artificial Intelligence (AAAI) 2023, 2024
- ◇ ACM International Conference on Multimedia (ACM MM) 2022, 2023
- ◇ IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) 2023

Research Internships

Snap Research <i>Diffusion and GAN for Human Image Restoration</i> Advisor: Dr. Jian Wang	Aug 2023 - Remote
Xu lab (CMU) <i>Diffusion for Cryo-ET Image Synthesis and Missing-Wedge Correction</i> Advisor: Dr. Xiangrui Zeng, Prof. Min Xu	May 2023 - Remote
Meituan Inc. <i>Vision Transformer and Video Semantic Segmentation</i> Advisor: Xiangxiang Chu	May 2021 - Aug 2021 Beijing, China
Remark AI UK Limited. <i>Retail Product Automatic Checkout</i> Advisor: Dr. Xiaoyun Yang	Feb 2021 - Apr 2021 Remote
USTB and EEasy Tech Joint Lab (USTB). <i>Fine-grained and Long-tailed Image Classification, Vehicle Re-identification</i> Advisor: Prof. Xu-Cheng Yin	Sep 2017 - Jan 2021 Beijing, China

Competitions

- ◇ ICCV 2021 Video Scene Parsing in the Wild Challenge (Top 10)
- ◇ CVPR 2021 FGVC 8 Plant Pathology Challenge (Top 10%)
- ◇ CVPR 2020 FGVC 7 Semi-Supervised Recognition Challenge (Top 15)

Honors & Awards

◇ First Prize of the National Innovation Project	2017.12
◇ Third Prize of the Beijing Electronic Design Competition	2017.09
◇ Third prize of the National English Contest	2017.05
◇ No.8 of the National RoboCup Competition	2017.04
◇ Runner-up of the Smart Car Competition	2016.12
◇ First prize of the Sensor Contest	2016.12
◇ Runner-up of the Engineering Training Competition	2016.11
◇ National Scholarship (Top 1)	2016.11
◇ Outstanding Merit Student (Top 1)	2016.11
◇ People's First-Class Scholarship (Top 3)	2016.06

Skills & Services

Language: Mandarin (Native); English (IELTS: 7.0)

Programming: Python, C/C++, Linux, PyTorch, Caffe, \LaTeX

Community Services:

Teaching Assistant of Face Recognition Course, working with Xiaobo Wang;

Teaching Assistant of 7-day Camp of Baidu Deep Learning Course;

Editor of Zhiyuan Community.

Personal Blog: Zhihu (ID: LeoFerguson)(>700 followers).

Recitation Instructor of CMPSC 131: Programming and Computation I: Fundamentals (203 students).