Chenxin Li

Website Scholar GitHub WeChat
chenxinli@link.cuhk.edu.hk (86)18859272837

RESEARCH INTERESTS

Algorithm: Generative Model, Foundation Model, Neural Rendering, Efficient Training
Interdisciplinary Application: AI4Space, AI4Med, AI4Science

EDUCATION

The Chinese University of Hong Kong (CUHK) Aug. 2023 - Now
Ph.D., Electronic Engineering Advisor: Prof. Yixuan Yuan

Xiamen University (XMU) Sep. 2019 - Jun. 2022
M.S., Information & Communication Engineering Advisor: Prof. Xinghao Ding&Prof. Yue Huang

Xiamen University (XMU) Sep. 2015 - Jun. 2019
B.S., Information & Communication Engineering GPA: 3.72/4.0

SELECTED PUBLICATIONS&MANUSCRIPTS

ACM MM 2024 (Accepted)[1] [page]: Y. Huang*, **C. Li***†, Z. Lin, H. Liu, H. Xu, Y. Liu, Y. Huang, X. Ding, Y. Yuan, "P^{2}SAM: Probabilistically Prompted SAMs Are Efficient Segmentator for Ambiguous Medical Images".

ECCV 2024 (Accepted) [page]: **C. Li**, X. Liu, C. Wang, Y. Liu, W. Yu, J. Shao, Y. Yuan, "GTP-4o: Modality-prompted Heterogeneous Graph Learning for Omni-modal Biomedical Representation".

Preprint 2024 [page]: **C. Li***, X. Liu*, W. Li*, C. Wang*, H. Liu, Y. Yuan, "U-KAN Makes Strong Backbone for Medical Image Segmentation and Generation".

Preprint 2024 [page]: **C. Li***, H. Liu*, Z. Fan, W. Li, Y. Liu, P. Pan, Y. Yuan, "GaussianStego: A Generalizable Stenography Pipeline for Generative 3D Gaussians Splatting".

MICCAI 2024 (Accepted) [page]: **C. Li***, H. Liu*, Y. Liu*, B. Feng, W. Li, X. Li, Z. Chen, J. Shao, Y. Yuan, "Endora: Video Generation Models as Endoscopy Simulators".

MICCAI 2024 (Accepted) [page]: **C. Li**, B. Feng, Y. Liu, H. Liu, C. Wang, W. Yu, Y. Yuan, "EndoSparse: Real-Time Sparse View Synthesis of Endoscopic Scenes using Gaussian Splatting".

MICCAI 2024 (Accepted) [page]: H. Liu*, Y. Liu*, **C. Li***, W. Li, X. Li, Y. Yuan, "LGS: A Light-weight 4D Gaussian Splatting for Efficient Surgical Scene Reconstruction".

Preprint 2024 [page]: Y. Liu*, **C. Li***, C. Yang, Y. Yuan, "EndoGaussian: Real-time Gaussian Splatting for Dynamic Endoscopic Scene Reconstruction".

3DV 2024 [page]: P. Pan, Z. Fan. B. Feng, P. Wang, **C. Li**, Z. Wang, " Cas6D: Learning to Estimate 6DoF Pose from Limited Data: A Few-Shot, Generalizable Approach using RGB Images ", International Conference on 3D Vision.

ICCV 2023 [link]: **C. Li***, B. Feng*, Z. Fan*, P. Wang, Z. Wang, "StegaNeRF: Embedding Invisible Information within Neural Radiance Fields", IEEE International Conference on Computer Vision.

ICASSP 2023 [link]: Y. Liu*, **C. Li***, X. Tu, Y. Huang, X. Ding "Hint-Dynamic Knowledge Distillation", IEEE International Conference on Acoustics, Speech, and Signal Processing.

ECCV 2022 [link]: **C. Li**, M. Lin, Z. Ding, N. Lin, Y. Zhuang, X. Ding, Y. Huang, L. Cao, "Knowledge Condensation Distillation", European Conference on Computer Vision.

ICONIP 2022 [link]: Z. Ding, Q. Dong, H. Xu, **C. Li**, X. Ding, Y. Huang, "Unsupervised Anomaly Segmentation for Brain Lesions Using Dual Semantic-Manifold Reconstruction", International Conference on Neural Information Processing.

MICCAI 2021 [link]: Y. Zhang*, **C. Li***, X. Lin, L. Sun, Y. Zhuang, Y. Huang, X. Ding, Y. Yu, "Generator Versus Segmentor: Pseudo-healthy Synthesis", International Conference on Medical Image Computing and Computer Assisted Intervention.

[1] * My equal contribution † My advising contribution

ICIP 2021 [link]: **C. Li**, Y. Zhang, Z. Liang, X. Ding, Y. Huang, "`Consistent Posterior Distributions under Vessel-Mixing: A Regularization for Cross-Domain Retinal Artery/Vein Classification`", IEEE International Conference on Image Processing.

CIKM 2021 [link]: Z. Liang, Y. Rong, **C. Li**, Y. Zhang, Y. Huang, T. Xu, X. Ding, J. Huang, "`Unsupervised Large-Scale Social Network Alignment via Cross Network Embedding`", Conference on Information and Knowledge Management.

NCA 2021 [link]: **C. Li**, W. Ma, L. Sun, Y. Huang, X. Ding, Y. Huang, G. Wang, Y. Yu, "`Hierarchical Deep Network with Uncertainty-aware Semi-supervised Learning for Vessel Segmentation`", Neural Computing and Applications.

CBM 2021 [link]: **C. Li**, Q. Qi, X. Ding, Y. Huang, D. Liang, Y. Yu, "`Domain Generalization on Medical Imaging Classification using Episodic Training with Task Augmentation`", Computers in Biology and Medicine.

CBM 2021 [link]: L. Sun*, **C. Li***, X. Ding, Y. Huang, G. Wang, Y. Yu, "`Few-shot Medical Image Segmentation using a Global Correlation Network with Discriminative Embedding`", Computers in Biology and Medicine.

SELECTED EXPERIENCE

AIM Group, The Chinese Univerity of Hong Kong (CUHK) Apr. 2023 - July. 2023
Research Assistant at *Creative 2D/3D Vision*, Advisor: Prof. Yixuan Yuan

VITA Group, University of Texas Austin Jul. 2022 - Jan. 2023
Research Assistant at Neural Radiance Field, Advisor: Prof. Atlas Wang

Deepwise Jan. 2021 - Oct. 2021
Research Intern at *Image segmentation*, Advisor: Prof. Yizhou Yu

SmartDSP Lab, Xiamen University (XMU) Sep. 2018 - Aug. 2019
Research Assistant at *Image segmentation*, Advisor: Prof. Xinghao Ding

SELECTED HONORS & AWARDS

- Outstanding Master's Thesis of Fujian Province Jun. 2022
- Outstanding Graduates of Xiamen University Jun. 2022
- Dean's Honor List, Xiamen University May. 2017

SELECTED TALKS

- "`What Makes Strong Backbone for Medical Scene Segmentation, Generation and Simulation?`" at DAMTP, University of Cambridge Jul. 2024
- "`StegaNeRF: Embedding Invisible Information within Neural Radiance Fields`" at AIxMed, Massachusetts General Hospital and Harvard Medical School Jul. 2023

SELECTED SERVICES

Conference Reviewer: ICML'24, ICLR'24, NeurIPS'24/23, CVPR'24/23, ICCV'23, ECCV'24, ACM MM'23, MICCAI'24/23

Journal Reviewer: TIP, DMLR, PR, TNNLS, NCA