

RESEARCH INTERESTS

#Agent #Memory #Personalization #NLP Applications

EDUCATION

Peking University

M.S. (Academic) in Computer Science, GPA: 3.60/4.00

Beijing, China
2024–2027 (*Expected*)

Peking University

B.S. in Computer Science, GPA: 3.72/4.00

Beijing, China
2020–2024

PUBLICATIONS

Refereed Publications

1. **Chenming Tang**, Hsiu-Yuan Huang, Weijie Liu, Clive Bai, Saiyong Yang, Yunfang Wu. “Do Not Step Into the Same River Twice: Learning to Reason from Trial and Error”. *ACL 2026 (Oral)*.
2. **Chenming Tang***, Yutong Yang*, Kexue Wang, Yunfang Wu. “Aligning Language Models with Real-time Knowledge Editing”. *ACL 2026*.
3. Hsiu-Yuan Huang*, **Chenming Tang***, Weijie Liu, Clive Bai, Saiyong Yang, Yunfang Wu. “Think Outside the Policy: In-Context Steered Policy Optimization”. *ACL 2026 (Findings)*.
4. **Chenming Tang***, Zhixiang Wang*, Hao Sun, Yunfang Wu. “Large Language Models Might Not Care What You Are Saying: Prompt Format Beats Descriptions”. *EMNLP 2025 (Findings)*.
5. **Chenming Tang**, Zhixiang Wang, Yunfang Wu. “SCOI: Syntax-augmented Coverage-based In-context Example Selection for Machine Translation”. *EMNLP 2024*.
6. **Chenming Tang**, Fanyi Qu, Yunfang Wu. “Ungrammatical-syntax-based In-context Example Selection for Grammatical Error Correction”. *NAACL 2024*.
7. **Chenming Tang**, Xiuyu Wu, Yunfang Wu. “Are Pre-trained Language Models Useful for Model Ensemble in Chinese Grammatical Error Correction?”. *ACL 2023 (Short Paper)*.

Preprints

1. **Chenming Tang**, Hsiu-Yuan Huang, Weijie Liu, Junqiang Zheng, Saiyong Yang, Yunfang Wu. “Democratizing Tool Learning with Environments Fully Simulated by a Free 8B Language Model”. *arXiv preprint arXiv:2604.17739*.
2. Kun Liang, **Chenming Tang**, Clive Bai, Weijie Liu, Saiyong Yang, Yunfang Wu. “ADWIN: Adaptive Windows for Horizon-Aware On-Policy Distillation”. *arXiv preprint arXiv:2605.28396*.
3. Hsiu-Yuan Huang, Weijie Liu, **Chenming Tang**, Sanwoo Lee, Kai Yang, Yangkun Chen, Saiyong Yang, Yunfang Wu. “RLVR Datasets and Where to Find Them: Tracing Data Lineage for Better Training Data”. *arXiv preprint arXiv:2605.26971*.
4. Kun Liang, Clive Bai, Xin Xu, **Chenming Tang**, Sanwoo Lee, Weijie Liu, Saiyong Yang, Yunfang Wu. “ORBIT: On-policy Exploration-Exploitation for Controllable Multi-Budget Reasoning”. *arXiv preprint arXiv:2601.08310*.
5. Hao Sun, **Chenming Tang**, Gengyang Li, Yunfang Wu. “Lost in the Passage: Passage-level In-context Learning Does Not Necessarily Need a ‘Passage’”. *arXiv preprint arXiv:2502.10634*.
6. Fanyi Qu, **Chenming Tang**, Yunfang Wu. “Evaluating the Capability of Large-scale Language Models on Chinese Grammatical Error Correction Task”. *arXiv preprint arXiv:2307.03972*.

RESEARCH EXPERIENCE

University of Illinois Urbana-Champaign

2026–Present

Advisor: Prof. Jiawei Han

Remote

- **Agent Memory:** Proposed a self-evolving agent memory system inspired by relational database.

Tencent & Peking University

2025–2026

Advisor: Dr. Weijie Liu & Assoc. Prof. Yunfang Wu

Beijing, China

- **Agentic Reinforcement Learning:** Democratized RL of tool-calling agents by adaptive environments fully simulated by open-source LMs, not requiring any annotated data, synthesized environments, or proprietary LMs.
- **Reasoning-oriented Reinforcement Fine-tuning:** Designed LTE, a mistake-hinting mechanism that helps the policy model solve more difficult problems during rollouts, significantly boosting the reasoning performance of post-trained models (ACL 2026 Oral).

Peking University

2022–2025

Advisor: Assoc. Prof. Yunfang Wu

Beijing, China

- **Knowledge Editing:** Led the development of CRAFT, a dynamic dataset for real-time and real-world knowledge editing, and proposed KEDAS, a novel self-adaptive paradigm of aligning LMs with real-time and real-world knowledge editing that significantly outperforms existing approaches (ACL 2026).
- **Prompting and In-context Learning:** Improved LMs' GEC performance with in-context demonstrations selected based on ungrammatical syntactic similarity (NAACL 2024), enhanced LMs on machine translation by in-context examples with a high coverage in both syntax and words (EMNLP 2024), and demonstrated a proper prompt format without well-designed descriptions is effective enough to achieve promising performance on many tasks (EMNLP 2025 Findings).
- **Grammatical Error Correction:** Highlighted that LM perplexity does not necessary correlate with grammatical correctness (ACL 2023 Short Paper).

AWARDS

- **Outstanding Graduate**, Peking University 2024
- **Exceptional Award for Academic Innovation**, Peking University 2023
- **Merit Student**, Peking University 2023
- **First prize**, NLPCC 2023 Shared Task 1 (Chinese Grammatical Error Correction) 2023
- **Second place**, CCL 2022 Shared Task 4 (Multi-reference Multi-source Chinese Learner Text Correction) 2022

TEACHING

Teaching Assistant | Introduction to Computing (C)

Spring 2025

Peking University | Instructor: Prof. Zhifang Sui & Assoc. Prof. Yunfang Wu

Beijing, China

STANDARDIZED TESTS

- **TOEFL iBT:** 111 (R:30, L:28, S:23, W:30) Dec 2025
- **GRE General Test:** 336 (V:166, Q:170, AWA:3.5) Jul 2025