Qingfeng Lan

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EDUCATION

University of Alberta **Sep 2018-Present**

- Master of Science (Thesis-based) in Computing Science
- Field of interest: Reinforcement Learning, Representation Learning, Lifelong Learning

University of Chinese Academy of Sciences (UCAS) **Sep 2014-July 2018**

- Bachelor of Engineering, major in Computer Science and Technology, minor in Physics
- Overall GPA: 3.78/4.0 Subject GPA: 3.85/4.0 Class ranking: 6/61

University of Oxford **Oct 2017-Mar 2018**

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

RESEARCH AND PROJECT

Language Modelling with General Value Function Networks **June 2019-Present**
Institution: University of Alberta
Advisor: Alona Fyshe

- Working on

Maxmin Q-learning: Tuning the Overestimation Bias of Q-learning **April 2019-Present**
Institution: University of Alberta
Advisor: Martha White

- Working on

Reducing Selection Bias in Counterfactual Reasoning for Estimating Individual Treatment Effects **Sep 2018-Dec 2018**
Institution: University of Alberta
Advisor: Negar Hassanpour, Russ Greiner

- 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
- The new algorithm achieved state-of-the-art performance for outcome prediction

The Application of Variational Autoencoder in POMDPs **Jan 2018-March 2018**
Institution: Whiteson Research Lab, University of Oxford
Advisor: Maximilian Igl

- Learned Variational Autoencoder and Partially Observable Markov Decision Processes (POMDPs)
- Read codes of a project for the application of variational autoencoder in POMDPs

A Deep Top-K Relevance Matching Model for Ad-hoc Retrieval. **July-Sep 2017 && March-April 2018**
Institution: Institute of Computing Technology (ICT), Chinese Academy of Sciences (CAS)
Advisor: Jiafeng Guo

- 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
- The sort performance was significantly improved and our model outperformed other state-of-the-art deep models

PUBLICATIONS

- Zhou Yang, **Qingfeng Lan**, Jiafeng Guo, Yixing Fan, Xiaofei Zhu, Yanyan Lan and Yue Wang: A Deep Top-K Relevance Matching Model for Ad-hoc Retrieval, China Conference on Information Retrieval 2018 **(Best Paper Award Candidate)**

HONORS AND AWARDS

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

SKILLS

- Finished online courses with excellent scores in Coursera, include *Machine Learning* (Grade Achieved: 99.6%) and *Deep Learning 5-Course Specialization*
- Skilled in C/C++, Python, Verilog, PyTorch; Familiar with Keras, Tensorflow, Octave/MATLAB, LATEX, Haskell