

Shuai Li (李帅)

Gender: Female

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Education

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| Aug 2015-now | The Chinese University of Hong Kong PhD program in Computer Science & Engineering Supervisor: Prof. Kwong-Sak Leung |
| 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) |

Research Interest

Interests: Online Learning, Multi-armed Bandits, Reinforcement Learning

My research interest lies at online learning and multi-armed bandits and focuses on online learning algorithms and the regret analysis. My current major research topic is online learning to rank with click models. I am also interested in general online learning problems, applying bandit algorithms in online recommendations and applying bandit algorithms in Monte-Carlo tree search.

Publications

1. 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.
2. **Shuai Li**, Wei Chen, S Li, Kwong-Sak Leung, *Improved Algorithm on Clustering of Bandits*, IJCAI 2019.
3. **Shuai Li**, Tor Lattimore, Csaba Szepesvari, *Online Learning to Rank with Features*, ICML 2019.
4. 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.
5. 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.
6. **Shuai Li**, Yasin Abbasi-Yadkori, Branislav Kveton, S. Muthukrishnan, Vishwa Vinay and 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.
7. 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.
8. **Shuai Li**, Shengyu Zhang, *Online Clustering of Contextual Cascading Bandits*, the 32nd AAAI Conference on Artificial Intelligence (AAAI), 2018.
 9. **Shuai Li**, Baoxiang Wang, Shengyu Zhang, Wei Chen, *Contextual combinatorial cascading bandits*, the 33rd International Conference on Machine Learning (ICML), pp. 1245-1253. 2016.
 10. Pengfei Liu, **Shuai Li**, Weiyang 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.
 11. **Shuai Li**, Xiaoqian Xu, Guojin Wang, *Design for triangular rational Bézier harmonic and biharmonic surfaces*, Journal of Zhejiang University (Science Edition), 2012(2):152-158.

Under Submissions

- **Shuai Li**, Wei Chen, Zheng Wen, Kwong-Sak Leung, *Stochastic Online Learning with Probabilistic Feedback Graph*.
- S Li, **Shuai Li**, Kwong-Sak Leung, *Generalized Clustering Bandits*.
- **Shuai Li**, Tong Yu, Ole Mengshoel, Kwong-Sak Leung, *Online Semi-Supervised Learning with Large Margin Separation*.
- Pengfei Liu, Hongjian Li, **Shuai Li**, Kwong-Sak Leung, *Improving Prediction of Phenotypic Drug Response on Cancer Cell Lines Using Deep Convolutional Network*.
- Xiaojin Zhang, **Shuai Li**, Shengyu Zhang, *Contextual Combinatorial Conservative Bandits*.
- Pengfei Liu, **Shuai Li**, Kwong-Sak Leung, *The Recovery of Stochastic Differential Equations with Genetic Programming and Kullback-Leibler Divergence*.

Patents

- Training and Utilizing Item-level Importance Sampling Models for Offline Evaluation and Execution of Digital Content Selection Policies, with Y. Abbasi-Yadkori, B. Kveton, V. Vinay and W. Zheng, US Patent App., filed, 2018.

Internships & Research Experiences

- 2018.9-2019.2 Research Intern of Prof. Tong Zhang and Lei Han at Tencent AI Lab, Shenzhen, China.
- 2018.4.30-8.31 Research Intern of Prof. Csaba Szepesvari and 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, Prof. Shengyu Zhang and Weiwen Liu 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 multi-armed 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.

Talks & Posters

- AAAI 2018 (spotlight & poster)
- ICML 2016 (oral & poster), 2018 (poster)
- KDD 2018 (oral & poster)
- NIPS 2016
- WIML 2016 (poster)
- The International Doctoral Forum (oral), Hong Kong, 2016.10.28-30.

Awards

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| 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) |

Professional Services

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| 2019 | Conference reviewer for ICML-2019, UAI-2019, NeurIPS-2019 (invited) |
| 2018 | Conference reviewer for NeurIPS-2018 Conference sub-reviewer for IJCAI-2018, ICML-2018, UAI-2018, AAAI-2019, BIBM-2018 Journal reviewer for PALADYN, JSDT Journal sub-reviewer for IEEE SIPN |
| 2017 | Conference reviewer for AAAI-2018 Conference sub-reviewer for AISTATS-2018 Journal reviewer for TCS |

Teaching Experience

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| 2019 | Probability and Statistics for Engineers |
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- (undergraduate-level, TA, Prof. Andrej Bogdanov)
- 2018 Fundamentals of Artificial Intelligence
(undergraduate-level, TA, Prof. Kwong-Sak Leung)
Compiler Construction (undergraduate-level, TA, Dr. YUAN Cheng Jiun)
- 2016 Probability and Statistics for Engineers
(undergraduate-level, TA, Prof. Shengyu Zhang)
Randomness and Computation (graduate-level, TA, Prof. Shengyu Zhang)
- 2015 Analysis of Boolean Functions (graduate-level, TA, Prof. Shengyu Zhang)
Topics in Theoretical Computer Science
(graduate-level, TA, Prof. Shengyu Zhang)
- 2014 Calculus II (undergraduate-level, TA, Prof. Donald W Hadwin)
- 2013 Calculus I (undergraduate-level, TA, Prof. Liming Ge)