

## Research Interests

Information retrieval and machine learning. My main focus is to develop online learning approaches that optimize rankers in search and recommender systems. Broader research topics include multi-armed bandits, online learning to rank, federated learning, and sparse Bayesian learning.

## Education

2016 – 2021 **Ph.D. Candidates**, *Informatics Institute, University of Amsterdam*.

Research on online learning to ranking for information retrieval.

Supervisor: Prof. Dr. Maarten de Rijke

Expected graduation date: March 4th, 2021

2013 – 2016 **Master of Engineering**, *School of Computer Science, University of Science and Technology of China*.

Research on the sparse Bayesian learning approach for feature selection.

Thesis: *Sparse Bayesian Feature Selection* (partially published in [5])

Supervisor: Prof. Dr. Huanhuan Chen

2009 – 2013 **Bachelor of Engineering**, *School of Computer Science, Tianjin University*.

Innovation project: *Semantic Web Based Chinese Knowledge Summarization*

Supervisor: Dr. Xin Wang

## Professional Experience

2020 **Machine Learning Intern**, *Apple, Cupertino, USA*.

Spring machine learning intern at the Siri search team.

2019 **Data Science Intern**, *Bloomberg, New York, USA*.

Summer research intern at the search team.

## Publications and Preprints

- [1] **Chang Li**, Ilya Markov, Maarten de Rijke, and Masrour Zoghi. MergeDTS: A method for effective large-scale online ranker evaluation. *ACM Transactions on Information Systems*, 38(4), August 2020.
- [2] **Chang Li**, Haoyun Feng, and Maarten de Rijke. Cascading hybrid bandits: Online learning to rank for relevance and diversity. In *RecSys 2020: The ACM Conference on Recommender Systems*. ACM, September 2020.
- [3] **Chang Li**, Branislav Kveton, Tor Lattimore, Ilya Markov, Maarten de Rijke, Csaba Szepesvari, and Masrour Zoghi. BubbleRank: Safe Online Learning to Re-Rank via Implicit Click Feedback. In *UAI 2019: Conference on Uncertainty in Artificial Intelligence*, July 2019.
- [4] **Chang Li** and Maarten de Rijke. Cascading non-stationary bandits: Online learning to rank in the non-stationary cascade model. In *IJCAI 2019: Twenty-Eighth International Joint Conference on Artificial Intelligence*, pages 2859–2865, August 2019.

- [5] Bingbing Jiang, **Chang Li**, Maarten de Rijke, Xin Yao, and Huanhuan Chen. Probabilistic feature selection and classification vector machine. *ACM Transactions on Knowledge Discovery from Data*, 13(2):Article 21, April 2019.
- [6] **Chang Li** and Maarten de Rijke. Incremental sparse bayesian ordinal regression. *Neural Networks*, 106:294–302, October 2018.
- [7] **Chang Li**, Artem Grotov, Ilya Markov, and Maarten de Rijke. Online learning to rank with list-level feedback for image filtering. In *arXiv preprint arXiv:1812.04910*, 2018.
- [8] **Chang Li** and Huanhuan Chen. Sparse Bayesian Approach for Feature Selection. In *Proceedings of IEEE Symposium on Computational Intelligence in Big Data (CIBD), Orlando, FL, USA, December 9-12*, pages 7–13, 2014.

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## Teaching and Supervision

### Teaching assistant

2018 Information Retrieval I (52041INR6Y), Dr. Evangelos Kanoulas, UvA.

2017 Statistical Reasoning (5062STRE6Y), Dr. Rein van den Boomgaard, UvA.

### Student supervision

2019 Zheya Feng, MSc, UvA; Dimitar Dimitrov, MSc, UvA and Mike Marcous, BSc, UvA

2018 Rick Bruins, MSc, UvA and Ilse Lankhorst, MSc, UvA

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## Skills

Languages Chinese (native), English (fluent)

Frameworks Numpy, Scikit-Learn, PyTorch, XGBoost, LightGBM  
& Tools

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## Professional Service

Reviewer CIKM, IJCAI, WWW, WSDM, FnTIR, TNNLS, TII, TOIS