Yingming Zhou

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EDUCATION

Capital Normal University

2021 - Present

GPA: 92.1/100, Rank: 1/20

Bachelor of Information Management and Information Science,

Publications

(* stands for equal contribution)

Manuscripts

[1] Think-on-Process: Dynamic Process Generation for Collaborative Development of Multi-Agent System.

Leilei Lin*, Yingming Zhou*, Wenlong Chen and Chen Qian.

(AAAI-2025) In submission. [PDF]

[2] MAO: A Framework for Process Model Generation with Multi-Agent Orchestration.

Leilei Lin, Yumeng Jin, Yingming Zhou, Wenlong Chen and Chen Qian.

(AAAI-2025) In submission. [PDF]

Conference Publications

[3] Individual Behavior Clustering with Sensors Using Graph Convolutional Networks.

Xingchi Peng, Yunuo Cao, Leilei Lin, Yingming Zhou and Wenlong Chen.

IEEE Wireless Communications and Networking Conference, 2024. [PDF]

RESEARCH EXPERIENCES

MAO: Multi-Agent Collaboration Orchestration for Process Model Generation

Apr 2024 - June 2024

Advisors: Leilei Lin & Chen Qian

- Proposed a novel framework that allows multi-agent to collaborate to automatically generate process models from textual process requirements without human involvement.
- Used multi-round interaction mechanisms and integration of external tools to alleviate hallucination phenomena.

ToP: Dynamic Instance Generation Guides Multi-Agent Software Development

Nov 2023 - Jan 2024

Advisors: Leilei Lin & Chen Qian

- Investigated how the Large Language Models(LLMs) dynamically generate instances to guide software development, and divised the ToP framework, which generate instances according to different user requirements, and then use multi-agent to develop software.
- Applied process mining algorithm to extract software development process from successful instances, which used to enhance the dynamic instance generation capability of large language models.

Individual Behavior Clustering Using Graph Convolutional Networks

Aug 2023 - Oct 2023

Advisor: Leilei Lin

• Aimed to use graph convolutional networks clustering different behavior patterns and visualize them on a calendar, which allows users to easily and intuitively spot anomalies.

ChatDev: Communicative Agents for Software Development

Sep 2023 - Nov 2023 Main Contributor

- ChatDev is a virtual software company that uses a variety of intelligent agents to play different roles and implement different needs of users through programming, which has been open sourced on Github and has accumulated over 25k stars. [link]
- Realize the automation of development process and the architecture construction of multi-agent collaboration.

Recommendation of Business Process Models based on Graph Convolutional Networks Mar 2023 - Jul 2023 Main Contributor

• Applied unfolding technology to structure the unstructured BPMN, and used GCN to capture the global characteristics of each two structured BPMN, finally gived recommendations.

AWARDS AND SCHOLARSHIPS

First-class Scholarship, Capital Normal University	2023/2024
Academic Excellent Award, Capital Normal University	2023/2024
Merit student, Capital Normal University	2023/2024
• The third prize of Enterprise Competition Simulation Competition, Chinese Academy Management	2023

Skills

- **Programming Skills:** Python, C++, Java, etc.
- Multi-Agent Framework: ChatDev, AutoGen, Camel, etc.