

Haizhou Shi

Updated November 14, 2025

Email: haizhou.shi.057@gmail.com

Homepage: haizhou-shi.github.io

Phone: (+1) 7324334667

Research Interests

Bayesian LLMs and Continual Training of LLMs.

Education

Rutgers University

New Jersey, US

Ph.D in Computer Science, focusing on Machine Learning

Sept. 2022 – Present

Advisor: Professor [Hao Wang](#).

Zhejiang University

Hangzhou, China

B.Eng & M.Eng in Computer Science and Technology

Sept. 2015 – June 2022

Mentors: Professors [Siliang Tang](#), [Yueting Zhuang](#).

Under Review

(2025) **SSR: Socratic Self-Refine for Large Language Model Reasoning.**

Haizhou Shi, Ye Liu, Bo Pang, Zeyu Leo Liu, Hao Wang, Silvio Savarese, Caiming Xiong, Yingbo Zhou, Semih Yavuz.

[arXiv preprint at arXiv:2511.10621](#)

(2025) **Token-Level Uncertainty Estimation for Large Language Model Reasoning.**

Tunyu Zhang*, **Haizhou Shi***, Yibin Wang, Hengyi Wang, Xiaoxiao He, Zhuowei Li, Haoxian Chen, Ligong Han, Kai Xu, Huan Zhang, Dimitris Metaxas, Hao Wang.

[NeurIPS-W'25](#), [arXiv preprint at arXiv:2505.11737](#)

(2025) **Efficient Uncertainty Estimation via Distillation of Bayesian LLMs.**

Harshil Vejendla*, **Haizhou Shi***, Yibin Wang, Tunyu Zhang, Huan Zhang, Hao Wang.

[arXiv preprint at arXiv:2505.11731](#)

Publication

(2025) **Training-Free Bayesianization for Low-Rank Adapters of Large Language Models.**

Haizhou Shi*, Yibin Wang*, Ligong Han, Huan Zhang, Hao Wang.

[NeurIPS'25](#), [arXiv preprint at arXiv:2412.05723](#)

(2025) **The Hidden Life of Tokens: Reducing Hallucination of Large Vision-Language Models via Visual Information Steering.**

Zhuowei Li, **Haizhou Shi**, Yunhe Gao, Di Liu, Zhenting Wang, Yuxiao Chen, Ting Liu, Long Zhao, Hao Wang, Dimitris N. Metaxas.

[ICML'25](#), [arXiv preprint at arXiv:2502.03628](#)

(2025) **Continual Learning of Large Language Models: A Comprehensive Survey.**

Haizhou Shi, Zihao Xu, Hengyi Wang, Weiyi Qin, Wenyuan Wang, Yibin Wang, Zifeng Wang, Sayna Ebrahimi, Hao Wang.

[ACM Computing Surveys](#), [arXiv preprint at arXiv:2404.16789](#)

(2024) **BLoB: Bayesian Low-Rank Adaptation by Backpropagation for LLMs.**

Yibin Wang*, **Haizhou Shi***, Ligong Han, Dimitris Metaxas, Hao Wang.

[NeurIPS'24](#), [arXiv preprint at arXiv:2406.11675](#)

(2023) **A Unified Approach to Domain Incremental Learning with Memory: Theory and Algorithm.**

Haizhou Shi, Hao Wang.

[NeurIPS'23](#), [arXiv preprint arXiv:2310.12244](#)

(2021) **On the Efficacy of Small Self-Supervised Contrastive Models without Distillation Signals.**

Haizhou Shi, Youcai Zhang, Siliang Tang, Wenjie Zhu, Yaqian Li, Yandong Guo, Yueting Zhuang.
AAAI'22 oral, arXiv preprint arXiv:2107.14762

(2021) **Towards Communication-Efficient and Privacy-Preserving Federated Representation Learning.**

Haizhou Shi, Youcai Zhang, Zijin Shen, Siliang Tang, Yaqian Li, Yandong Guo, Yueting Zhuang.
FL-AAAI-22 oral, arXiv preprint arXiv:2109.14611

(2021) **CIL: Contrastive Instance Learning Framework for Distantly Supervised Relation Extraction.**

Tao Chen, **Haizhou Shi**, Siliang Tang, Zhigang Chen, Fei Wu, and Yueting Zhuang.
ACL'21, arXiv preprint arXiv:2106.10855

(2019) **Informative Visual Storytelling with Cross-Modal Rules.**

Jiacheng Li, **Haizhou Shi**, Siliang Tang, Fei Wu, Yueting Zhuang.
ACM-MM'19, Proceedings of the 27th ACM International Conference on Multimedia

Work Experience

AI Research Intern, at Salesforce AI Research.

Palo Alto, US

Mentors: [Semih Yavuz](#), [Yingbo Zhou](#).

June 2025 – Present

Led the research project on LLM reasoning.

Led the research project on Reward Modeling of LLMs.

Machine Learning Research Intern, at Morgan Stanley.

New York, US

Mentors: [Marin Bilos](#), [Kashif Rasul](#).

June 2024 – Aug. 2024

Led the research project on lifelong time series forecasting.

Research Intern, at OPPO Research Institute.

Shanghai, China

Mentors: [Youcai Zhang](#), [Yandong Guo](#).

Dec. 2020 – Nov. 2021

Led the research on self-supervised learning for lightweight backbones (paper available [here](#)).

Led the research on federated self-supervised learning (paper available [here](#)).

Research Intern, at Intel Asia-Pacific Research & Development LTD.

Shanghai, China

Mentors: [Shengsheng Huang](#), [Jinquan Dai](#).

Apr. 2019 – Aug. 2019

Conducted reinforcement learning research on the google football simulated environment, benchmarked multiple existing frameworks including DQN, PG, and IMPALA.

Service & Outreach

Life-long Fellow, at Melton Foundation.

June 2016 – Present

Learned and practiced the concept of the global citizenship. Participated multiple global conferences on promoting and enabling global citizenship as a way for individuals and organizations to work together across boundaries of place and identity to address global challenges.

Reviewer, at Academic Conferences

Provided review services for multiple top-tier ML&AI conferences, including *ICLR'26*, *NeurIPS'25* (**Top-Reviewer Award**), *ICML'25*, *ICLR'25*, *ACL ARR'25*, *AAAI'25*, *NeurIPS'24*, *ECCV'24*, *IJCAI'24*, *AAAI'24*, *AAAI'23*, *ICCV'23*, *ECCV'22*.