## Wenjun WU

wunrry.github.io ShenZhen,China Email: wunrry@gmail.com

Research Interests Theory and application of RL and embodied AI, with particular focus on developing multi-agent systems for physical AI.

Research & Industry Experience

Galaxy Al Research (Link: https://gengzhige.ai/gair.html)

2024-Present

(International cutting-edge AI learning and research community)

Researcher, Worked on National TBM Project with Beijing Jiaotong University

- Cognitive Grounding: Bridged the "data-physics gap" by creating a
  "Semantic Structure Map", a physical AI that grounds the agent's
  abstract reasoning in physical causality.
- Reinforcement Learning: Solved for optimal diagnostic actions by modeling the task as a POMDP, using Expected Information Gain as an reward to drive uncertainty-reducing exploration.
- Agentic System: Translated the Agentic AI framework into a multi-agent system, demonstrating practical viability by outperforming SOTA agents by 51% on a real-world industrial dataset.

**Tencent Inc.** (Stock: 0700.HK Link: https://www.tencent.com)

(the world's largest company in the video game industry and one of the highest grossing multimedia companies) 2023-Present

Data Science Leader, Architecture Group, Social Product Department

- Led a 10-member team to support big data and R&D efficiency, addressed scaling challenges in a 500M+ MAU social product.
- Developed AI systems (including intelligent auditing, backend expert, AI architecture analyzer), which boosting team R&D performance by 20%.
- Built a large-scale data platform and integrated algorithms to resolve insufficient analysis capacity, accelerated diagnosis speed by 30%.

Baidu Inc. (Stock: 9888.HK Link: https://www.baidu.com)

(A multinational technology enterprise, primarily engaged in internet search engines, artificial intelligence)

2022-2023

Data Analyst, Data Middle Office, Global Business Department

 Organized a 5-member cross-functional team to address low ad delivery efficiency(Google/Meta); built a data modeling and analytics platform, boosting ad efficiency by 50%.

 Independently developed ML and DL algorithms to counter declining user engagement; Identified business issues and growth drivers, increasing user lifetime value in IN/JP markets by 60%.

CSCEC Inc. (Stock: 601668.SS Link: https://english.cscec.com)

(One of the world's largest investment and construction group and engineering contractor)

2020-2021

Technical Engineer, Shanghai Business, the Third Bureau

 Designed 3D models and CAD drawings, analyzed progress/cost/quality data and supported a 100-member construction team in production.

## Education

Hebei University of Technology. TianJin, China

2016-2020

Bachelor of Engineering Management

## **Publications**

"MATAgent : A Multi-Agent Collaborative Reasoning Framework for TBM Jam Disaster Prediction and Diagnosis." With Beijing Jiaotong University.

In review

Wenjun. Wu. "Al-Assisted Programming Framework and Code Generation Toolchain Design." Tencent Technical Report on Development Operations, 2025.

Wenjun. Wu. "Comprehensive Training and Fine-Tuning of the Chinese LLaMA3." Tencent Technical Report on Machine Learning, 2024.

Wenjun. Wu. "LangChain Agent Architecture and Deployment for Enterprise Applications." Tencent Technical Report on Machine Learning, 2024.

Wenjun. Wu. "Intelligent Agent System Design Based on Structured Output and Function Calling." Tencent Technical Report on Machine Learning, 2023.

## Skills

- AgentFrame: OpenAl-Agents, Langchain, LangGraph, CAMEL
- AppFrame : Dify, n8n, Coze, Streamlit, Gradio
- LLMFrame: VLLM, SGlang, Ollama, LLaMA-Factory, MS-Swift
- Programming Language: Python, JavaScript, HTML, CSS