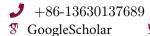
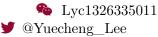
Yuecheng Li







Education

2022 – Present

M.Eng. Computer Technology, Sun Yat-sen University (SYSU, Project 985), China.

Honor: First Prize Scholarship, One-Star Volunteer, Postgraduate Exempt from Exam.

2018 - 2022

B.Sc. Computational Mathematics, Sun Yat-sen University, China.

Honor: Second Prize Scholarship, Outstanding Branch Secretary of Youth League. **Thesis**: The Research on Community Detection Algorithm based on Contrastive Learning.

Work Experience

2024.06 - 2024.09

- Tongyi Algorithm & Product Security team, Alibaba Cloud.
 - Summary: Safety benchmark for Tongyi Qianwen, QAs on Safety evaluations, Safe corpus generation, and Safety alignment of LLM
 - · Responsibilities:
 - Evaluated the safety assessment capabilities of various commercial and open-source large language models (LLMs).
 - Proposed a hard few-shot chain-of-thought (CoT) prompt engineering based on a safety committee mechanism.
 - Developed a "brainstorming" in-context learning approach based on an LLM safety committee to generate high-quality safe corpora.
 - Achievements:
 - Increased the safety evaluation response rate to 100% compared to the original prompt engineering.
 - Compared to few-shot CoT, improved the precision of unsafe responses by 8.0%, recall by 5.3%, and F1 score by 7.7% from the SOTA LLM.

Research Publications

Conference Proceedings

- Yuecheng Li, J. Chen, C. Chen, L. Yang, and Z. Zheng, "Contrastive Deep Nonnegative Matrix Factorization for Community Detection," in ICASSP 2024-2024 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Accepted by ICASSP2024 (CCF B) [paper] [code].
- Yuecheng Li, Y. Hu, L. Fu, C. Chen, L. Yang, and Z. Zheng, "Community-Aware Efficient Graph Contrastive Learning via Personalized Self-Training," in arXiv preprint arXiv:2311.11073, 2023, Under Review [paper].
- Yuecheng Li, T. Wang, C. Chen, et al., "Clients Collaborate: Flexible Differentially Private Federated Learning with Guaranteed Improvement of Utility-Privacy Trade-off," in arXiv preprint arXiv:2402.07002, 2024, Under Review [paper].

Journal Articles

- J. Chen, B. Deng, <u>Yuecheng Li</u>, C. Chen, and Z. Zheng, "Adaptable Node Alignment for Relieving Distribution Shift on Graphs," 2024, Submitted to IEEE Transactions on Knowledge and Data Engineering (TKDE), Under Review.
- S. Huang, L. Fu, <u>Yuecheng Li</u>, C. Chen, Z. Zheng, and H.-N. Dai, "A Cross-client Coordinator in Federated Learning Framework for Conquering Heterogeneity," 2024, Accepted by IEEE Transactions on Neural Networks and Learning Systems (TNNLS, CCF B)[paper].
- Z. Wu, Yuecheng Li, T. Liao, J. Lou, C. Chen, and Z. Zheng, "Two Guards Need Divide and Conquer: Parallel Hybrid Protection for Privacy-preserved Federated Learning," 2024, Submitted to IEEE Transactions on Information Forensics and Security (TIFS), Under Review.
- C. Chen, Yuecheng Li (first author in students), Z. Wu, et al., "Privacy Computing Meets Metaverse: Necessity, Taxonomy and Challenges," arXiv preprint arXiv:2304.11643, 2023, Accepted by Ad Hoc Networks 2024 (CCF C) [paper] [code].
- L. Fu, S. Huang, <u>Yuecheng Li</u>, C. Chen, C. Zhang, and Z. Zheng, "Learning the Global Prompt in the Low-rank Tensor Space for Heterogeneous Federated Learning," 2023, Submitted to Neural Networks, Under Review.
- L. Fu, Yuecheng Li, S. Huang, C. Chen, C. Zhang, and Z. Zheng, "Parameter-oriented Contrastive Schema and Multi-level Knowledge Distillation for Heterogeneous Federated Learning," 2023, Submitted to Information Fusion, Under Review.

R&D Projects

- Key Researcher of Algorithm, responsible for multimodal data mining involving text and tables, as well as the optimization of transformer and time series models (Merchants Union Consumer Finance Company Limited: Horizontal Project).
- Key Developer of System, responsible for the development of federated smart contracts based on Golang and the research on incentive mechanism design for federated learning (Open Fund: The Research on Federated Learning based on Blockchain).

Awards and Achievements

- First Prize (Top 1, Core Member), SecretFlow Cup: National College Privacy Computing Competition, Organizers: Ant Group SecretFlow Open Source Community, Zhejiang University. [link]
 - Excellence Award (Top 4, Team Leader), AI Agent Debate Competition, Organizers: Alibaba Cloud, Tongyi Lab
- Runner-up (Solo), AFAC2023 Fintech AI Challenge: Fund Trend Simulation Prediction Contest, Organizers: CCF, Ant Group. [link]
 - Excellence Award (Top 6, Solo), ICDM 2023 TuGraph Competition: Pretrained Model-based Community Detection and Fraudulent Group Mining, Organizers: ICDM2023, Ant Group, Zhejiang University.
- Second Prize, The 11th&12th National College Student Mathematics Competition (Mathematics A Category), Organizers: Chinese Mathematical Society.
 - Second Prize (Leader), The Guangdong Provincial Competition of the 2019 Contemporary Undergraduate Mathematical Contest in Modeling, Organizers: China Society for Industrial and Applied Mathematics.

Invited Talk

2023

Inviter: Shenzhen Transsion Holdings Co., Ltd..

Title: When Federated Learning Meets Differential Privacy.

Patent

2023

Community Detection Method, Apparatus, Computer Device, and Storage Medium (Publication No. CN116383441A, Initiative for Examination as to Substance).

Related Courses

Graduate Course

Data Privacy Protection and Secure Computing (94/100), Professional Practice (99/100), Machine Learning (92/100), Multimedia Content Security (92/100), Frontier and Practice of Engineering Technology (99/100).

Undergraduate Course

Mathematical Analysis (93/100), Mathematical Statistics (95/100), Stochastic Processes (96/100), Optimization Methods (95/100), Applications of Matlab (100/100), Digital Signal Processing (100/100).

Skills

Languages

Strong English reading, writing, and speaking abilities (CET-6).

Coding & Typesetting

Python, Matlab, LaTeX, ...

ML Frameworks

LightGBM, PyTorch, PyTorch Geometric, DGL, Opacus, and vLLM, ...

Service

2022 - Present

Reviewer: CIKM2024, KDD 2024, IEEE Internet of Things Journal.

2022 - 2023

Teaching Assistant: Linear Algebra and Analytic Geometry (SYSU).

2019 - 2020

Branch Secretary of the Youth League: Class 1, Mathematics Major, SYSU (Zhuhai).

References

Prof. Chuan Chen

Sun Yat-sen University chenchuan@mail.sysu.edu.cn

Prof. Lei Yang

Sun Yat-sen University yanglei39@mail.sysu.edu.cn

Prof. Zibin Zheng

Sun Yat-sen University zhzibin@mail.sysu.edu.cn