Guojiao Lin

Email Address: guojiaolin37@gmail.com | *Home Page:* **guojiaolin.github.io**

Research Interest: Multimodal Large Language Models and Embodied Artificial Intelligence

EDUCATION

Computer Network information Center, Chinese Academy of Sciences   **Sep 2022 - Jun 2025**
- Master of Engineering in Computer Technology (Advisor: Prof. Zhen Meng)
- GPA: 3.67 / 4.0

Shandong University of Science and Technology   **Sep 2018 - Jun 2022**
- Bachelor of Engineering in Software Engineering
- GPA: 88.15 / 100   Comprehensive Score Ranking: 4/122 (Top 5%)

PUBLICATIONS & PATENTS

GUME: Graphs and User Modalities Enhancement for Long-Tail Multimodal Recommendation   **2024**
Guojiao Lin, Zhen Meng, Dongjie Wang, Qingqing Long, Yuanchun Zhou and Meng Xiao
ACM International Conference on Information and Knowledge Management (CIKM)   ***Accepted***
- Proposed GUME to address limited interaction data for long-tail items in recommender systems, outperforming SoTA models on four public datasets with an average improvement of 2.41% in Recall@20 and 3.42% in NDCG@20.
- Designed user modality enhancement strategy and data alignment strategy to improve generalization and reduce noises.
- **Key Contributions**: Independently conducted literature research, idea development, framework construction, most of the experiment conduction, and paper writing, gaining comprehensive experience in the research process.

A Drug-Drug Interaction Prediction Method and System Based on Multimodal Knowledge Graphs   **2024**
Zhen Meng, Guojiao Lin, Zhilong Hu, and Pengfei Wang
Invention Patent   *Substantive Examination Stage*
- Invented a method integrating drug interaction data and multimodal information to build a four-modality knowledge graph.
- Effectively addressed multimodal integration and long-path dependency challenges by leveraging multimodal alignment and graph neural networks to learns drug representations and predicts DDIs.
- **Key Contributions**: Applied insights from recommendation system to drug interaction prediction, independently conducted idea development and patent writing.

Learning the Beneficial, Forgetting the Harmful: High Generalization Reinforcement Learning with in Evolving Representations   **2024**
Jiawei Zheng, Yonghong Song, Guojiao Lin, Hao Lin, Shuaitao Li, and Jiayi Duan
NEUROCOMPUTING   *Under Review*
- Proposed a novel method named LBFH to improve generalization in visual Reinforcement Learning (RL), which outperforms SoTA models on DMControl-GB and Robotic Manipulation tasks.
- Combined Dynamic model-based Dual Feature Alignment (DDFA) and RL with Periodic Resets (RLPR) to address dynamic feature utilization, primacy bias, and error accumulation.
- **Key Contributions**: Designed and implemented the method and experiments for dual feature alignment, and wrote the corresponding sections of the paper.

ACADEMIC PROJECTS

PhyloView: interactive and scalable visualization of phylogenetic trees   **Team Member / 2024**
- Developed PhyloView, a scalable, extensive and interactive online tool for visualizing phylogenetic trees.
- Addressed the growing accumulation of phylogenomic data and the increased need for bioinformatic analysis by constructing evolutionary relationships for different data types.
- Implemented using JavaScript, D3.js, interactive data visualization, and tree layout algorithms.

Skills

- **English:** IELTS 6 points (First Attempt).
- **Programming:** Proficient in Python, C, C++, Java and Lingo.
- **AI and Deep Learning:** Proficient in PyTorch; knowledgeable in deep learning and machine learning.
- **Mathematics:** Advanced Math (98/91), Discrete Math (97), Probability (100).

Awards & Honors

- **First Prize** in the Blue Bridge Cup (Java).   (national level; top 5%)
- **Third Prize** in the China Software Cup.   (national level; top 7%)
- **Second Prize** in the MathorCup.   (national level; top 15%)
- Qingdao's **Top 1,000** Outstanding University Students.
- Received **five first-class** scholarships and two corporate scholarships.   (top 1%)
- Nominated for **Top 10** Outstanding Students at undergraduate school.