# Yingming Zhou

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#### **EDUCATION**

# **Capital Normal University**

2021 - Present

Bachelor of Information Management and Information Science, GPA: 92.1/100, Rank: 1/20.

#### **Publications**

(\* stands for equal contribution)

Manuscripts

[1](AAAI-2025) Leilei Lin\* and Yingming Zhou\*. "Think-on-Process: Dynamic Process Generation for Collaborative Development of Multi-Agent System." In submission. [PDF]

[2](AAAI-2025) Leilei Lin, Yumeng Jin and Yingming Zhou. "MAO: A Framework for Process Model Generation with Multi-Agent Orchestration." In submission. [PDF]

Conference Publications

[3](WCNC-2024) Xingchi Peng, Yunuo Cao, Leilei Lin and Yingming Zhou. "Individual Behavior Clustering with Sensors Using Graph Convolutional Networks." 2024 IEEE Wireless Communications and Networking Conference. [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.

## PROJECT EXPERIENCES

# 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.