Zun Wang

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Education

The Australian National University, Canberra, Australia   **Jul 2020 – Jul 2023**
Master of Machine Learning and Computer Vision
Graduated with Postgraduate Medal for Academic Excellence (Top 1 out of the college)

University of Science and Technology of China, Hefei, China   **Sep 2015 – Jun 2019**
Bachelor of Mathematics and Applied Mathematics
Specialization in Probability and Statistics

Research Experience

Shanghai AI Laboratory, GeneralVideo Group, Shanghai, China   **Mar 2022 – present**
Research Intern – Led by Dr. Yi Wang and Prof. Yu Qiao
- Topics: Video Understanding, Vision-and-Language Navigation.
- Improves SoTA performance on the R2R-VLN benchmark from 69% to 80% by introducing an effective data-generation paradigm (accepted by ICCV 2023).
- Achieves new SoTA performance on the VLN-CE benchmark by enhancing navigation agent with history videos.
- Won both channels of the REVERIE Challenge in CSIG 2022 among 50+ international teams.

Shanghai AI Laboratory & Sensetime, AGI Group, Shanghai, China   **Dec 2021 – Mar 2022**
Research Intern – Led by Dr. Jing Shao
- Topics: Embodied AI.
- Won the RxR-Habitat Competition in Embodid AI Workshop @ CVPR 2022. We improve SoTA performance from 37% to 55%.

The Australian National University, Canberra, Australia   **Mar 2021 – Dec 2021**
Research Student – Supervised by Prof. Stephen Gould
- Topics: Vision-and-Language Navigation.
- Projects on discrete-to-continuous Vision-and-Language Navigation (accepted by CVPR 2022).

Selected Publications

1. Scaling Data Generation in Vision-and-Language Navigation
   Zun Wang*, Jialu Li*, Yicong Hong*, Yi Wang, Qi Wu, Mohit Bansal, Stephen Gould, Hao Tan and Yu Qiao
   ICCV 2023
2. Bridging the Gap Between Learning in Discrete and Continuous Environments for Vision-and-Language Navigation
   Yicong Hong*, **Zun Wang***, Qi Wu and Stephen Gould
   CVPR 2022

Techical Reports

1. Techical Report for REVERIE Challenge (CSIG 2022)
   Zun Wang, Yi Wang, Yinan He and Yu Qiao
   CSIG 2022
2. 1st Place Solutions for RxR-Habitat Vision-and-Language Navigation Competition (CVPR 2022)
   Dong An*, **Zun Wang***, Yangguang Li, Yi Wang, Yicong Hong, Yan Huang, Liang Wang and Jing Shao
   arXiv 2022

Contests

CSIG 2022, REVERIE Challenge channel 1 & channel 2, **1st places, 14800 USD Bonus**   **Aug 2022**
Zun Wang, Yi Wang, Yinan He, Yu Qiao

CVPR 2022 Embodied AI Workship, RxR-Habitat Competition, **1st place**   **Jun 2022**
Dong An*, **Zun Wang***, Yangguang Li, Yi Wang, Yicong Hong, Yan Huang, Liang Wang, Jing Shao

Academic Activities

- Winner invited talk at Competition Forum @ CSIG2022
- Winner invited talk at Embodied AI Workshop @ CVPR2022
- Conference Reviewer: AAAI2023, CVPR2023

Awards

Postgraduate Medal for Academic Excellence, ANU   **Jul 2023**
Top 1 student out of the whole postgraduate students from the College of Engineering, Computing & Cybernetics

Chancellor's Letter of Commendation, ANU   **Nov 2022**
Awarded to full-grade students over the past year