

PROFILE

- **Research Interests:** RL, Multi-agent Reinforcement Learning, Safe Reinforcement Learning, Robotics
- **Skills:** Python, C++, Robotics, PyTorch, Mujoco 2.0+, OpenAI Gym, Latex
- **Languages:** English(Fluent), Chinese(Native)

EDUCATION

- **King's College London** London, UK
PhD in Computer Science Oct. 2022 – Present
 - **Project:** Safe, Robust and Moral Multi-agent Reinforcement Learning with Casual Lens
 - **Supervisors:** : Dr Yali Du and Dr Sanjay Modgil
 - **Awards:** K-CSC Scholarship Holder
- **University College London** London, UK
MSc in Robotics and Computation Sep. 2020 – Sep. 2021
 - **Grade: Distinction (top 15%, 71.29)**
 - **Project:** Self-Modelling Reinforcement Learning Machines
 - **Supervisor:** Prof Jun Wang and Dr Minne Li
 - **Relevant Models:** Introduction to Deep Learning / Reinforcement Learning (Taught by DeepMind) / Multi-agent Artificial Intelligence / Robotic Systems Engineering.
 - **Activity:** RLChina UCL Representative
- **University of Oxford** Oxford, UK
Summer Courses: Planning For Autonomous Robots Jun. 2021 – Aug. 2021
 - **Project:** This course provides a broad introduction to the problems of mission and motion planning for autonomous robots. The taught content covered uninformed and informed graph search, classical planning, planning under uncertainty using MDPs, and sampling-based motion planning.
 - **Supervisor:** Prof. Nick Hawes.
- **Eötvös Loránd University** Budapest, HU
BSc in Computer Science. Sep. 2016 – Jun. 2019
 - **Grade: 4.73/5.0 (top 5%, Outstanding)**
 - **Project:** Campus Information Query System Based on Speech Recognition and Speech Synthesis.
 - **Supervisor:** Prof Márta Turcsányi-Szabó
 - **Awards:** ELTE Hungarian Scholarship Holder; China Scholarship Council (CSC) Scholarship Holder (2016-2019).

RELEVANT WORK EXPERIENCE

- **Huawei Technologies Research & Development (UK) Ltd** London, UK
RL Research Intern Sep 2021 - March 2023
 - **Project:** : EDA: Speedup and Parallelization in C/C++; AI: Constrained Reinforcement Learning Project;
 - **Outcomes:** : Publication on ICML 2022, and one paper under reviewed
 - **Awards:** 2021 MIA Timely Awards
- **China State Information Center** Beijing, CN
Research Intern Dec 2019 - Jun 2020
 - **Project:** : Forecast of local economic trends within traditional machine learning
 - **Responsibility:** Worked as a research assistant at the Administration Center of China E-government Network, using output and tax data to predict local economic trends.

PUBLICATIONS

1. Ziyang Wang, Yali Du, Aivar Sootla, Haitham Bou Ammar, and Jun Wang. Cama: A new framework for safe multi-agent reinforcement learning using constraint augmentation. *Openreview: jK02XX9ZpJkt*, 2022
2. Xidong Feng, Yicheng Luo, Ziyang Wang, Hongrui Tang, Mengyue Yang, Kun Shao, David Mguni, Yali Du, and Jun Wang. Chessgpt: Bridging policy learning and language modeling. *arXiv preprint arXiv:2306.09200*, 2023
3. Aivar Sootla, Alexander I Cowen-Rivers, Taher Jafferjee, Ziyang Wang, David Mguni, Jun Wang, and Haitham Bou-Ammar. Sauté rl: Almost surely safe reinforcement learning using state augmentation. In *International Conference on Machine Learning, 2022*, 2022
4. Shangding Gu, Jakub Grudzien Kuba, Munning Wen, Ruiqing Chen, Ziyang Wang, Zheng Tian, Jun Wang, Alois Knoll, and Yaodong Yang. Multi-agent constrained policy optimisation. *arXiv preprint arXiv:2110.02793*, 2021
5. Yudi Zhang, Yali Du, Biwei Huang, Ziyang Wang, Jun Wang, Meng Fang, and Mykola Pechenizkiy. Grd: A generative approach for interpretable reward redistribution in reinforcement learning. *arXiv preprint arXiv:2305.18427*, 2023
6. David Mguni, Usman Islam, Yaqi Sun, Xiuling Zhang, Joel Jennings, Aivar Sootla, Changmin Yu, Ziyang Wang, Jun Wang, and Yaodong Yang. Desta: A framework for safe reinforcement learning with markov games of intervention. *arXiv preprint arXiv:2110.14468*, 2021