Jialuo Li

EDUCATION

College of Computing, Georgia Institute of Technology

Aug. 2025 - Present

Master of Science in Computer Science

Yao Class, IIIS, Tsinghua University

Sept. 2021 - July. 2025

Bachelor of Engineering in Computer Science and Technology. GPA 3.84/4.00

Research Experiences

Research on design of profile systems for customer service with LLMs

Sept. 2023 - May. 2024

 $Student\ Research$

Beijing, China

- Integrate LLMs into customer service systems, enabling these models to effectively access, interpret, and interact with user information in existing databases and utilize guiding documents to handle common inquiries.
- Develop a modular architecture with a classifier-executor-verifier system: the classifier directs requests, the executor handles tasks or responses, and the verifier ensures accuracy and safety through feedback.

Research on physics reasoning capability in text-to-image synthesis

Feb. 2024 – Nov. 2024

Research intern, advised by Saining Xie at NYU

NY, NY, USA

- Investigate and detect physics anomalies in current state-of-the-art text-to-image (T2I) models by identifying inconsistencies or deviations from physical laws and principles within the generated images.
- Systematically gather diverse data by developing an expert-annotated adversarial dataset. Leverage it to develop post-training algorithms using flow matching and supervised fine-tuning for domain adaptation.

Research on query-adaptive frame selection for video understanding

Sept. 2024 – May. 2025

Research intern, Mentored by Bin Li at MSRA

Beijing, China

- Propose a novel frame selection paradigm that tailors frame sampling strategies to different query types, improving efficiency and accuracy in long-form video understanding tasks.
- Develop a two-stage framework: a divider that segments videos based on query requirements, and a grounding module that selects representative frames for downstream models.
- Achieve state-of-the-art performance on multiple long-form video benchmarks, demonstrating significant gains in both reasoning accuracy and computational efficiency.

Publications and Manuscripts

(* stands for equal contribution.)

- [1] (Under Review) Jialuo Li, Bin Li, Jiahao Li, Yan Lu. "DIvide, then Ground: Tailoring Frame Selection to Query Types for Long-Form Video Understanding." [PDF]
- [2] (CVPR 2025) Jialuo Li, Wenhao Chai, Xingyu Fu, Haiyang Xu, Saining Xie. "Science-T2I: Addressing Scientific Illusions in Image Synthesis." [PDF]
- [3] (COLM 2024) Jingzhe Shi, Jialuo Li, Qinwei Ma, Zaiwen Yang, Huan Ma, Lei Li. "CHOPS: Chat with Customer Profile Systems for Customer Service with LLMs." [PDF]

AWARDS AND SCHOLARSHIPS

Scholarships

Social Worker Merit Scholarship of Tsinghua

Oct. 2022

Social Worker Merit Scholarship of Tsinghua

Oct. 2023

Second-Class Freshmen Scholarship of Tsinghua

Nov. 2021

Competitive Physics in High School

1st Prize in National High School Physics Olympics Competition (10th Place Nationwide)

Nov. 2020

National Team member of China for Asian Physics Olympiad (APhO)

Feb. 2021 - May. 2021

Programming languages: Python, Pytorch, C++, Bash, Matlab

Leadership: Class monitor of Yao Class from 2022 to 2023; president of the IIIS Student Union Organization Group

from 2022 to 2024; CPHO-S co-founder, former tech group leader, council member.

Miscellaneous: Ball Sports Enthusiasts – basketball, soccer, pingpong, badminton.