

JINXIANG MENG (孟金翔)

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🎓 EDUCATION

University of Chinese Academy of Sciences (UCASNJ)

2024.09 – Present

Master's in Computer Science, Excellent Graduate Joint Program with NJUPT

Trained at the Institute of Automation, Chinese Academy of Sciences. Advisor: Prof. Kang Liu.

GPA: 3.82/4.00; **Rank:** 1/35. **Honor:** Merit Student, University of Chinese Academy of Sciences.

💡 RESEARCH INTERESTS

General Agent • Data Agent • Synthetic Data • Environments Synthetic • Structured Data Reasoning

My research focuses on building data and environment foundations for reliable general-purpose agents, especially data-intensive and general agents in real-world workflows.

- How can we design realistic benchmarks and task taxonomies that reveal agents' capabilities and failure modes in real-world workflows?
- How can we systematically create, filter, and optimize synthetic data and interactive environments for training more capable and generalizable agents?
- How can real agent failures be transformed into scalable data flywheels for data selection, environment generation, quality control, and agent improvement?

My experience spans agent benchmark construction, scalable data synthesis, environment generation, and post-training, with contributions to DAComp, DV-World, SpreadsheetBench-oriented agent training, and general-agent environment synthesis for Seed models.

📁 INTERNSHIP/PROJECT EXPERIENCE

Seed-Application Team, ByteDance

2025.08 - Present

Mentor: Yang Wang, Yuekun Guo.

• Benchmark construction

- **DAComp:** designed and scaled repository-level data-engineering task construction, covering architecture design, multi-stage SQL/DAG pipeline implementation, and requirement-driven pipeline evolution.
- **DV-World:** constructed real-world visualization-agent tasks across spreadsheet manipulation, chart / dashboard generation, diagnostic repair, visual artifact evolution, and interactive intent alignment.

• Data synthesis & Agent training

- Designed and implemented the DAComp-DA data synthesis pipeline for open-ended data-analysis agents, covering task generation, trajectory construction, data filtering, and RFT training; improved Seed-1.8 performance from 24.5% to 49.8%, with the synthesized data mixture incorporated into Seed-2.0.
- Built the SpreadsheetBench synthetic data pipeline and trained Seed-1.8 with RL, improving benchmark performance from 35.5% to 45.0% through spreadsheet-specific task synthesis, executable supervision, and environment-level feedback.

• General-agent environment synthesis

- Developed two scalable environment-synthesis pipelines for general-agent training: a trajectory-driven pipeline that reconstructs executable environments from backflow agent traces, and a scenario-driven pipeline that generates diverse general agent environments from task taxonomies and seed scenarios.
- Built a closed-loop data flywheel connecting real agent failures to training data, including trajectory filtering, bad-case pattern mining, environment reconstruction, targeted SFT data selection, and human-audited quality control; achieved over 85% human-audit pass rate, with the pipeline deployed at Seed scale and the synthesized data mixture incorporated into Seed-2.1.

📖 PUBLICATIONS

(* denotes equal contribution) For full publications, please check [Google Scholar](#)

- [1] **Jinxiang Meng**, Shaoping Huang, Fangyu Lei, Yitong Zhang, Yiming Huang, Zeyao Ma, Shizhu He, Jun Zhao, Kang Liu, [DV-World: Benchmarking Data Visualization Agents in Real-World Scenarios](#). (*ICML 2026*)
- [2] **Jinxiang Meng**, Ruiyang Dong, Kuntao Yang, Jianwen Luo, Jiahui Liu, Fangyu Lei, Shizhu He, Jun Zhao, Kang Liu, [Not All Failures Are Equal: Pattern-Guided Fine-Tuning for Improving LLM Agents](#). (*Under Review*)
- [3] **Jinxiang Meng**, Fangyu Lei, Ruiyang Dong, Enrui Wang, Jianwen Luo, Shizhu He, Jun Zhao, Kang Liu, [SheetForge: Scaling Spreadsheet Agents in Executable Environments](#). (*Under Review*)
- [4] Fangyu Lei*, **Jinxiang Meng***, Yiming Huang, Junjie Zhao, Yitong Zhang, Jianwen Luo, Xin Zou, Ruiyi Yang, Wenbo Shi, Yan Gao, Shizhu He, Zuo Wang, Qian Liu, Yang Wang, Ke Wang, Jun Zhao, Kang Liu, [DAComp: Benchmarking Data Agents across the Full Data Intelligence Lifecycle](#). (*ICLR 2026*)
- [5] Fangyu Lei*, **Jinxiang Meng***, Yiming Huang, Shizhu He, Jun Zhao, Kang Liu, [TaREx: Reinforcement Learning for Code-Driven Table Reasoning](#). (*AAAI 2026 Oral*)
- [6] Fangyu Lei*, **Jinxiang Meng***, Jianwen Luo, XingChang Yang, Kuntao Yang, Yitong Zhang, Shizhu He, Jun Zhao, Kang Liu, [DA-Omni: Scaling Training for Full-Stack Data Agents](#). (*Under Review*)
- [7] Fangyu Lei*, **Jinxiang Meng***, Yiming Huang, Tinghong Chen, Yun Zhang, Shizhu He, Jun Zhao, Kang Liu, [Reasoning-table: Exploring reinforcement learning for table reasoning](#). (*Under Review*)
- [8] Jianwen Luo*, Yiming Huang*, **Jinxiang Meng**, Fangyu Lei, Shizhu He, Xiao Liu, Shanshan Jiang, Bin Dong, Jun Zhao, Kang Liu, [GATE: Graph-based Adaptive Tool Evolution Across Diverse Tasks](#). (*ACL 2026 Oral*)
- [9] Fangyu Lei, Xingchang Yang, Kuntao Yang, **Jinxiang Meng**, Yitong Zhang, Shizhu He, Jun Zhao, Kang Liu, [VerifierArena: Benchmarking and Analyzing Universal Judges for Unverifiable Agentic Tasks](#). (*Under Review*)
- [10] [Seed2. 0 Model Card: Towards Intelligence Frontier for Real-World Complexity](#). (*Technical Report*)

🔧 TECHNICAL SKILLS

Agent & Evaluation: Benchmark construction, task taxonomy design, LLM-as-a-Judge, rubric design, execution-based evaluation, trajectory analysis

Data & Training: Synthetic data generation, environment synthesis, data filtering, SFT, RL, reward design, post-training data curation

Programming & Tools: Python, SQL, Bash, PyTorch, HuggingFace Transformers, Docker, Linux, Git, LaTeX