Tsinghua Science and Technology Park, Haidian District, Beijing

Email: xinyuliu0602@gmail.comMobile: (+86)17788066762

CET6:554

EDUCATION

Xidian University

Master's degree of Computer Science and Technology

Xi'an, Shaanxi, China
Sept. 2020 – Jun. 2022

Xidian University

Xi'an, Shaanxi, China

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

- 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 Zhouu
   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

 $\circ$  Won the 2nd place(CVPR2021)

## Honours and Awards

### Awards

- o Social scholarship sponsored by CETC Leis Info System Co., Ltd. (top 1%)
- The 2021 National Scholarship for Graduate Studeents.
- 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.