



Gao Wu

Algorithm Engineer | Agents / LLM Post-Training

Communist Youth League member

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EDUCATION

 **Zhejiang University | M.Eng., Control Science and Engineering** Sep 2024 - Jun 2027

- College of Control Science and Engineering. Three first/co-first-author papers submitted or publicly available; one publicly available second-author paper; co-author of one additional paper.

 **Northwestern Polytechnical University | B.Eng., Automation** Sep 2020 - Jun 2024

- School of Automation; recommended for graduate admission to Zhejiang University. GPA: 3.73/4.1; ranked 11th of 178 in the major.
- First-Class University Scholarship, Yajun Wu Scholarship, Outstanding Graduate, Outstanding Student, and National Outstanding Student in the Zhixing Program.

INTERNSHIP EXPERIENCE

 **Alibaba, Tongyi Lab | AI R&D Intern** Jun 22, 2026 - Sep 17, 2026

- Objective:** Own the mobile GUI track of training-data generation for Qwen post-training, integrating multiple benchmarks and rollout configurations to produce diverse, automatically evaluated interaction trajectories.
- Platform:** Support AndroidWorld, MobileWorld, MobileGym, iOSWorld, and other benchmarks; integrate team-developed training tasks and evaluators with batch execution, automatic scoring, trajectory collection, and failure recovery.
- Contribution:** Designed and implemented rollouts across models, agents, and action spaces. Integrated native GUI agents and Claude Code/Codex, either constrained to GUI actions through MCP or allowed terminal/ADB tools; adapted benchmark environments and standardized task lifecycle and output protocols.
- Impact:** Enabled multi-configuration trajectory collection across mobile benchmarks. For AndroidWorld, integrated 2,000+ team-authored training tasks with new goals/evaluators while retaining 116 original tasks for validation; leveraged a platform capable of 40,000 concurrent tasks and million-scale daily task throughput.

 **Kuaishou, Main App Technology Division | AI Research Intern** Aug 11, 2025 - Jun 18, 2026

- Objective:** Built an internal intelligent regression-testing platform for mobile regression and reproduction scenarios, applying GUI agents to natural-language test authoring, automated execution, and standardized results.
- Technology:** Combined LLM agents, Android automation, multi-model collaboration, natural-language task understanding, test execution and verification, knowledge reuse, and cross-platform abstractions.
- Contribution:** Connected GUI agent capabilities to production testing, contributing to system design, agent integration, knowledge accumulation, test-scenario abstraction, and result analysis.
- Impact:** Supported enterprise Android regression testing and reduced test-case authoring/maintenance effort. End-to-end success reached 90%; positive/negative-case classification accuracy reached 95% against human-labeled ground truth among wholly or partially executed workflows.

RESEARCH AND PROJECTS

MobileForge: Closed-Loop Self-Evolution for Mobile GUI Agents | Co-first Author Open source

- Motivation:** Co-designed an annotation-free post-training framework for adapting mobile GUI agents to real applications, closing the loop from app exploration and curriculum task mining to trajectory evaluation and policy optimization.
- Contribution:** Co-developed the design and core implementation. Built interaction sampling and evaluation; converted task-level feedback, step-level feedback, and failure hints into step-level GRPO data; optimized policies with VeRL without human expert trajectories.
- Results:** Improved Qwen3-VL-8B AndroidWorld Pass@3 from 55.2% to 67.2%. ForgeOwl-8B reached 77.6% Pass@3 on AndroidWorld; MobileWorld GUI-only task success rose from 37.6% to 41.0%.

STEER: Scalable Task-Conditioned Experience Evolution and Reuse | Project Lead First-author submission

- Motivation:** Led a self-evolving experience-management framework that converts GUI agent interactions into reusable operational knowledge while keeping the executor frozen.
- Contribution:** Led design, implementation, and experiments. Proposed outcome-conditioned knowledge with applicability, completion, and provenance; controlled candidate trials, matched controls, and admission; and designed TaskContract-based retrieval/composition to reject operational conflicts.
- Results:** On 117 MobileWorld tasks, five-pass cumulative success increased from 67.5% without memory to 77.8%, with 70.5% fewer retrieved-context tokens on average than similarity retrieval. Independent OSWorld V2 evolution achieved 16.35% cumulative partial reward.

MemGUI: Mobile GUI Memory Benchmark and Proactive Context Management | Second Author Open source

- Motivation:** Helped build MemGUI-Bench to evaluate short- and long-term memory in mobile GUIs; developed MemGUI-Agent to address context growth and loss of cross-app information in long tasks.

- **Contribution:** Developed proactive context management and the training/evaluation pipeline. Context-as-Action (CONACT) jointly generates GUI actions and context decisions, maintaining a folded action history, persistent key UI facts, and precise recent steps in one forward pass. Helped expand 128 seed tasks, collect and filter teacher trajectories at trajectory and step levels, build MemGUI-3K (2,956 trajectories; 64,430 valid steps), and run Qwen3-VL-8B LoRA SFT, ablations, and generalization studies.
- **Results:** MemGUI-Bench has 128 tasks across 26 apps, 89.8% memory-intensive, with Pass@k and progressive automatic evaluation. MemGUI-Agent-235B achieved 37.5% Pass@1 / 62.5% Pass@3 (+13.3 / +15.6 points); MemGUI-8B-SFT improved Pass@1 from 9.4% to 23.4% and gained 8.5 points on out-of-domain MobileWorld.

Financial Text-to-SQL Training and Inference Optimization | Project Lead

6th Place

- **Motivation:** In a two-day China Merchants Bank Digital Finance Training Camp challenge, trained Qwen3.5-2B to generate financial SQL, with PostgreSQL execution-result matching as the primary metric.
- **Contribution:** Led the team and personally focused on data construction and training. Starting from examples with expected outputs but no reference SQL, generated candidate gold SQL with a stronger model; used read-only PostgreSQL execution and result comparison to verify candidates, then fed failures back for repair. Designed a data flywheel pairing a task generator with the SQL model, and built LoRA SFT and execution-reward GRPO training on Huawei Ascend NPUs.
- **Results:** Built 1,558 verified training episodes. Public validation accuracy rose from 38.05% (baseline) to 73.45% (LoRA SFT) and 75.58% (best GRPO); throughput improved from 0.33 to 2.48 requests/s. Ranked 6th of 18 teams.

PUBLICATIONS AND OPEN SOURCE

- [1] **MobileForge: Annotation-Free Adaptation for Mobile GUI Agents with Hierarchical Feedback-Guided Policy Optimization** Co-first author | Submitted to AAAI 2027 <https://mobile-forge.github.io/>
- [2] **STEER: Scaling Long-Term Memory for Self-Evolving GUI Agents** First author | Submitted to ICLR 2027
- [3] **MemGUI-Agent: An End-to-End Long-Horizon Mobile GUI Agent with Proactive Context Management** Second author | Submitted to ICLR 2027 <https://memgui-agent.github.io/>
- [4] **MemGUI-Bench: Benchmarking Memory of Mobile GUI Agents in Dynamic Environments** Co-author | Accepted to ACM MM 2026 <https://lgy0404.github.io/MemGUI-Bench/>
- [5] **AnchorMTS: Multi-View Signal Representation and Forecast-Anchored Fusion for Long-Term Time-Series Forecasting** First author | Submitted to ICASSP 2027

STUDENT LEADERSHIP

NPU Student Calligraphy and Painting Association | President

Sep 2021 – Jun 2022

- **Service and responsibility:** Served as class secretary of the Communist Youth League and participated in university leadership programs and civic activities; recognized as an Outstanding League Member, a National Outstanding Student in the Zhixing Program, and a Leading Action Pioneer.
- **Leadership:** Managed association operations, delegated responsibilities, and convened three leadership meetings. Organized three university-level events: a pen-calligraphy competition, a calligraphy and painting exhibition, and a Spring Festival handwritten-couplet activity; each drew more than 100 participants.
- **Volunteering:** Organized online tutoring, Aerospace Day school visits, after-school learning support, and pandemic-response programs, completing 176.5 volunteer hours. Led the delivery of 130+ handwritten Spring Festival couplets and 450 greeting cards to children in supported communities, plus 200+ couplets for campus members during the pandemic.
- **Recognition:** Association members won 4 first, 5 second, 14 third, and 10 merit prizes in national calligraphy events. The association was named a “Model 100” National Outstanding Student Association; activities were covered by China Youth Network, Shaanxi Network, and Guangming Online.

COMPETITIONS

14th National Undergraduate Mathematics Competition (Non-Math) | First Prize

Jan 2023

Interdisciplinary Contest in Modeling (ICM) | Meritorious Winner

Mar 2023

SKILLS

- **Programming and tools:** Proficient in Python; familiar with C/C++; Git, LaTeX, PostgreSQL execution verification, Android automation, and Ascend NPU training integration.
- **Model training and RL:** PyTorch and multimodal LLM post-training; LoRA SFT, GRPO, reward design, step-level training data, VeRL, and ms-swift.
- **Agent methods and evaluation:** Multimodal GUI agents, long-horizon memory, proactive context management, task generation, trajectory evaluation, LLM-as-a-Judge, experience retrieval, and knowledge management; experience spanning algorithm design, data loops, and production deployment.
- **AI-assisted development:** Practical experience with Cursor, Codex, and other coding assistants.
- **Languages:** English (CET-6) **Interests:** Badminton and calligraphy.