# Shuai Li (李帅)

**Gender**: Female

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## **Position**

#### John Hopcroft Center, Shanghai Jiao Tong University

Tenure-track Associate Professor Jan 2023 - now
Tenure-track Assistant Professor Sep 2019 - Jan 2023

# **Education**

2019	The Chinese University of Hong Kong (PhD in Computer Science & Engineering)
	Supervisor: Prof. Kwong-Sak Leung and Prof. Shengyu Zhang
2015	University of Chinese Academy of Sciences (Master's Degree in Math)
	Institute of Mathematics, Supervisor: Prof. Liming Ge
2011	Zhejiang University (Bachelor's Degree in Math)
	Chu Kochen Honors College (GPA: 3.92/4.00)

## **Awards**

2023	Notable reviewer for ICLR-2023
	Huawei Spark Award
	Tencent Excellent Advisor
	Bronze Medal for Parallel Track SAT in SAT Competition
2022	Top Reviewer for UAI-2022
2021	Outstanding Reviewer for NeurIPS-2021 (8%)
2020	Shanghai Sailing Talents
2018	Google PhD Fellowship
	Reaching out award, Hong Kong SAR Government Scholarship
	Student travel award in AAAI 2018, KDD 2018
2017	Recipient of Overseas Research Attachment Program, CUHK
2016	Student travel award in ICML 2016, NIPS 2016, WIML 2016
2012	Outstanding Student, University of Chinese Academy of Sciences
2011	Certificate of Excellence Chu Kochen Honors Program, Zhejiang University
	(30/5500)

## **Research Interests**

- Multi-armed Bandits
  - Structure: Graph Feedback, Online Clustering of Bandits, Online Learning to Rank, Conversational Feedback
  - o Multi-players: Bandit Learning in Matching Markets, Fairness, Incentive
  - o Robustness: Best-of-both-worlds, Corruption and Attack

- Reinforcement Learning
  - Convergence Analysis: MDP with Function Approximation, Best-of-bothworlds, Extensive Games
  - o Offline Pretraining Methods and Offline-to-online Adaptation
  - Applications to Recommender Systems
- Learning Theory
  - Diffusion Model: Sampling Improvement
  - Transformer: In-context Learning

#### **Publications**

- \*Equal contribution #Corresponding author
  - 1. Fang Kong, Zilong Wang, and **Shuai Li**\*, *Improved Analysis for Bandit Learning in Matching Markets*, NeurIPS, 2024.
  - 2. Ruofeng Yang, Zhijie Wang, Bo Jiang, and **Shuai Li**\*, *The Convergence of Variance Exploding Diffusion Models under the Manifold Hypothesis*, NeurIPS, 2024.
  - 3. Ruofeng Yang, Bo Jiang, Cheng Chen, Ruinan Jin, Baoxiang Wang, and **Shuai Li**\*, Few-Shot Diffusion Models Escape the Curse of Dimensionality, NeurIPS, 2024.
  - 4. **Shuai Li**, Zhao Song, Yu Xia, Tong Yu, Tianyi Zhou, *The Closeness of In-Context Learning and Weight Shifting for Softmax Regression*, NeurIPS, 2024.
  - 5. Zhihui Xie, Jizhou Guo, Tong Yu, and **Shuai Li**\*, *Calibrating Reasoning in Language Models with Internal Consistency*, NeurlPS, 2024.
  - 6. Yao Tang, Zhihui Xie, Zichuan Lin, Deheng Ye, and **Shuai Li**\*, *Learning Versatile Skills with Curriculum Masking*, NeurIPS, 2024.
  - 7. Fang Kong, Penglei Zhao, Shichao Han, Yong Wang, and **Shuai Li**<sup>#</sup>, *Sequential Optimum Test with Multi-armed Bandits for Online Experimentation*, CIKM Applied, 2024.
  - 8. Zilong Wang and **Shuai Li**\*, *Optimal Analysis for Bandit Learning in Matching Markets with Serial Dictatorship*, Theoretical Computer Science (TCS) [J], 2024.
  - 9. Zhijie Wang, Bo Jiang, and **Shuai Li**<sup>#</sup>, *In-Context Learning on Function Classes Unveiled for Transformers*, Proceedings of the 41st International Conference on Machine Learning (ICML), 2024.
  - 10. Xutong Liu, Siwei Wang, Jinhang Zuo, Han Zhong, Xuchuang Wang, Zhiyong Wang, **Shuai Li**<sup>#</sup>, Mohammad Hajiesmaili, John C.S. Lui, and Wei Chen<sup>#</sup>, *Combinatorial Multivariant Multi-Armed Bandits with Applications to Episodic Reinforcement Learning and Beyond*, Proceedings of the 41st International Conference on Machine Learning (ICML), 2024.
  - 11. Yu Xia, Tong Yu, Zhankui He, Handong Zhao, Julian McAuley, and **Shuai Li**, *Aligning as Debiasing: Causality-Aware Alignment via Reinforcement Learning with Interventional Feedback*, Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2024.
  - 12. Yu Xia\*, Xu Liu\*, Tong Yu, Sungchul Kim, Ryan A. Rossi, Anup Rao, Tung Mai, and **Shuai Li**, *Hallucination Diversity-Aware Active Learning for Text Summarization*, Proceedings of the 2024 Conference of the North American Chapter of the

- Association for Computational Linguistics (NAACL), 2024.
- 13. Yu Xia\*, Fang Kong\*, Tong Yu, Liya Guo, Ryan A. Rossi, Sungchul Kim, and **Shuai Li**\*, Which LLM to Play? Convergence-Aware Online Model Selection with Time-Increasing Bandits, WWW 2024.
- 14. Ruinan Jin, **Shuai Li**, and Baoxiang Wang, *On Stationary Point Convergence of PPO-Clip*, the Twelfth International Conference on Learning Representations (ICLR), 2024.
- 15. Zhehao Zhang, Tong Yu, Handong Zhao, Kaige Xie, Lina Yao, **Shuai Li**, *Exploring Soft Prompt Initialization Strategy for Few-shot Continual Text Classification*, IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2024.
- 16. Fang Kong and **Shuai Li**\*, Improved Bandits in Many-to-one Matching Markets with Incentive Compatibility, The 38th AAAI Conference on Artificial Intelligence (AAAI), 2024.
- 17. Fang Kong, Xiangcheng Zhang, Baoxiang Wang, and **Shuai Li**<sup>#</sup>, Improved Regret Bounds for Linear Adversarial MDPs via Linear Optimization, Transactions on Machine Learning Research (TMLR) [J], 2024.
- 18. Yu Xia, Zhihui Xie, Tong Yu, and **Shuai Li**\*, *Towards Joint Utilization of Absolute and Relative Bandit Feedback for Conversational Recommendation*, User Modeling and User-Adapted Interaction (UMUAI) [J], 2024.
- 19. Xu Liu, Tong Yu, Kaige Xie, Junda Wu, and **Shuai Li**\*, *Interact with the Explanations: Causal Debiased Explainable Recommendation System*, the 17th ACM International Conference on Web Search and Data Mining (WSDM), 2024.
- 20. Canzhe Zhao, Ruofeng Yang, Baoxiang Wang, Xuezhou Zhang, and **Shuai Li**\*, Learning Adversarial Low-rank Markov Decision Processes with Unknown Transition and Full-information Feedback, 37th Conference on Neural Information Processing Systems (NeurIPS), 2023.
- 21. Jinhang Zuo, Zhiyao Zhang, Zhiyong Wang, **Shuai Li**\*, Mohammad Hajiesmaili, and Adam Wierman, *Adversarial Attacks on Online Learning to Rank with Click Feedback*, 37th Conference on Neural Information Processing Systems (NeurIPS), 2023.
- 22. Zhiyong Wang, Jize Xie, Tong Yu, **Shuai Li**\*, and John C.S. Lui, *Online Corrupted User Detection and Regret Minimization*, 37th Conference on Neural Information Processing Systems (NeurIPS), 2023.
- 23. Zhiyong Wang, Jize Xie, Xutong Liu, **Shuai Li**\*, and John C.S. Lui, *Online Clustering of Bandits with Misspecified User Models*, 37th Conference on Neural Information Processing Systems (NeurIPS), 2023.
- 24. Junda Wu, Tong Yu, Rui Wang, Zhao Song, Ruiyi Zhang, Handong Zhao, Chaochao Lu, **Shuai Li**<sup>#</sup>, and Ricardo Henao, *InfoPrompt: Information-Theoretic Soft Prompt Tuning for Natural Language Understanding*, 37th Conference on Neural Information Processing Systems (NeurIPS), 2023.
- 25. Yu Xia, Junda Wu, Tong Yu<sup>#</sup>, Sungchul Kim, Ryan A. Rossi, and **Shuai Li**, *User-Regulation Deconfounded Conversational Recommender System with Bandit Feedback*, Proceedings of the 29th ACM SIGKDD Conference on Knowledge

- Discovery and Data Mining (KDD Research Track), 2023.
- 26. Fang Kong, Canzhe Zhao, and **Shuai Li**\*, *Best-of-three-worlds Analysis for Linear Bandits with Follow-the-regularized-leader Algorithm*, Proceedings of Thirty Sixth Conference on Learning Theory (COLT), 2023.
- 27. Zhihui Xie, Zichuan Lin, Deheng Ye, Qiang Fu, Yang Wei, and **Shuai Li**<sup>#</sup>, *Future-conditioned Unsupervised Pretraining for Decision Transformer*, Proceedings of the 40th International Conference on Machine Learning (ICML), 2023.
- 28. Canzhe Zhao, Yanjie Ze, Jing Dong, Baoxiang Wang, **Shuai Li**<sup>#</sup>, *DPMAC:*Differentially Private Communication for Cooperative Multi-Agent Reinforcement

  Learning, Proceedings of the Thirty-Second International Joint Conference on

  Artificial Intelligence (IJCAI), 2023.
- 29. Qizhi Li\*, Xubin Zheng\*, Jize Xie\*, Ran Wang, Mengyao Li, Man-Hon Wong, Kwong-Sak Leung, **Shuai Li**, Qingshan Geng, Lixin Cheng, *bvnGPS: a generalizable diagnostic model for acute bacterial and viral infection using integrative host transcriptomics and pretrained neural networks*, Bioinformatics [J], 2023.
- 30. Canzhe Zhao, Ruofeng Yang, Baoxiang Wang, **Shuai Li**\*, *Learning Adversarial Linear Mixture Markov Decision Processes with Bandit Feedback and Unknown Transition*, The Eleventh International Conference on Learning Representations (ICLR), 2023.
- 31. Yichi Zhou, Fang Kong, **Shuai Li**, *Stochastic No-Regret Learning for General Games with Variance Reduction*, The Eleventh International Conference on Learning Representations (ICLR), 2023.
- 32. Qizhi Li\*, Canzhe Zhao\*, Tong Yu, Junda Wu, **Shuai Li**\*, *Clustering of Conversational Bandits with Posterior Sampling for User Preference Learning and Elicitation*, User Modeling and User-Adapted Interaction (UMUAI) [J], 2023.
- 33. Fang Kong, Jize Xie, Baoxiang Wang, Tao Yao, **Shuai Li**\*, *Online Influence Maximization under Decreasing Cascade Model*, Proceedings of the 2023 International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2023.
- 34. Rui Zhao\*, Xu Liu\*, Yizheng Zhang\*, Minghao Li, Cheng Zhou, **Shuai Li** and Lei Han<sup>#</sup>, *CraftEnv: A Flexible Collective Robotic Construction Environment for Multi-Agent Reinforcement Learning*, Proceedings of the 2023 International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2023.
- 35. Ruofeng Yang, Xiangyuan Li, Bo Jiang, **Shuai Li**<sup>#</sup>, *Understanding Representation Learnability of Nonlinear Self-Supervised Learning*, Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2023.
- 36. Zhiyong Wang, Xutong Liu, **Shuai Li**<sup>#</sup>, John C.S. Lui, *Efficient Explorative Key-term Selection Strategies for Conversational Contextual Bandits*, Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2023.
- 37. Junda Wu, Rui Wang, Handong Zhao, Ruiyi Zhang, Chaochao Lu, **Shuai Li**, Ricardo Henao, *Few-Shot Composition Learning for Image Retrieval with Prompt Tuning*, Proceedings of the AAAI Conference on Artificial Intelligence (AAAI), 2023.
- 38. Weiwen Liu\*, Yunjia Xi\*, Jiarui Qin, Xinyi Dai, Ruiming Tang#, **Shuai Li**, Weinan Zhang and Rui Zhang#, *Personalized Diversification for Neural Re-ranking in*

- *Recommendation,* IEEE 39th International Conference on Data Engineering (ICDE), 2023.
- 39. Canzhe Zhao, Yanjie Ze, Jing Dong, Baoxiang Wang, **Shuai Li**\*, *Differentially Private Temporal Difference Learning with Stochastic Nonconvex-Strongly-Concave Optimization*, Proceedings of the 16th ACM International Conference on Web Search and Data Mining (WSDM), 2023.
- 40. Fang Kong, **Shuai Li**\*(alphabetical order), *Player-optimal Stable Regret for Bandit Learning in Matching Markets*, ACM-SIAM Symposium on Discrete Algorithms (SODA), 2023.
- 41. Zhihui Xie, Handong Zhao, Tong Yu, **Shuai Li**<sup>#</sup>, *Discovering Low-rank Subspaces for Language-agnostic Multilingual Representations*, Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022.
- 42. Junda Wu, Rui Wang, Tong Yu<sup>#</sup>, Ruiyi Zhang, Handong Zhao, **Shuai Li**, Ricardo Henao, Ani Nenkova, *Context-aware Information-theoretic Causal De-biasing for Interactive Sequence Labeling*, Findings of Empirical Methods in Natural Language Processing (EMNLP), 2022.
- 43. Zilong Wang, Liya Guo, Junming Yin and **Shuai Li**<sup>#</sup>, *Bandit Learning in Many-to-One Matching Markets*, Proceedings of the 31st ACM International Conference on Information & Knowledge Management (CIKM), 2022.
- 44. Jinhang Zuo, Songwen Hu, Tong Yu, **Shuai Li**<sup>#</sup>, Handong Zhao and Carlee Joe-Wong, *Hierarchical Conversational Preference Elicitation with Bandit Feedback*, Proceedings of the 31st ACM International Conference on Information & Knowledge Management (CIKM), 2022.
- 45. Yong Zhuang, Tong Yu, Junda Wu, Shiqu Wu, **Shuai Li**<sup>#</sup>, *Spatial-Temporal Aligned Multi-Agent Learning for Visual Dialog Systems*, The 30th ACM International Conference on Multimedia (MM), 2022.
- 46. Xutong Liu, Haoru Zhao, Tong Yu, **Shuai Li**<sup>#</sup>, John C.S. Lui, *Federated Online Clustering of Bandits*, The 38th Conference on Uncertainty in Artificial Intelligence (UAI), 2022.
- 47. Fang Kong, Yichi Zhou, **Shuai Li**<sup>#</sup>, *Simultaneously Learning Stochastic and Adversarial Bandits with General Graph Feedback*, The 39th International Conference on Machine Learning (ICML), 2022.
- 48. Fang Kong, Junming Yin, **Shuai Li**<sup>#</sup>, *Thompson Sampling for Bandit Learning in Matching Markets*, The 31st International Joint Conference on Artificial Intelligence (IJCAI), 2022.
- 49. Junda Wu\*, Zhihui Xie\*, Tong Yu, Handong Zhao, Ruiyi Zhang and **Shuai Li**<sup>#</sup>, *Dynamics-Aware Adaptation for Reinforcement Learning Based Cross-Domain Interactive Recommendation*, The 45th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2022.
- 50. Kun Wang, Jing Dong, Baoxiang Wang, **Shuai Li**, *Cascading Bandit under Differential Privacy*, IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2022.
- 51. Anirban Santara, Gaurav Aggarwal, **Shuai Li**, Claudio Gentile, *Learning to Plan*

- Variable Length Sequences of Actions with a Cascading Bandit Click Model of User Feedback, The 25th International Conference on Artificial Intelligence and Statistics (AISTATS), 2022.
- 52. Canzhe Zhao, Tong Yu, Zhihui Xie, **Shuai Li**\*, *Knowledge-aware Conversational Preference Elicitation with Bandit Feedback*, The Web Conference (WWW), 2022.
- 53. Cheng Chen, Canzhe Zhao, **Shuai Li**\*, *Simultaneously Learning Stochastic and Adversarial Bandits under the Position-based Model*, The 36th AAAI Conference on Artificial Intelligence (AAAI), 2022.
- 54. Jing Dong, Ke Li, **Shuai Li**, Baoxiang Wang<sup>#</sup>, *Combinatorial Bandits under Strategic Manipulations*, The 15th ACM International Conference on Web Search and Data Mining (WSDM), 2022.
- 55. Fang Kong, Yueran Yang, Wei Chen, **Shuai Li**\*, *The Hardness Analysis of Thompson Sampling for Combinatorial Semi-bandits with Greedy Oracle*, Thirty-fifth Conference on Neural Information Processing Systems (NeurIPS), 2021.
- 56. Houshuang Chen, Zengfeng Huang, **Shuai Li**, Chihao Zhang (alphabetical order), *Understanding Bandits with Graph Feedback*, Thirty-fifth Conference on Neural Information Processing Systems (NeurIPS), 2021.
- 57. Fang Kong, Yueran Yang, Wei Chen, **Shuai Li**<sup>#</sup>, *Combinatorial online learning based on optimizing feedbacks* (in Chinese), Big Data Research, 2021.
- 58. Yueran Yang\*, Yu Zhang\*, **Shuai Li**, Xubin Zheng, Man Hon Wong, Kwong-Sak Leung, Lixin Cheng, *A robust and generalizable immune-related signature for sepsis diagnostics*, IEEE/ACM Transactions on Computational Biology and Bioinformatics (TCBB), 2021.
- 59. Junda Wu\*, Canzhe Zhao\*, Tong Yu, Jingyang Li, **Shuai Li**<sup>#</sup>, *Clustering of Conversational Bandits for Coarse-to-Fine Grained Preference Elicitation*, Proceedings of the 30th ACM International Conference on Information & Knowledge Management (CIKM), 2021.
- 60. Junda Wu, Tong Yu, **Shuai Li**\*, *Deconfounded and Explainable Interactive Vision-Language Retrieval of Complex Scenes*, Proceedings of the 29th ACM International Conference on Multimedia (MM), 2021.
- 61. Zhihui Xie, Tong Yu, Canzhe Zhao, **Shuai Li**\*, *Comparison-based Conversational Recommender System with Relative Bandit Feedback*, The 44th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2021.
- 62. Jianghao Lin, Weiwen Liu, Xinyi Dai, Weinan Zhang, **Shuai Li**, Ruiming Tang, Xiuqiang He, Jianye Hao and Yong Yu, *A Graph-Enhanced Click Model for Web Search*, The 44th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2021.
- 63. Xinyi Dai, Jianghao Lin, Weinan Zhang, **Shuai Li**, Weiwen Liu, Ruiming Tang, Xiuqiang He, Jianye Hao, Jun Wang and Yong Yu, *A Generative Adversarial Click Model for Information Retrieval*, The Web Conference (WWW), 2021.
- 64. **Shuai Li**\*, Fang Kong, Kejie Tang, Qizhi Li, Wei Chen, *Online influence* maximization under linear threshold model, Thirty-fourth Conference on Neural Information Processing Systems (NeurlPS), 2020.

- 65. Fang Kong, Qizhi Li, **Shuai Li**<sup>#</sup>, A Survey on Online Influence Maximization (in Chinese), Computer Science, 2020.
- 66. Baoxiang Wang, **Shuai Li**, Jiajin Li, Siu On Chan, *The Gambler's Problem and Beyond*, the International Conference on Learning Representations (ICLR), 2020.
- 67. **Shuai Li**, Wei Chen, Zheng Wen, Kwong-Sak Leung, *Stochastic Online Learning with Probabilistic Feedback Graph*, the 34th AAAI Conference on Artificial Intelligence (AAAI), 2020.
- 68. Ran Wang, **Shuai Li**, Lixin Cheng, Man-Hon Wong, Kwong-Sak Leung, *Predicting Associations among Drugs, Targets and Diseases by Tensor Decomposition for Drug Repositioning*, BMC Bioinformatics, 2019.
- 69. Pengfei Liu, Hongjian Li, **Shuai Li**, Kwong-Sak Leung, *Improving Prediction of Phenotypic Drug Response on Cancer Cell Lines Using Deep Convolutional Network*, BMC Bioinformatics, 2019.
- 70. **Shuai Li**, Wei Chen, S Li, Kwong-Sak Leung, *Improved Algorithm on Clustering of Bandits*, the 28th International Joint Conference on Artificial Intelligence (IJCAI), 2019.
- 71. **Shuai Li**, Tor Lattimore, Csaba Szepesvari, *Online Learning to Rank with Features*, the 36th International Conference on Machine Learning (ICML), 2019.
- 72. Tor Lattimore, Branislav Kveton, **Shuai Li**, Csaba Szepesvai, *TopRank: A Practical Algorithm for Online Stochastic Ranking*, the 32nd Conference on Neural Information Processing Systems (NeurIPS), 2018.
- 73. Ran Wang, **Shuai Li**, Man-Hon Wong, and Kwong-Sak Leung, *Drug-Protein-Disease Association Prediction and Drug Repositioning Based on Tensor Decomposition*, IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 2018.
- 74. **Shuai Li**, Yasin Abbasi-Yadkori, Branislav Kveton, S. Muthukrishnan, Vishwa Vinay, Zheng Wen, *Offline Evaluation of Ranking Policies with Click Models*, the 24th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining (KDD Research Track), 2018.
- 75. Weiwen Liu, **Shuai Li**, Shengyu Zhang, *Contextual Dependent Click Bandit Algorithm for Web Recommendation*, International Computing and Combinatorics Conference (COCOON), pp. 39-50, Springer, Cham, 2018.
- 76. **Shuai Li**, Shengyu Zhang, *Online Clustering of Contextual Cascading Bandits*, the 32nd AAAI Conference on Artificial Intelligence (AAAI), 2018.
- 77. **Shuai Li**, Baoxiang Wang, Shengyu Zhang, Wei Chen, *Contextual Combinatorial Cascading Bandits*, the 33rd International Conference on Machine Learning (ICML), pp. 1245-1253. 2016.
- 78. Pengfei Liu, **Shuai Li**, Weiying Yi, Kwong-Sak Leung, *A Hybrid Distributed Framework for SNP Selections*, the 22nd International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA), 2016.
- 79. **Shuai Li**, Xiaoqian Xu, Guojin Wang, *Design for Triangular Rational Bézier Harmonic and Biharmonic Surfaces* (in Chinese), Journal of Zhejiang University (Science Edition), 2012(2):152-158.

#### **Patents**

- 李奇之、赵灿哲、**李帅**,*基于用户聚类的对话在线推荐系统*,专利号 202211107539.8,中国.
- **Shuai Li**, Zheng Wen, Yasin Abbasi-Yadkori, Vishwa, Vinay, Branislav Kveton, *Training and Utilizing Item-level Importance Sampling Models for Offline Evaluation and Execution of Digital Content Selection Policies*, US Patent 20190303995A1.

## **Tutorials & Keynote Talks**

- 05/2024: Shuai Li and Fang Kong. Tutorial of "Bandit Learning in Mechanism Design: Matching Markets and Beyond" at AAMAS 2024.
- 07/2022: Invited talk of "Simultaneously Learning Stochastic and Adversarial Bandits with General Graph Feedback" on the CCF NCTCS Annual.
- 07/2021: Keynote talk of "Online Learning to Rank with Click Models: An Overview" in the 2nd Workshop on Deep Reinforcement Learning for Information Retrieval at SIGIR'2021

## **Internships & Research Experiences**

- 2018.9-2019.2 Research Intern of Prof. Tong Zhang and Dr. Lei Han at Tencent Al Lab, Shenzhen, China.
- 2018.4.30-8.31 Research Intern of Prof. Csaba Szepesvari and Dr. Tor Lattimore on the topic of contextual online learning to rank at DeepMind, London, UK.
- 2017.6.5-11.10 Data Science Research Intern of Dr. Branislav Kveton on the topic of offline evaluation for ranking policies with click models at Adobe, San Jose, CA, US.
- 2017.1.16-5.6 Visiting student in the program of Foundation of Machine Learning, Simons institute, University of California Berkeley, CA, US.
- 2016.10-2018.5 Research collaborations with Prof. Bogdan Cautis of Noah's Ark Lab of Huawei and Prof. Shengyu Zhang of CUHK on contextual bandits.
- 2016.8.22-26 Attended the Algorithms and Uncertainty Boot Camp of Simons Institute, University of California, Berkeley, US.
- 2016.6.27-2016.8.21 Research assistant with Prof. Csaba Szepesvari of University of Alberta, Canada, on the generalized linear bandits.
- 2015.4-6 Visited Dr. Wei Chen of Microsoft Research Asia, Beijing, on the multiarmed bandit problem.
- 2014.11-2015.4 Research Assistant with Prof. Shengyu Zhang in the Chinese University of Hong Kong on the multi-armed bandit problem.
- 2013.8-2014.5 Teaching Assistant with Prof. Liming Ge in the University of New Hampshire, US.

## **Professional Services**

Program Committee for

AAAI Conference on Artificial Intelligence (AAAI) 2025-2023, 2021-2020, 2018

The IEEE International Conference on Data Mining (ICDM) 2024

International Conference on Autonomous Agents and Multiagent Systems (AAMAS)

#### 2024-2021

#### Conference reviewer:

International Conference on Machine Learning (ICML) 2024-2019

International Conference on Learning Representations (ICLR) 2025-2021

Conference on Neural Information Processing Systems (NeurIPS) 2024-2018

Conference on Uncertainty in Artificial Intelligence (UAI) 2023-2019

International Conference on Artificial Intelligence and Statistics (AISTATS) 2024-2022, 2020

International Joint Conference on Artificial Intelligence (IJCAI) 2023

Algorithmic Learning Theory (ALT) 2024

ACM International Conference on Multimedia (MM) 2023

#### Journal reviewer:

IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) 2020

Transactions on Knowledge Discovery from Data (TKDD) 2024

IEEE Transactions on Neural Networks and Learning Systems (TNNLS) 2022-2021

IEEE/ACM Transactions on Networking (TON)

Machine Learning

Theoretical Computer Science (TCS) 2017

#### Conference subreviewer:

The ACM-SIAM Symposium on Discrete Algorithms (SODA) 2024, 2021

The International Colloquium on Automata, Languages and Programming (ICALP) 2020

# **Teaching Experiences**

At SJTU			
2024-2025	CS3330 Combinatorics (undergraduate CS major)		
2023-2024	Al3601 Reinforcement Learning (undergraduate Al class)		
2023-2024	CS3308 Machine Learning (undergraduate John class, co-instructed)		
2020-2022	CS3317 Artificial Intelligence (undergraduate CS major, in English)		
2020-2022	CS3330 Combinatorics (undergraduate CS major)		
2019	VE445 Introduction to Machine Learning (undergraduate, UM-SJTU Joint		
Inst	itute, in English)		
TA at CUHK			
2019, 2016	Probability and Statistics for Engineers		
(undergraduate-level, Prof. Andrej Bogdanov and Prof. Shengyu Zhang)			

2018 Fundamentals of Artificial Intelligence

Compiler Construction (undergraduate-level, Dr. YUAN Cheng Jun)

2016 Randomness and Computation (graduate-level, Prof. Shengyu Zhang)

2015 Analysis of Boolean Functions (graduate-level, Prof. Shengyu Zhang)

Topics in Theoretical Computer Science (graduate-level, Prof. Shengyu Zhang)

#### TA at UNH

2014 Calculus II (undergraduate-level, Prof. Donald W Hadwin)

(undergraduate-level, Prof. Kwong-Sak Leung)

2013 Calculus I (undergraduate-level, Prof. Liming Ge)