Curriculum Vitae
Siqi Liang
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GitHub: https://github.com/AgentDS
Homepage: https://agentds.github.io/

Education:

University of Michigan Jan. 2025 – Now
Ph.D. Student, School of Information
Michigan State University Jan. 2023 – Dec. 2024
Ph.D. Student, Department of CSE
- Transferred to University of Michigan

University of Southern California Aug. 2018 – Dec. 2020
Master of Computer Science (general), Viterbi School of Engineering
- Overall **GPA** 3.83/4.0

University of Electronic Science and Technology of China Sep. 2014 – Jul. 2018
- Bachelor of Engineering in Computer Science and Technology, School of Computer Science and Engineering
- Overall **GPA**: 3.94/4.0, **Weighted Average Mark**: 90.03/100, **Ranking**: 4/301

Publication:

- Ahn, S., **Liang, S.**, & Zhou, J. (2024). Robust Prompt Learning for Vision-Language Models with Noisy Labels.

- Yu, S., Ahn, S., **Liang, S.**, Hou, B., Ji, J., Chang, S., & Zhou, J. (2024). ConDS: Context Distribution Shift for Robust In-Context Learning.

- **Liang, S.***, Ahn, S.*, & Zhou, J. (2024). Distributed In-Context Learning under Non-IID Among Clients. *arXiv preprint arXiv:2408.00144*. (* equal contribution)

- Hoang, B., Pang, Y., **Liang, S.**, Zhan, L., Thompson, P., & Zhou, J. (2024). Distributed Harmonization: Federated Clustered Batch Effect Adjustment and Generalization. *KDD 2024 ADS*.

- Hong, J., Zheng, W., Meng, H., **Liang, S.**, Chen, A., Dodge, H. H., ... & Wang, Z. A-CONECT: Designing AI-based Conversational Chatbot for Early Dementia Intervention. In *ICLR 2024 Workshop on Large Language Model (LLM) Agents*.

- **Liang, S.**, Huang, J., Hong, J., Zeng, D., Zhou, J., & Xu, Z. (2023). FedNoisy: Federated Noisy Label Learning Benchmark. *arXiv preprint* arXiv: 2306.11650.

- Zeng, D. *, **Liang, S.** *, Hu, X., & Xu, Z. (2023). FedLab: A Flexible Federated Learning Framework. *Journal of Machine Learning Research, 24(100), 1-7*. (* equal contribution)

- Chen, A. B., **Liang, S.**, Nguyen, J. H., Liu, Y., & Hung, A. J. (2021). Machine learning analyses of automated performance metrics during granular sub-stitch phases predict surgeon experience. *Surgery*, 169(5), 1245–1249. https://doi.org/10.1016/j.surg.2020.09.020

- Xu, B. Y., **Liang, S.**, Pardeshi, A. A., Lifton, J., Moghimi, S., Lewinger, J. P., & Varma, R. (2021). Differences in Ocular Biometric Measurements among Subtypes of Primary Angle Closure Disease: The Chinese American Eye Study. *Ophthalmology*. Glaucoma, 4(2), 224–231. https://doi.org/10.1016/j.ogla.2020.09.008

- **Liang, S.**, Nguyen, J., Chen, J., Vanstrum, E., Mingo, S., Liu, Y., & Hung, A. (2020). MP34-11 DISTINGUISHING SURGICAL EXPERTISE USING MACHINE LEARNING AND AUTOMATED PERFORMANCE METRICS DURING SUB-STITCHES OF VESICO-URETHRAL ANASTOMOSIS. *The Journal of Urology*, 203(Supplement 4), e507-e507.

- Hao, L.*, **Liang, S.***, Ye, J., & Xu, Z. (2018). TensorD: A tensor decomposition library in TensorFlow. *Neurocomputing*, 318, 196-200. (* equal contribution)

Service:

- *Reviewer*

- *Conference:* ICLR 2025, KDD 2025 Research, NeurIPS 2024 Datasets & Benchmarks Track, KDD 2023 ADS, ICML 2022
- *Journal:* IEEE TNNLS, IEEE Transactions on Signal Processing, IEEE SMC
- *Conference Workshop:* AAAI 2025 FLUID Workshop, KDD 2024 FedKDD Workshop, KDD 2023 FL4Data-Mining Workshop

- *Volunteer:* DahShu Data Science Symposium 2024, KDD 2023 FL4Data-Mining Workshop

Teaching Experience:

Teaching Assistant   Spring 2024
CSE 480 Database Systems   *Michigan State University*

Working Experience:

Research Assistant   Dec. 2021 – Jun. 2022
Mentor: Prof. Irwin King   *Shenzhen Research Institute (SZRI), The Chinese University of Hong Kong*
Research Assistant   Mar. 2021 – Dec. 2022
Mentor: Prof. Zenglin Xu   *SMILE Lab, Shenzhen*

Projects:

Open-source Federated Learning Framework Project   Mar. 2021 – Dec. 2022
Mentor: Prof. Zenglin Xu   *School of Computer Science & Technology, Harbin Institute of Technology Shenzhen*
- Paper *FedLab: A Flexible Federated Learning Framework (2021)*
- GitHub: https://github.com/SMILELab-FL/FedLab

Robotic Surgery Project   Mar. 2019 – Jul. 2020
Mentor: Prof. Yan Liu   *Melady Lab, Viterbi School of Engineering, University of Southern California*
- Abstract *Distinguishing Surgical Expertise using Machine Learning and Automatic Performance Metrics during the Sub-stitches of Vesico-urethral Anastomosis, American Urology Association, The Journal of Urology (2020)*
- Paper *Machine learning analyses of automated performance metrics during granular sub-stitch phases predict surgeon experience* published by *Surgery (2020)*

Angle Closure Glaucoma Detection   Aug. 2018 – Jun. 2020
Mentor: Dr. Benjamin Y. Xu   *Keck School of Medicine of the University of Southern California*
- Built binary & multiclass classifiers for Angle Closure based on OCT parameter datasets.
- Designed and analyzed machine learning model on distinguishing primary angle closure (PACS) and primary angle closure glaucoma (PACG) using only OCT parameter datasets

Large-scale Tensor Decomposition   Sep. 2016 – Dec. 2017
Mentor: Prof. Zenglin Xu   *(Statistical Machine Intelligence & LEarning) SMILE Lab, UESTC*
- Developed a new toolbox "TensorD" in Python & TensorFlow, and wrote documentation for TensorD using Sphinx
- Wrote paper "*TensorD: A Tensor Decomposition Library in TensorFlow*", published by *Neurocomputing*
- GitHub: https://github.com/Large-Scale-Tensor-Decomposition/tensorD

Scholarships & Awards & Honors:

Outstanding Graduate of University of Electronic Science and Technology of China	*2018*
Honorary Junior Research Assistant, *The Chinese University of Hong Kong*	*2017*
Top Prize of People's Scholarship (Top 1% of 301 students), *UESTC*	*2016, 2017*
National Scholarship (Top 1% of 294 students), *Ministry of Education of the People's Republic of China*	*2015*