# Shuai Li (李帅)

Gender: Female

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### Education

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**

- Tor Lattimore, Branislav Kveton, **Shuai Li**, Csaba Szepesvai, *TopRank: A Practical Algorithm for Online Stochastic Ranking*, NIPS 2018.
- Ran Wang, Shuai Li, Man Hon Wong, and Kwong Sak Leung, Drug-Protein-Disease Association Prediction and Drug Repositioning Based on Tensor Decomposition, IEEE BIBM 2018.
- **Shuai Li**, Yasin Abbasi-Yadkori, Branislav Kveton, S. Muthukrishnan, Vishwa Vinay and Zheng Wen, *Offline Evaluation of Ranking Policies with Click Models*, KDD 2018, research track.
- Weiwen Liu, **Shuai Li**, Shengyu Zhang, *Exploration in Web Page Recommendation: A Contextual DCM Bandit Approach*, COCOON 2018.
- **Shuai Li**, Shengyu Zhang, *Online Clustering of Contextual Cascading Bandits*, AAAI, 2018.
- **Shuai Li**, Baoxiang Wang, Shengyu Zhang, Wei Chen, *Contextual combinatorial cascading bandits*, ICML 2016.
- 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.
- **Shuai Li**, Xiaoqian Xu, Guojin Wang, *Design for triangular rational Bézier harmonic and biharmonic surfaces*, Journal of Zhejiang University (Science

## **Under Submissions**

- **Shuai Li**, Wei Chen, Zheng Wen, Kwong-Sak Leung, *Online Stochastic Learning with Stochastic Feedback Graph*, ongoing.
- Shuai Li, Tor Lattimore, Csaba Szepesvari, Online Learning to Rank with Features.
- **Shuai Li**, Wei Chen, S Li, Kwong-Sak Leung, *Improved Algorithm on Clustering of Bandits via set representations*.
- 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*.
- 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**

- 2018.4.30-8.31 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 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.

# **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**

2018	Google PhD Fellowship.
	Reach out award, CUHK.
	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**

2019 2018	Conference reviewer for ICML-2019 (invited) Conference reviewer for NIPS-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

# **Teaching Experience**

Journal reviewer for TCS

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)