

# Haoming Liu

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## EDUCATION

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<b>NYU Shanghai &amp; NYU Tandon</b>	2023 – Present
<i>Doctor of Philosophy in Computer Science, advised by Professor Hongyi Wen.</i>	<i>GPA: 4.00/4.00</i>
<b>NYU Shanghai</b>	2019 – 2023
<i>Bachelor of Science in Computer Science, minor in Mathematics.</i>	<i>GPA: 3.94/4.00</i>

## PUBLICATIONS & PREPRINTS

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**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

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<b>Ditail</b>   [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.	
<b>GEMRec</b>   [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

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<b>STEM Lead Course Assistant</b>   <i>NYU Shanghai</i>	2021 – 2023
Courses supported: Machine Learning, Information Visualization, Intro to Computer and Data Science.	
<b>Research Assistant</b>   <i>NYU Shanghai</i>	2020 – 2023
Conduct semantic segmentation and few-shot segmentation research, advised by Professor Li Guo.	
<b>Club President</b>   <i>NYU Shanghai</i>	2020 – 2021
Host the Splice club, a CS/DS-focused student organization.	

## HONORS & AWARDS

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<b>NYU Shanghai Doctoral Fellowship</b>   <i>NYU Shanghai</i>	2023 – Present
<b>Dean’s Award in Computer Science, Data Science, and Engineering</b>   <i>NYU Shanghai</i>	2023
<b>NYU Shanghai Excellence Award</b>   <i>NYU Shanghai</i>	2023
<b>Summa Cum Laude</b>   <i>NYU Shanghai</i>	2023
<b>University Honors Scholar</b>   <i>NYU</i>	2023
<b>Research Assistant Fund</b>   <i>NYU Shanghai</i>	2021 – 2023
<b>Dean’s List for Academic Year</b>   <i>NYU Shanghai</i>	2019 – 2023
<b>Deans’ Undergraduate Research Fund</b>   <i>NYU Shanghai</i>	2020 – 2021

## SKILLS & INTERESTS

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**Programming Skills:** Python (PyTorch, Transformers, Datasets, Numpy, Pandas, Matplotlib, Flask, PyMongo, PySpark), Javascript (React.js, D3.js), HTML/CSS, JAVA, C, Matlab, Linux, Git, Slurm, Markdown, L<sup>A</sup>T<sub>E</sub>X.

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

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