

Qingfeng Lan

✉ qian3@ualberta.ca | 🏠 lancelqf.github.io/about | 🌐 qian3

Education

University of Alberta

MASTER OF SCIENCE (THESIS-BASED), COMPUTING SCIENCE

- **Supervisor:** Alona Fyshe
- **Field of interest:** Reinforcement Learning, Representation Learning, Lifelong Learning

Edmonton, Canada

Sep 2018 - Present

University of Chinese Academy of Sciences (UCAS)

BACHELOR OF ENGINEERING, COMPUTER SCIENCE AND TECHNOLOGY

- **Supervisor:** Yanyan Lan
- **Overall GPA:** 3.78/4.0; **Subject GPA:** 3.85/4.0; **Class ranking:** 6/61

Beijing, China

Sep 2014 - July 2018

University of Oxford

VISITING NON-MATRICULATED PROGRAMME

- **Visiting Student** in Department of Computer Science, St Edmund Hall
- **Courses:** Computational Learning Theory, Computational Game Theory, Computer-Aided Formal Verification, Principles of Programming Languages, Computer Security, Lambda Calculus and Types, Quantum Computer Science

Oxford, England

Oct 2017 - Mar 2018

Research

Predictive Representation Learning for Sequence Labeling

THESIS PROJECT

- Working on

University of Alberta

June 2019-Present

Maxmin Q-learning: Controlling the Estimation Bias of Q-learning

ICLR 2020

- Highlighted that the effect of overestimation bias on learning efficiency is environment-dependent
- Proposed a new variant of Q-learning algorithm called Maxmin Q-learning which provides a parameter-tuning mechanism to flexibly control bias.

University of Alberta

April 2019-Sep 2019

Reducing Selection Bias in Counterfactual Reasoning for Individual Treatment Effects Estimation.

NEURIPS WORKSHOP ON CAUSAL MACHINE LEARNING 2019

- Proposed a new graphical model which includes the latent variables of the observed features
- Explicitly removed selection bias by separating the learned representations of features into parts

University of Alberta

Sep 2019-Dec 2019

A Deep Top-K Relevance Matching Model for Ad-hoc Retrieval

CCIR 2018

- Proposed a deep relevance matching model for ad-hoc retrieval problem
- Leveraged Top-K pooling to capture the details of interaction scores, applied term gating network to control the contributes of each query term to the final matching score

Institute of Computing Technology

July-Sep 2017

Publications

Conference Papers

- **Qingfeng Lan**, Yangchen Pan, Alona Fyshe, Martha White. Maxmin Q-learning: Controlling the Estimation Bias of Q-learning. ICLR, 2020. **(Poster)**
- Zichen Zhang, **Qingfeng Lan**, Lei Ding, Yue Wang, Negar Hassanpour, Russell Greiner. Reducing Selection Bias in Counterfactual Reasoning for Individual Treatment Effects Estimation. NeurIPS Workshop on Causal Machine Learning, 2019. **(Poster Spotlight)**
- Zhou Yang, **Qingfeng Lan**, Jiafeng Guo, Yixing Fan, Xiaofei Zhu, Yanyan Lan and Yue Wang, Xueqi Cheng. A Deep Top-K Relevance Matching Model for Ad-hoc Retrieval. CCIR, 2018. **(Best Paper Award Candidate)**

Honors

- The Interdisciplinary Contest in Modeling, Honorable Mention, Dec 2016
- National Endeavor Fellowship (won twice), Dec 2015 and Oct 2017
- UCAS Second-Class Academic Scholarship (won twice), Nov 2015 and Oct 2017
- UCAS Third-Class Academic Scholarship, Nov 2016
- CAS Academic Scholarship, Dec 2016

Skills

Languages Skilled in C/C++, Python, Verilog, PyTorch; Familiar with Keras, Tensorflow, Octave/MATLAB, Haskell