# Haoming Liu

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#### **EDUCATION**

### NYU Shanghai & NYU Tandon

2023 - Present

Doctor of Philosophy in Computer Science, advised by Professor Hongyi Wen.

NYU Shanghai

Bachelor of Science in Computer Science, minor in Mathematics.

2019 - 2023 GPA: 3.94/4.00

## Publications & Preprints

**Liu, Haoming**, Guo, Yuanhe, Wang, Shengjie, and Wen, Hongyi, "Diffusion Cocktail: Fused Generation from Diffusion Models," arXiv preprint arXiv:2312.08873, 2023.

Guo, Yuanhe, **Liu, Haoming**, and Wen, Hongyi, "GEMRec: Towards Generative Model Recommendation," arXiv preprint arXiv:2308.02205 (accepted by WSDM 2024 demo track), 2023.

Liu, Haoming\*, Guo, Li\*, Zhou, Zhongwen, and Zhang, Hanyuan, "Pyramid-Context Guided Feature Fusion for RGB-D Semantic Segmentation," in Proceedings of the 2022 IEEE International Conference on Multimedia and Expo Workshops (ICMEW), 2022.

## SELECTED PROJECTS

Ditail | [Paper] [Code] [Demo] [Website]

2023.10 - 2023.12

A training-free method for fine-grained image manipulation on content and/or style, enabling flexible integration of existing pre-trained Diffusion models and LoRAs.

GEMRec | [Paper] [Code] [Demo] [Video]

2023.06 - 2023.08

A prompt-model interaction dataset for generative model recommendation, consisting of 18K images generated by pairing 200 pre-trained DMs with 90 textual prompts, along with a user interface for preference exploration.

# EXPERIENCE

STEM Lead Course Assistant   NYU Shanghai	2021 - 2023
Courses supported: Machine Learning, Information Visualization, Intro to Computer and Data Science.	
Research Assistant   NYU Shanghai	2020 - 2023
Conduct semantic segmentation and few-shot segmentation research, advised by Professor Li Guo.	
Club President   NYU Shanghai	2020 - 2021
Heat the Coline shake CC/DC formed attribute association	

Host the Splice club, a CS/DS-focused student organization.

#### Honors & Awards

NYU Shanghai Doctoral Fellowship   NYU Shanghai	2023 - Present
Dean's Award in Computer Science, Data Science, and Engineering   NYU Shanghai	2023
NYU Shanghai Excellence Award   NYU Shanghai	2023
Summa Cum Laude   NYU Shanghai	2023
University Honors Scholar   NYU	2023
Research Assistant Fund   NYU Shanghai	2021 - 2023
Dean's List for Academic Year   NYU Shanghai	2019 - 2023
Deans' Undergraduate Research Fund   NYU Shanghai	2020 - 2021

# SKILLS & INTERESTS

Programming Skills: Python, PyTorch, C, Javascript, HTML/CSS, Matlab, Linux, Git, Slurm, Markdown, LATEX.

Language Skills: Native in Mandarin, Working proficiency in English (TOEFL 105, 27 for Speaking).

Hobbies: Chinese Philosophy, Meditation, Guqin, Guitar, Pool, Jogging.