

Ye Liu

Ph.D. Candidate @ The Hong Kong Polytechnic University

CONTACT INFORMATION	Department of Computing The Hong Kong Polytechnic University Hung Hom, Kowloon, Hong Kong	Email: coco.ye.liu@connect.polyu.hk Google Scholar: bit.ly/2eiaBcsAAAAJ Homepage: yeliu.dev
RESEARCH INTERESTS	<ul style="list-style-type: none">• Foundation Models• Computer Vision (CVPR'22, TNNLS'23, arXiv'24)• Multimedia Systems (ACM MM'20)• Urban Computing (CIKM'23, arXiv'23)	
EDUCATION	The Hong Kong Polytechnic University Ph.D. in Computer Science <i>Advisor: Prof. Chang Wen Chen</i>	Hong Kong SAR Sep. 2021 - Present
	Wuhan University B.S. in Geographical Information Science & B.E. in Computer Science <i>Advisor: Prof. Huifang Li & Prof. Gui-Song Xia</i>	Wuhan, China Sep. 2016 - Jun. 2020
RESEARCH EXPERIENCES	Show Lab, National University of Singapore Visiting Scholar (<i>Advisor: Prof. Mike Z. Shou</i>) Long-form video-language understanding.	Singapore Mar. 2024 - Present
	Visual Computing Group, Harvard University Associate (<i>Advisor: Prof. Hanspeter Pfister</i>) Foundation models for vision and language understanding.	Boston, USA Jun. 2023 - Present
	ARC Lab, Tencent PCG Research Intern (<i>Advisor: Dr. Yang Wu & Dr. Zhongang Qi</i>) High-level video content analytics.	Shenzhen, China Jul. 2021 - Present
	LIESMARS, Wuhan University Research Assistant (<i>Advisor: Prof. Huifang Li</i>) Instance segmentation in remote sensing images.	Wuhan, China Mar. 2020 - Jun. 2021
	SUNY Buffalo & The Chinese University of Hong Kong, Shenzhen Research Intern (<i>Advisor: Prof. Junsong Yuan & Prof. Chang Wen Chen</i>) Zero-shot human-object interaction detection.	Buffalo, USA Jul. 2019 - Dec. 2019
	GNSS Research Center, Wuhan University Research Assistant (<i>Advisor: Prof. Chi Guo & Prof. Weiping Jiang</i>) Hardware-efficient video object tracking.	Wuhan, China Sep. 2018 - Jun. 2019
	The Hamlyn Centre, Imperial College London Summer Research Intern (<i>Advisor: Prof. Guang-Zhong Yang</i>) Voice-controlled visual servoing system.	London, UK Jul. 2018 - Aug. 2018
PUBLICATIONS	Ye Liu , Jixuan He, Wanhua Li, Junsik Kim, Donglai Wei, Hanspeter Pfister, and Chang Wen Chen. "R ² -Tuning: Efficient Image-to-Video Transfer Learning for Video Temporal Grounding". <i>Under Review (arXiv:2404.00801)</i> , 2024.	
	Ye Liu , Huifang Li*, Chao Hu, Shuang Luo, Yan Luo, and Chang Wen Chen. "Learning to Ag-	

gregate Multi-Scale Context for Instance Segmentation in Remote Sensing Images". *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, 2024.

Yan Luo, Haoyi Duan, **Ye Liu***, and Fu-lai Chung. "Timestamps as Prompts for Geography-Aware Location Recommendation". In *Proceedings of the ACM International Conference on Information and Knowledge Management (CIKM)*, 2023.

Yan Luo, **Ye Liu***, Fu-lai Chung, Takahiro Yabe, Yu Liu, and Chang Wen Chen. "End-to-End Personalized Next Location Recommendation via Contrastive User Preference Modeling". *Under Review (arXiv:2303.12507)*, 2023.

Ye Liu, Siyuan Li, Yang Wu*, Chang Wen Chen, Ying Shan, and Xiaohu Qie. "UMT: Unified Multi-modal Transformers for Joint Video Moment Retrieval and Highlight Detection". In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2022.

Ye Liu, Junsong Yuan*, and Chang Wen Chen. "ConsNet: Learning Consistency Graph for Zero-Shot Human-Object Interaction Detection". In *Proceedings of the ACM International Conference on Multimedia (ACM MM)*, 2020.

PATENTS Chang Wen Chen, **Ye Liu**, Ying Shan, Siyuan Li, Yang Wu, Xiaohu Qie. "A Video Recognition Algorithm, System, Storage Medium, and Server". *Invention Patent (CN114581821A)*, 2022.

INVITED TALKS Preparing for Confirmation of Registration, *PolyU Research Student Gathering* Apr. 2023

TEACHING COMP3122: Information Systems Development (TA) Spring 2023
EXPERIENCES COMP1004: Introduction to Artificial Intelligence and Data Analytics (TA) Fall 2022
COMP3334: Computer Systems Security (TA) Spring 2022
COMP1001: Problem Solving Methodology in Information Technology (TA) Fall 2021

HONORS & AWARDS PolyU International Collaborative Research Fellowship 2024
PolyU Student Innovation and Entrepreneurship Scholarship 2022, 2023, 2024
HKSTP Ideation Grant 2023
The Most Appreciated Teaching Assistant (MATA) Award 2022
Special Scholarship for Outstanding Exchange Students, WHU 2017, 2018, 2019
Best Overall Project Award, Imperial College London 2018

SERVICES **Journal Reviewer**
IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
Conference Reviewer
The International Conference on Machine Learning (ICML) 2024
The European Conference on Computer Vision (ECCV) 2024
The Asian Conference on Computer Vision (ACCV) 2024
The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2023, 2024
The International Conference on Learning Representations (ICLR) 2024
Neural Information Processing Systems (NeurIPS) 2023
The IEEE/CVF International Conference on Computer Vision (ICCV) 2023
The IEEE International Conference on Image Processing (ICIP) 2023

SKILLS **Programming:** Python, PyTorch, Git, Slurm, ArcGIS, LaTeX
Languages: English (*fluent*), Mandarin (*native*), Cantonese (*native*)