Tsinghua Science and Technology Park, Haidian District, Beijing

Mobile: (+86)17788066762

Email: xinyuliu0602@gmail.com

CET6:554

#### **EDUCATION**

Xidian University
 Master's degree of Computer Science and Technology
 Xi'an, Shaanxi, China Sept. 2020 – Jun. 2022
 Xidian University
 Bachelor of Communication Engineering
 Xi'an, Shaanxi, China Sep. 2016 – Jun. 2020

#### WORK EXPERIENCE

### Institute for AI Industry Research (AIR), Tsinghua University

Beijing, China

Research Assistant (Supervisor: Assistant Prof. Hao Zhao)

Mar. 2022 - Now

- $\circ \quad \text{Propose an unified architecture for shape-aware zero-shot semantic segmentation} (\text{SAZS})$
- Investigate the caption generation and propose an action-aware driving caption transformer architecture(ADAPT)

# Intelligent Perception and Image Understanding Lab(IPIU), Xidian University \*Research Assistant (Supervisor: IEEE Fellow Prof. Licheng Jiao)

Xi' an, China Jan. 2020 - Now

- o Investigate End-to-End video question answering and won the 1st place of related competition
- o Investigate visual question answering and won the 2nd place of related competition

#### Publications

- Delving into Shape-aware Zero-shot Semantic Segmentation
   Xinyu Liu, Beiwen Tian, Zhen Wang, Rui Wang, Kehua Sheng, Bo Zhang, Hao Zhao, Guyue Zhou IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR 2023)
- ADAPT: Action-aware Driving Caption Transformer
  Bu Jin, **Xinyu Liu**, Yupeng Zheng, Pengfei Li, Hao Zhao, Tong Zhang, Yuhang Zheng, Guyue Zhou, Jingjing Liu
  IEEE International Conference on Robotics and Automation (ICRA 2023)

### Competitions Workshop

# ICCV 2021: Multi-Modal Video Reasoning and Analyzing Competition

Task: Track-1 & video question answering

Jun. 2022 - Aug. 2022

 $\circ~$  Won the 1st place. (ICCV2021)

# CVPR 2021: FloodNet Challenge @ EARTHVISION 2021-VQA

Task: Track 2 & remote sensing image question answering

Jun. 2022 - Sep. 2022

• Won the 2nd place(CVPR2021)

## Honors and Awards

#### Awards

- $\circ~$  Social scholarship sponsored by CETC Leis Info System Co., Ltd. (top 1%)
- The 2021 National Scholarship for Graduate Students.
- o The championship in the MMVRAC Track: Video Question Answer competition of the ICCV 2021.
- The second place in the VQA competition of the CVPR 2021 FloodNet Challenge.
- The M Award (First Prize) in the American Mathematical Contest in Modeling for College Students.