# **BOSHEN XU**

website: xuboshen.github.io (+86) 13881861005 xuboshen.uestc@gmail.com

#### **EDUCATION**

Renmin University of China

Ph.D in Computer Science

University of Electronic Science and Technology of China

B.S in School of Computer Science and Engineering

GPA: 3.97/4.00(90.41/100), ranked 2/65

#### RESEARCH INTERESTS

Relation understanding, video understanding, 3D deep learning and embodied AI.

#### **PROJECTS**

#### **Human-Object Relation Understanding**

Nov. 2022- Jul. 2023

Sep. 2023 - now

Advisor: Qin Jin Sep. 2019 - Jun. 2023

Advisor: Qin Jin

- Egocentric Hand-Object Interaction. The egocentric data is hard and expensive to fetch. I propose a visual prompt-based method to effectively pre-train model with third-person videos to achieve viewpoint adaptation and enhance viewpoint generalization to Ego-HOI recognition, which is accepted by ACM MM 2023 (1st author).
- Human-Object Interaction Detection The HOI task has long been plagued by the lack of data and supervision due to the large number of possible combinations of verbs and objects in real life. Models trained on limited data can only predict HOIs within a set of fixed categories. We therefore propose an open-category HOI pre-training model with specially designed proxy tasks that can well generalize to novel interaction categories. This work is published in CVPR 2023 (2st author)

#### **PUBLICATIONS**

- 1. **Boshen Xu**, Sipeng Zheng, and Qin Jin. POV: Prompt-Oriented View-agnostic Learning for Egocentric Hand-Object Interaction in the Multi-view World. In ACM MM, 2023
- 2. Sipeng Zheng, **Boshen Xu**, and Qin Jin. Open-category human-object interaction pre-training via language modeling framework. In CVPR, 2023

## **SERVICE**

• Conference Reviewer: ACM MM 2023.

### AWARDS AND SCHOLARSHIPS

Provincial Outstanding Graduate. 2023
National Second Prize in China Undergraduate Mathematical Contest in Modeling. 2021
National Scholarship for undergraduates. 2020