Brandon (Yifan) Yang

brandonyifanyang.com

EDUCATION

University of Virginia

Bachelor of Science in Computer Science; GPA: 3.91

Charlottesville, VA

Aug. 2021 - May. 2025

Email: jqm9ba@virginia.edu

RESEARCH EXPERIENCE

Learning and Interactive Robotics, University of Virginia

Charlottesville, VA

Aug 2024 - Present

• Ongoing Senior Capstone: Vision-Language-Action model for robotic manipulation.

University of Maryland

Advisor: Prof. Yen-Ling Kuo

College Park, MD

Advisor: Prof. Jia-Bin Huang

May 2024 - Present

• Injecting semantically aware and consistent embeddings into 3D Gaussian Splatting scenes.

Collaborative Robotics Lab, University of Virginia

Charlottesville, VA

 $Advisor:\ Prof.\ Tariq\ Iqbal$

May 2022 - May 2024

- Grounded Location for Object Manipulation (GLOMA)
 - * Zero-shot image-editing model grounded by language instruction for object relocation and manipulation tasks.
 - * Developed bounding box-guided object manipulation using Llama 2 backbone for goal location prediction, and pre-trained diffusion model for image generation.
- o Centralized multi-agent RL for Collaborative Robots
 - * Developed long-horizon offline centralized MARL for bolt screwing tasks.
 - * Deployed and tested custom simulated environments in IsaacGym for training and evaluation.

EXPERIENCE

Teaching Assistant

Machine Learning w/ Prof. Rich Nguyen

Aug 2024 - Present

Teaching Assistant

Theory of Computation w/ Prof. Mark Floryan

Jan 2024 - May 2024

Lab Lead Teaching Assistant

Computer Systems Organization w/ Prof. John Hott

Jan 2023 - May 2023

 $\circ~$ Led weekly lab sections with short lectures and hands-on activities for 70+ students.

Projects

- QuantSoftware Toolkit: Open source python library for financial data analysis and machine learning for finance.
- Github Visualization: Data Visualization of Git Log data using D3 to analyze project trends over time.
- Recommendation System: Music and Movie recommender systems using collaborative filtering on public datasets.

PROGRAMMING SKILLS

• Languages: Scala, Python, Javascript, C++, SQL, Java

Technologies: AWS, Play, React, Kafka, GCE