Haizhou Shi (史海舟)

Updated November 6, 2023

Email: haizhou.shi@rutgers.edu **Scholar**: HOMEPAGE **Phone**: (+1) 7324334667

Research Interests

Continual Learning, Domain Adaptation, Representation Learning.

Education

Rutgers University New Jersey, US
Ph.D. Student in Computer Science, with Concentration on Machine Learning Sept. 2022 – Present
Advisor: Professor Hao Wang.

Zhejiang University Hangzhou, China
M.Eng in Computer Science and Technology Sept. 2019 – June 2022
Mentors: Professors Siliang Tang, Yueting Zhuang.

Zhejiang University Hangzhou, China
B.Eng in Computer Science and Technology Sept. 2015 – June 2019
Mentors: Professors Siliang Tang, Yueting Zhuang.

Publication

(2023) **A Unified Approach to Domain Incremental Learning with Memory: Theory and Algorithm.**
Haizhou Shi, Hao Wang.
NeurIPS'23, arXiv preprint arXiv:2310.12244

(2023) **Structure-Aware Group Discrimination with Adaptive-View Graph Encoder: A Fast Graph Contrastive Learning Framework.**
Zhenshuo Zhang, Yun Zhu, **Haizhou Shi**, Yun Zhu, Siliang Tang.
ECAI'23, arXiv preprint arXiv:2303.05231

(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

(2020) **Unsupervised Reinforcement Learning of Transferable Meta-Skills for Embodied Navigation.**
Juncheng Li, Xin Wang, Siliang Tang, **Haizhou Shi** and Fei Wu, Yueting Zhuang, William Yang Wang.
CVPR'20, Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition

Pre-print

(2023) **GraphControl: Adding Conditional Control to Universal Graph Pre-trained Models for Graph Domain Transfer Learning.**
Yun Zhu, Yaoke Wang, **Haizhou Shi**, Zhenshuo Zhang, Siliang Tang
arXiv preprint arXiv:2310.07365

(2023) **MARIO: Model Agnostic Recipe for Improving OOD Generalization of Graph Contrastive Learning.**
Yun Zhu, **Haizhou Shi**, Zhenshuo Zhang, Siliang Tang.
arXiv preprint arXiv:2307.13055

(2021) **Revisiting Catastrophic Forgetting in Class Incremental Learning.**
Zixuan Ni*, **Haizhou Shi***, Siliang Tang, Yueting Zhuang.
arXiv preprint arXiv:2107.12308

(2020) **Run Away From your Teacher: Understanding BYOL by a Novel Self-Supervised Approach.**
Haizhou Shi*, Dongliang Luo*, Siliang Tang, Jian Wang, Yueting Zhuang.
arXiv preprint arXiv:2011.10944

Work Experience

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-notched ML&AI conferences, including **AAAI'24, AAAI'23, ICCV'23, ECCV'22, and ECAI'23**.