E-mail: li.chen.8@stonybrook.edu, Mobile: 631-710-8066 Website: https://superlc1995.github.io/

Research Interests

I am broadly interested in computer vision, machine learning, topological data analysis, and uncertainty estimation, focusing on using uncertainty-driven ideas to deal with computer vision/machine learning problems.

Education

• Stony Brook University,

Department of Biomedical Informatics, USA

Ph.D. Candidate, Jan. 2020 - Now

• Stony Brook University,

Department of Applied Mathematics & Statistics, USA

Master of Science, Sep. 2018 - Jul. 2020

• Jilin University,

School of Mathematics, China

Bachelor of Science, Sep. 2014 - Jul. 2018

Publications

(* indicates equal contribution)

[1] Spatial Diffusion for Cell Layout Generation

Chen Li, Xiaoling Hu, Shahira Abousamra, Meilong Xu, Chao Chen International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI), 2024

- [2] Calibrating Uncertainty for Semi-Supervised Crowd Counting Chen Li, Xiaoling Hu, Shahira Abousamra, Chao Chen International Conference on Computer Vision (ICCV), 2023
- [3] Confidence Estimation Using Unlabeled Data.

Chen Li, Xiaoling Hu, Chao Chen

International Conference on Learning Representations (ICLR), 2023

[4] Spatial Transcriptomic Analysis Reveals Associations between Genes and Cellular Topology in Breast and Prostate Cancers.

Lujain Alsaleh, **Chen Li**, Justin L. Couetil, Ze Ye, Kun Huang, Jie Zhang, Chao Chen, Travis S. Johnson *Cancers*, 2022

Selected Honors and Awards

- Third Class Academic Scholarship, Jilin University, 2016 (20%)
- Second Class Academic Scholarship, Jilin University, 2015 (15%)

Experiences

Stony Brook University, Department of BMI, USA

Sep. 2020 - Present

Research Assistant

Advisor: Prof. Chao Chen

- Uncertainty estimation
- Semi-supervised learning
- Crowd counting
- Diffusion model

United Imaging Intelligence America

Jun. 2020 - Sep. 2020

Research Intern

Advisor: Dr. Chen Xiao

- \bullet Cross-domain conditional generation
- ullet Diffusion model
- Cardiac magnetic resonance imaging

Project: Pseudo-labeling driven cross-domain CMR image generation using conditional diffusion model.

Skills

• Languages: C, Matlab, Python

 \bullet $\mathbf{OS} :$ Linux, Windows

• Tools: Torch, PyTorch, OpenCV, matplotlib