# Ziyang Wang

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#### EDUCATION

# The University of North Carolina at Chapel Hill

Chapel Hill, NC

Ph.D. student in Computer Science department

Sept 2022 - May 2027 (Expected)

• Advisor:Prof. Mohit Bansal

• Research Interest: multimodal learning, video-language understanding

### University of Electronic Science and Technology of China

Chengdu, China

Bachelor of Software Engineering

Sept 2018 - July 2022

• Graduate from Elite Program

• GPA: 3.92/4

# Research Interest

# Multimodal learning, vision-language understanding

• In general, I am interested in the fundamental challenges in multimodal machine learning. Particularly, I am enthusiastic about video-language understanding. Recently, I have been working on multiple topics on video-language alignment, video LLM, and neuro-symbolic methods to accomplish complex and explainable video understanding.

#### Research Experience

#### Research Assistant

September 2022 – present

UNC Chapel Hill

Chapel Hill, NC

- Advised by Prof. Mohit Bansal, also work closely with Prof. Gedas Bertasius
- Have a broad interest in multi-modal learning, video-language understanding

#### Applied Scientist Intern

May 2023 – Oct 2023

Amazon Alexa AI

Seattle, WA

• Work with Heba Elfardy, Kevin Small, Markus Dreyer on multimodal retrieval

## Research Intern

October 2021 – May 2022

Tsinghua University

Beijing, China

• Work with Prof. Jingjing Liu on multimodality

#### Research Assistant

January 2021 – September 2021

Chengdu, China

• Worked with Prof. Jingjing Li on transfer learning

#### Publication

UESTC

- 1. Ziyang Wang, Heba Elfardy, Markus Dreyer, Kevin Small, Mohit Bansal. Unified Embeddings for Multimodal Retrieval via Frozen LLMs. **EACL2024** Findings.
- 2. Ce Zhang\*, Taixi Lu\*, Md Mohaiminul Islam, **Ziyang Wang**, Shoubin Yu, Mohit Bansal, Gedas Bertasius. A Simple LLM Framework for Long-Range Video Question-Answering. Arxiv preprint. Link
- 3. Ziyang Wang, Yi-Lin Sung, Feng Cheng, Gedas Bertasius, Mohit Bansal. Unified Coarse-to-Fine Alignment for Video-Text Retrieval. In Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV 2023) Link
- 4. Ziyang Wang, Yunhao Gou, Jingjing Li, Lei Zhu, Heng Tao Shen. Language-Augmented Pixel Embedding for Generalized Zero-shot Learning. IEEE Transactions on Circuits and Systems for Video Technology (TCSVT 2022) Link
- 5. Ziyang Wang\*, Yunhao Gou\*, Jingjing Li, Yu Zhang, and Yang Yang. Region Semantically Aligned Network for Zero-Shot Learning. In Proceedings of the 30th ACM International Conference on Information and Knowledge Management (CIKM 2021 oral) Link

#### SERVICE

- 1. Reviewer: ACL Rolling Review (ARR), CIKM, ACM Multimedia
- 2. Program Committee: T4V @ CVPR 2023