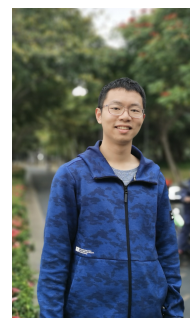


Kewei Lian

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🌐 <https://kevin-lkw.github.io> 🌐 kewei Lian



Education

2021 – now 📖 **Undergraduate, Peking University**
School of Electronics Engineering and Computer Science.

Research Publications

Arxiv Preprints

- 1 S. Cai, Z. Wang, **Kewei Lian**, *et al.*, “Rocket-1: Mastering open-world interaction with visual-temporal context prompting,” *arXiv preprint arXiv: 2410.17856*, 2024.
- 2 G. Zhao*, **Kewei Lian***, H. Lin, *et al.*, “Optimizing latent goal by learning from trajectory preference,” *arXiv preprint arXiv: 2412.02125*, 2024.

Skills

- Languages 📖 Strong reading, writing and speaking competencies for **English** and **Mandarin Chinese**.
- Coding 📖 Python, C/C++, \LaTeX , ...
- Mathematics 📖 Mathematical Analysis, Linear Algebra, Probability Theory.
- Misc. 📖 Algorithm, Data structure, research experience in CV and NLP.

Miscellaneous Experience

Selected Awards and Achievements

- 2023 📖 **Peking University Second Prize Scholarship**, Peking University
- 📖 **Merit Student**, Peking University.
- 2022 📖 **Xiaomi Scholarship**, Peking University.
- 📖 **Award for Academic Excellence**, Peking University.
- 📖 **First Prize**, The Chinese Mathematics Competitions.
- 📖 **Second Prize**, Group Programming Ladder Tournament, China Collegiate Computing Contest.
- 2019 📖 **Fist Prize**, National Olympiad in Informatics in Provinces, NOIP.
- 📖 **Bronze Medal**, 13th Asia-Pacific Informatics Olympiad, APIO.
- 📖 **Bronze Medal**, China Team Selection, CTS.
- 2018 📖 **Fist Prize**, National Olympiad in Informatics in Provinces, NOIP.

Research Interest

Interests **■** My research interests lie in the field of building generally capable agents in open-world environments, such as Minecraft. I also have broad interests in Computer Vision (CV) and Natural Language Processing (NLP), with a particular focus on generative models such as transformers and diffusion models.

Projects

2024 **■** **Path-Finding Ability of Open World Agent in Minecraft.**

2023 **■** **Finetune SAM model on medical datasets.**

We finetuned Segment Anything Model on CT-scan datasets BTCV, and added a Convolutional Neural Network(AlexNet) to classify different organs.

■ **Length generalization on synthetic reasoning tasks.** We use a GAN-like method to finetune the positional encoding of Transformer, aiming to achieve better performance on reasoning tasks.