Education

Sep.2016– **Ph.D. student**, *Informatics Institute, University of Amsterdam*.

Present Supervisor: Prof. Dr. Maarten de Rijke

Research topic:

Online learning to rank

Multi-armed bandits

Sparse Bayesian learning

Sep.2013— **Master of Science**, School of Computer Science, University of Science and Technology Jun.2016 of China.

Supervisor: Prof. Dr. Huanhuan ChenThesis: Sparse Bayesian Feature Selection

Sep.2009— Bachelor of Engineering, School of Computer Science, Tianjin University.

Jul.2013 Supervisor: Dr. Xin Wang

Graduation project: Semantic Web Based Chinese Knowledge Summarization

Publications and Preprints

- [1] **Chang Li**, Branislav Kveton, Tor Lattimore, Ilya Markov, Maarten de Rijke, Csaba Szepesvari, and Masrour Zoghi. BubbleRank: Safe online learning to rerank. *The Web Conference 2019 (WWW 2019), under review, arXiv preprint arXiv:1806.05819*, 2019.
- [2] **Chang Li**, Ilya Markov, Maarten de Rijke, and Marsrour Zoghi. MergeDTS: A method for effective large-scale online ranker evaluation. *ACM Transactions on Information Systems* (TOIS), under review, arXiv preprint arXiv:1812.04412, 2018.
- [3] **Chang Li**, Artem Grotov, Bryan Eikema, Ilya Markov, and Maarten de Rijke. Online learning to rank with list-level feedback for image filtering. *arXiv preprint arXiv:1812.04910*, 2018.
- [4] **Chang Li** and Maarten de Rijke. Incremental sparse Bayesian ordinal regression. *Neural Networks*, 106:294–302, 2018.
- [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*, 2018. Accepted subject to minor revisions.
- [6] **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.

Selected Research Topics

2017-present **Bandits and ranking**.

Keywords: Dueling bandits, click models, upper confidence bound and Thompson sampling. Bandits algorithms are widely used in sequential decision making and online learning. I proposed two types of bandit algorithms: one is about the large-scale dueling bandits, called MergeDTS; the other is about the safe online learning to (re-)rank via click feedback, called BubbleRank.

2013–2017 Sparse Bayesian learning.

Keywords: Bayesian inference, Laplacian approximation, EM algorithm and ordinal regression. Sparse Bayesian learning is a widely used learning framework. By incorporating different types of likelihoods, I proposed an ordinal regression algorithm, called ISBOR and a joint feature selection and classification algorithm, called PFCVM.

Teaching and Supervision

Teaching assistant

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

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

Student supervision

2018 Rick Bruins, MSc Data Science, UvA, master thesis, topic: ICD-10 classification.

2018 Ilse Lankhorst, MSc Data Science, UvA, master thesis, topic: *Predicting hospital cost from a machine learning perspective*.

Professional Service

Reviewer Foundations and Trends in Information Retrieval

IEEE Transactions on Neural Networks and Learning Systems

IEEE Transactions on Industrial Informatics

Miscellaneous

Programming Python (Tensorflow), Matlab

languages

Languages Chinese (native), English (working proficiency)

Hobbies Sports, travel, movies