# Yingchaojie Feng

Visual Analytics and Intelligence Group State Key Lab of CAD&CG Zhejiang University fycj@zju.edu.cn +86 15868802350 yingchaojiefeng.github.io

## **RESEARCH INTERESTS**

Data Visualization, Human-Computer Interaction, Natural Language Processing, Digital Humanity Specifically, I design and develop visual and interactive systems to facilitate user comprehension and utilization of NLP models in downstream tasks, including creative tasks (e.g., text-to-image, painting-to-poetry) and analytical tasks (e.g., natural language-based visual data analysis). Recently, I have also focused on 1) visual explanation and diagnosis of large language models (LLM) and 2) LLM-powered data analysis.

### **EDUCATION**

2020- **Ph.D. Candidate in Computer Technology**, Zhejiang University Advisor: Prof. Wei Chen

2016-2020 B.Eng. in Software Engineering, Zhejiang University of Technology

#### **PUBLICATIONS**

#### Peer-reviewed Conferences and Journal Papers

- Jiaying Lu, Bo Pan, Jieyi Chen, **Yingchaojie Feng**, Jingyuan Hu, Yuchen Peng, and Wei Chen. AgentLens: Visual Analysis for Agent Behaviors in LLM-based Autonomous Systems. IEEE Transactions on Visualization and Computer Graphics, Early Access, 2024.
- Yingchaojie Feng, Xingbo Wang, Kam Kwai Wong, Sijia Wang, Yuhong Lu, Minfeng Zhu, Baicheng Wang, and Wei Chen. PromptMagician: Interactive Prompt Engineering for Text-to-Image Creation. IEEE Transactions on Visualization and Computer Graphics (VIS' 23), 2023.
- Yingchaojie Feng, Xingbo Wang, Bo Pan, Kam Kwai Wong, Yi Ren, Shi Liu, Zihan Yan, Yuxin Ma, Huamin Qu, Wei Chen. XNLI: Explaining and Diagnosing NLI-based Visual Data Analysis. IEEE Transactions on Visualization and Computer Graphics, Early Access, 2023.
- Wei Zhang, Jian-Wei Zhang, Kam Kwai Wong, Yifang Wang, **Yingchaojie Feng**, Luwei Wang, Wei Chen. Computational Approaches for Traditional Chinese Painting: From the 'Six Principles of Painting' Perspective. Journal of Computer Science and Technology. (Accepted)
- Yingchaojie Feng, Jiazhou Chen, Keyu Huang, Jason K. Wong, Hui Ye, Wei Zhang, Rongchen Zhu, Xiaonan Luo, Wei Chen. iPoet: Interactive Painting Poetry Creation with Visual Multimodal Analysis. Journal of Visualization, 25(3):671–685, 2022.
- Yingchaojie Feng, Zihan Zhou, Wei Zhang, Siwei Tan, Ruimin Shao, Jiazhou Chen, Wei Chen. WPFY: a Visual Interactive Creation System for Chinese Classical Poetry. Journal of Computer-Aided Design and Computer Graphics, 33(09):1318-1325. 2021. (in Chinese)
- Jiazhou Chen, Keyu Huang, **Yingchaojie Feng**, Wei Zhang, Siwei Tan, Wei Chen. Automatic Poetry Generation Based on Ancient Chinese Paintings. Journal of Computer-Aided Design and Computer Graphics, 33(07):1038-1044. 2021. (in Chinese)
- Haiyang Zhu, Minfeng Zhu, **Yingchaojie Feng**, Deng Cai, Yuanzhe Hu, Shilong Wu, Xiangyang Wu, Wei Chen. Visualizing Large-Scale High-Dimensional Data via Hierarchical Embedding of KNN Graphs. Visual Informatics 5 (2), 51-59, 2021.

Yanyan Wang, Zhanning Bai, Zhifeng Lin, Xiaoqing Dong, **Yingchaojie Feng**, Jiacheng Pan, Wei Chen. G6: a Web-Based Library for Graph Visualization. Visual Informatics 5 (4), 49-55, 2021.

## **Preprints and Manuscripts**

- Yingchaojie Feng, Zhizhang Chen, Zhining Kang, Sijia Wang, Minfeng Zhu, Wei Zhang, and Wei Chen. JailbreakLens: Visual Analysis of Jailbreak Attacks Against Large Language Models. Submitted to IEEE VIS 2024. Under Review.
- Luoxuan Weng, Xingbo Wang, Junyu Lu, **Yingchaojie Feng**, Yihan Liu, and Wei Chen. InsightLens: Discovering and Exploring Insights from Conversational Contexts in Large-Language-Model-Powered Data Analysis. Submitted to IEEE VIS 2024. Under Review.
- Bo Pan, Jiaying Lu, Ke Wang, Li Zheng, Zhen Wen, **Yingchaojie Feng**, Minfeng Zhu, Wei Chen. AgentCoord: Visually Exploring Coordination Strategy for LLM-based Multi-Agent Collaboration. Submitted to IEEE VIS 2024. Under Review.
- Wei Zhang, Wong Kam-Kwai, Biying Xu, Yiwen Ren, Yuhuai Li, Minfeng Zhu, **Yingchaojie Feng**, Wei Chen. CultiVerse: Towards Cross-Cultural Understanding for Paintings with Large Language Model. Submitted to IEEE VIS 2024. Under Review.

## **INDUSTRY EXPERIENCE**

2022 OPPO Mobile Communications, Research Intern

Designed and developed a tool (Figma plugin) for automatic code generation for Figma design drafts.

## **PRESENTATIONS**

PromptMagician: Interactive Prompt Engineering for Text-to-Image Creation Conference Presentation at IEEE VIS 2023

Invited Talk at ChinaVis 2023

Invited Talk at the 16th China R conference and 2023 X-AGI conference

- Explainable Natural Language Interface for Visual Data Analysis
  Invited Talk at the Department of Data Technology and Product, Aicheng Technology, Alibaba.
- iPoet: Interactive Painting Poetry Creation with Visual Multimodal Analysis
  Conference Presentation at ChinaVis 2021

## **GRANTS AND AWARDS**

#### **Awards and Honors**

- First Prize in Academic Excellence Scholarship, Zhejiang University
- 2020 Outstanding Graduate, Zhejiang University of Technology
- First Prize in the Zhejiang Provincial University Students Service Outsourcing Innovation and Application Competition
- 2018 Honorary title of "Outstanding Student", Zhejiang University of Technology
- 2017-2019 Academic Scholarship, Zhejiang University of Technology

# **PROFESSIONAL SERVICE**

# **Conference Reviewing**

2022-2023 ACM CHI, CHI LBW

2023 EuroVis

2023 PacificVis

2023 ChinaVis

## **Journal Reviewing**

2023 Computational Visual Media (CVM)

## **Community Service**

2023 Student Volunteer, IEEE VIS' 23

# **Teaching Assistant**

2022-2023 Frontiers of Big Data Visualization (Lecturer: Prof. Wei Chen), Zhejiang University