Huazheng Wang

Contact Email: huazheng.wang@oregonstate.edu

Information Phone: (541)737-9465

Address: 3097 Kelly Engineering Center, Corvallis, OR 97331

Homepage: https://huazhengwang.github.io/

Appointments Assistant Professor

09/2022 - Present

School of Electrical Engineering and Computer Science

Oregon State University

Postdoctoral Research Associate

08/2021 - 07/2022

Department of Electrical and Computer Engineering

Princeton University Host: Prof. Mengdi Wang

Education Ph.D. in Computer Science

08/2015 - 08/2021

University of Virginia

Advisor: Prof. Hongning Wang

Thesis: Learning by Exploration with Information Advantage

B.E. (honours) in Computer Science

08/2011 - 06/2015

University of Science and Technology of China (USTC)

Research Interest Machine Learning, Reinforcement Learning, Information Retrieval

Honors and Awards

ICML 2021 Best Reviewers (Top 10%)

 John A. Stankovic Research Award, UVa
 SIGIR 2019 Best Paper Award
 Bloomberg Data Science PhD Fellowship

 2018 - 2021

Recent Publications Google Scholar

- Chuanhao Li, Huazheng Wang, Mengdi Wang, Hongning Wang, Learning Kernelized Contextual Bandits in a Distributed and Asynchronous Environment, ICLR 2023.
- Hui Yuan, Chengzhuo Ni, **Huazheng Wang**, Xuezhou Zhang, Le Cong, Csaba Szepesvári, Mengdi Wang, Bandit Theory and Thompson Sampling-Guided Directed Evolution for Sequence Optimization, NeurIPS 2022.
- Chuanhao Li, **Huazheng Wang**, Mengdi Wang, Hongning Wang, Communication Efficient Distributed Learning for Kernelized Contextual Bandits, NeurIPS 2022
- Huazheng Wang, David Zhao, Hongning Wang, Dynamic Global Sensitivity for Differentially Private Contextual Bandits, RecSys 2022
- Huazheng Wang, Haifeng Xu and Hongning Wang, When Are Linear Bandits Attackable?, Proceedings of the 39th International Conference on Machine Learning, ICML 2022.
- Yiling Jia, **Huazheng Wang**, Stephen Guo and Hongning Wang, *PairRank: Online Pairwise Learning to Rank by Divide-and-Conquer*, The Web Conference 2021 (WWW 2021) (Nominated for the Best Paper Award).

- Huazheng Wang, Qian Zhao, Qingyun Wu, Shubham Chopra, Abhinav Khaitan and Hongning Wang, *Global and Local Differential Privacy for Collaborative Bandits*, Fourteenth ACM Conference on Recommender Systems, pages 150-159, RecSys 2020.
- Qingyao Ai, Tao Yang, **Huazheng Wang** and Jiaxin Mao, *Unbiased Learning to Rank: Online or Offline?*, ACM Transactions on Information Systems (TOIS).
- Zhiyuan Liu*, **Huazheng Wang***, Fan Shen, Kai Liu and Lijun Chen, *Incentivized Exploration for Multi-Armed Bandits under Reward Drift*, The 34th AAAI Conference on Artifical Intelligence, pages 4981-4988, AAAI 2020 (*Equal contribution).
- Huazheng Wang, Zhe Gan, Xiaodong Liu, Jingjing Liu, Jianfeng Gao and Hongning Wang Adversarial Domain Adaptation for Machine Reading Comprehension, EMNLP 2019.
- Huazheng Wang, Sonwoo Kim, Eric McCord-Snook, Qingyun Wu and Hongning Wang, Variance Reduction in Gradient Exploration for Online Learning to Rank, The 42th Annual International ACM SIGIR Conference, pages 835-844, SIGIR 2019 (Best Paper Award).
- Qingyun Wu, Zhige Li, **Huazheng Wang**, Wei Chen and Hongning Wang, Factorization Bandits for Online Influence Maximization, The 25th ACM SIGKDD Conference On Knowledge Discovery And Data Mining, pages 636-646, KDD 2019 (acceptance rate for oral presentation: 9.1%).
- Qingyun Wu, **Huazheng Wang**, Yanen Li and Hongning Wang, *Dynamic Ensemble of Contextual Bandits to Satisfy Users' Changing Interests*, The Web Conference 2019, pages 2080-2090, WWW 2019 (acceptance rate for oral presentation: 8%).
- Huazheng Wang, Ramsey Langley, Sonwoo Kim, Eric McCord-Snook and Hongning Wang, Efficient Exploration of Gradient Space for Online Learning to Rank, The 41th Annual International ACM SIGIR Conference, pages 145-154, SIGIR 2018.
- Huazheng Wang, Qingyun Wu and Hongning Wang, Factorization Bandits for Interactive Recommendation, The 31st AAAI Conference on Artificial Intelligence, pages 2695-2702, AAAI 2017.

Tutorial

- Huazheng Wang, Yiling Jia and Hongning Wang, Interactive Information Retrieval with Bandit Feedback, The 44th Annual International ACM SIGIR Conference (SIGIR 2021).
- Qingyun Wu, **Huazheng Wang** and Hongning Wang, *Learning by Exploration:* New Challenges in Real-World Environments, The 26th ACM SIGKDD Conference On Knowledge Discovery And Data Mining (KDD 2020).

Teaching Experience

• AI539: Introduction to Online Learning

OSU, Winter 2023

• CS499/AI539: Information Retrieval

OSU, Spring 2023

Software

• BanditLib: a library of bandit algorithms. https://github.com/huazhengwang/BanditLib

Service

- Area Chair of NeurIPS 2023, ICLR 2023, Reviewer of ICLR 2022, 2021, ICML 2023
 2020, NeurIPS 2022, 2021, 2016, KDD 2022, AAAI 2021, 2020, AISTATS 2021, 2020, ACL 2019, 2018, WSDM 2018.
- ICML 2021 Best Reviewers Award (Top 10%)