Xiaohan Wang

Wuhan,China | u202314628@hust.edu.cn | tel:+86-157-1630-9056

EDUCATION

Huazhong University of Science and Technology, BS in Electronic Engineerning Sept 2023 – June 2027

- **GPA:** 86.27/100
- **Relevant Courses:** Advanced Mathematics, C programming language, Probability Theory, Linear Algebra, Data Structrues and Algorithm, Computer System.
- **Research Interests:** Natural Language Processing,Reinforcement Learning,LLM Reasoning and Planning,Agentic AI.

PUBLICATION

Ruicheng Zhang,**Xiaohan Wang**, Shuhao Zhang. **NeuroMem: A Programmable Memory Framework for Building Personalized LLM Assistants**. In Proceedings of the National Database Conference (**NDBC**'25).

SELECTED PROJECTS

Obstacle-Avoiding Robot Arm Control via Reinforcement Learning Nov 2024

- Designed and built a custom PyBullet simulation environment for a 6-DOF robotic arm to perform obstacle-avoiding object grasping.
- Formulated the task as a sequential decision-making problem and applied a TD3-based reinforcement learning algorithm to optimize the policy.
- Improved learning efficiency through distance-based reward shaping and uncertainty-driven epsilon-greedy exploration strategy.
- Tools: Python, PyTorch, Stable-Baselines3, Gym-style environment wrapping, PyBullet.

RESEARCH EXPERIENCE

SAGE:Streaming-Augmented Generative Execution Mar 2025 - Present

- **System Design:** Led the end-to-end design and implementation of the core Memory component for SAGE, a dataflow-native framework built to support modular and controllable reasoning workflows over Large Language Models.
- **Technical Implementation:** Implemented the memory system as a lightweight vector database featuring native support for text embeddings, multi-index management, metadata filtering, and persistence to disk.
- **Architectural Innovation & Impact:** Architected the memory system as a native, stateful node within the dataflow graph, establishing it as a first-class citizen to provide a reliable core for context-aware computation in complex RAG and Agent workflows.

HONORS & AWARDS

- **996 Class Awards:** Top 10 outstanding students in the entire faculty for academic excellence and overall performance
- **Study Self-Reliance Scholarship:** Achieved excellent grades in the first academic year.

SKILLS

Languages: proficient in Python, familiar with C,git/bash

Technologies: PyTorch, Hugging Face, vLLM, Stable-Baselines3, Docker, VectorDB