

Zhiqiang He

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EDUCATION

Northeastern University (NEU)

MS in Control Science and Engineering, GPA 3.29/4

Location, Shengyang, China

Sep 2019 - Jun 2022

East China Jiaotong University (ECJTU)

BS in Automation, GPA 3.42/4

Location, Nanchang, China

Sep 2015 - Jun 2019

RESEARCH EXPERIENCE

NEU / Institute of Deep Learning and Advanced Intelligent Decision-Making

Reinforcement Learning Algorithm Development - Team Leader

Sep 2020 - Jun 2021

- Focus on Model-Based Reinforcement Learning and its Application.

Jiangxi Province Advanced Control and Key Optimization Laboratory

Reinforcement Learning Algorithm Application - Team Leader

Sep 2016 - Jun 2019

- Focus on Model-Free Reinforcement Learning and its Application.

WORK EXPERIENCE

Reinforcement Learning Algorithm Intern

Baidu, Beijing, China

(Received Super Special Offer)

June 2021 - October 2021

- Proposed and implemented Expert Data-Assisted Multi-Agent Proximal Policy Optimization (EDA-MAPPO) algorithm, successfully delivering the solution to client production environment.

Reinforcement Learning Algorithms Engineer

InspirAI, Hangzhou, China

(Top-Performing Team)

June 2022 - May 2023

- Developed a general-purpose AI framework for card games, successfully deployed (SDK) across multiple popular titles including Three Kingdoms Kill, Hearthstone, Landlord and GuanDan.
- Achieved 6% win-rate improvement through AI algorithm optimization in the GuanDan project.

PUBLICATIONS LIST

- He Zhiqiang, Qiu W, Zhao W, et al. **Understanding World Models through Multi-Step Pruning Policy via Reinforcement Learning**[J]. Information Sciences, 2024: 121361. ([Paper](#) and [Code](#). JCR Q1, Impact Factor: 8.1)
- He Zhiqiang, ZhiLiu. **Plasticity-Aware Mixture of Experts for Learning Under QoE Shifts in Adaptive Video Streaming** [J]. arXiv preprint arXiv:2504.09906, 2025.
- He Zhiqiang, ZhiLiu. **Understanding and Exploiting Plasticity for Non-stationary Network Resource Adaptation**[J]. arXiv preprint arXiv:2505.01584, 2025.
- Chen P, He Zhiqiang, Chen C, et al. **Control strategy of speed servo systems based on deep reinforcement learning**[J]. Algorithms, 2018, 11(5): 65. ([Paper](#) and [Code](#). Citation: 54)
- Wang J, Zhang L, He Zhiqiang, et al. **Erlang planning network: An iterative model-based reinforcement learning with multi-perspective** [J]. Pattern Recognition, 2022, 128: 108668. ([Paper](#) and [Code](#). JCR Q1, Impact Factor: 8.5)

ADDITIONAL INFO AND AWARDS

- Outstanding Graduate (Top 1%), East China Jiaotong University (2019).
- 10k Followers. Zhihu Blogger.
- Merit Student Award. East China JiaoTong University.
- Third Prize, The 15th "Challenge Cup" Jiangxi Division (2017).
- Honorable Mention. The Mathematical Contest in Modeling (MCM, 2018).
- National Computer Rank Examination Level 4 Certificates (Network Engineer).