# FENG QIAN

Personal Website

Google Scholar

(+1) 617-642-1201

fengqian@g.harvard.edu

Room 402, Conant Hall, 35th Oxford St., Cambridge, MA, USA

### **EDUCATION**

Harvard University, MA, USA

Aug 2018 - Dec 2019

Master in Data Science

Peking University (PKU), Beijing, China

Sep 2014 - Jul 2018

Bachelor of Management in Information Management & Information System

Peking University (PKU), Beijing, China

Sep 2015 - Jul 2018

Bachelor of Science in Computer Science (Dual Major)

### ACADEMIC PUBLICATIONS IN ARTIFICIAL INTELLIGENCE

### **PUBLICATIONS**

- 1. Feng Qian, Chengyue Gong, Karishma Sharma, Yan Liu. Neural User Response Generator: Early Fake News Detection with Wisdom of the Crowd. *Proceedings of the Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI)*. 2018. [paper]
- 2. Feng Qian, Natali Ruchansky, Prajwal Anand, Yan Liu. A dataset published with paper: Fake News Detection Dataset with Both Article Body and User Responses. *Proceedings of the Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI)*. 2018. [paper]
- 3. Feng Qian, Chengyue Gong, Luchen Liu, Lei Sha, Ming Zhang. Topic Medical Concept Embedding: Multi-Sense Representation Learning for Medical Concept. *IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*. 2017. (Acceptance Rate 10.4%. Oral representation. IEEE BIBM TCCLS Student Award). [paper][ppt]
- 4. Karishma Sharma, **Feng Qian**, He Jiang, Natali Ruchansky, Ming Zhang, Yan Liu. Combating fake news: A 42-page survey on identification and mitigation techniques. *ACM Transactions on Intelligent Systems and Technology (TIST)*. 2019. [paper]
- 5. Feng Qian, Lei Sha, Luchen Liu, Baobao Chang, Ming Zhang. Syntax Aware LSTM Model for Semantic Role Labeling. Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP) Workshop. 2017. [paper][ppt]
- 6. Feng Qian, Lei Sha, Baobao Chang, Zhifang Sui. Jointly Extracting Event Triggers and Arguments by Dependency-Bridge RNN and Tensor-Based Argument Interaction. Association for The Advancement of Artificial Intelligence (AAAI). 2018. [paper][ppt]
- 7. Lei Sha, **Feng Qian**, Zhifang Sui, Baobao Chang. Will Repeated Reading Benefit Natural Language Understanding? China Computer Federation (CCF) Conference on Natural Language Processing & Chinese Computing (NLPCC). 2017. [paper][ppt]
- 8. Lei Sha, Xiaodong Zhang, **Feng Qian**, Baobao Chang, Zhifang Sui. A Multi-View Fusion Neural Network for Answer Selection. Association for The Advancement of Artificial Intelligence (AAAI). 2018. [paper][ppt]

## CEO and Co-Founder of AdElite LLC $^{\circledR}$

Dec 2018 - Present

- · Designed and created an high-end academic summer program in which, with honor, we have 7 Harvard professors and 9 Harvard students to share their academic experience and experience.
- · Did sales and sales management, made a \$180K revenue and \$50K net income in the first year.
- · Designed and led a tech team to develop a whole web-based system that can support our sales management, student management, and academic management need.
- · Our company is developing fast and we are looking forward to a 5X net income in the coming 3 years and another branch on the west coast next year.

### Technique Consultant at Summit Education Enterprise®

Aug 2015 - Present

- · Established sales channels with more then 10 top universities in China. Keep donating 10% of all my income to charity.
- · Collected and cleaned sales data in the last ten years.
- · Trained a xgboost decision tree model on the dataset, found out students who have a higher possibility to become our future customers, and asked salespeople to give them special discounts.
- · Enhanced sales by 28% in the year of 2016 and 18% in 2017.

### ACADEMIC RESEARCH EXPERIENCES IN ARTIFICIAL INTELLIGENCE

Melady Lab, University of Southern California (USC)

May 2017 - Present
Fake news detection using machine learning and deep learning methods

Advisor: Prof. Yan Liu, Dr. Natali Ruchansky

- · co-authored a 42-page survey paper on the fake news detection and mitigation technology. [paper]
- · Collected a brand new fake news detection dataset, which contains both news articles and user responses. Such feature is not possessed by any other dataset. [paper]
- · Proposed and implemented a Two Layer Convolutional Neural Network with User Response Generator (TCNN-URG). TCNN-URG combines conditional generative model (C-VAE) and deep learning model (CNN) to utilize extra knowledge which lies between user responses and news article. Published on IJCAI. 2018. [paper]

Institute of Network Computing and Info System, Peking University Jan 2017 - Present Medical representation learning using machine learning and non-parametric method Advisor: Prof. Ming Zhang, Dr. Luchen Liu

- · Proposed and implemented Topic Medical Concept Embedding (TMCE) to address the problem that current embedding techniques could not consider multi-sense attributes of medical concepts.
- · TMCE combines intuitions from both embedding model and non-parametric topic model, and outperforms other strong baselines on diagnose prediction and ability of interpreting.
- · Paper published on IEEE BIBM. 2017. with an oral presentation and IEEE BIBM TCCLS Student Award. [paper][ppt]

Key Laboratory of Computational Linguistics, Peking University Sep 2016 - Oct 2017 Deep learning, machine learning, and neural networks on NLP tasks Advisor: Prof. Baobao Chang, Dr. Lei Sha

In order to address the problem that current deep learning model cannot utilize high-level semantic information provided by dependency relationships, proposed and implemented Syntax-Aware LSTM (SA-LSTM) which modifies the structure of Bi-LSTM according to the structure of dependency relationships. SA-LSTM reached new state-of-the-art on both Chinese and English SRL task. Work published on EMNLP workshop. 2017. [paper][ppt]

- · Further developed and adapted SA technique to event extraction task. Work published on AAAI. 2018. [paper][ppt]
- · Researched on whether repeated-reading models including deep-LSTM, multi-level attention, and multipass Bi-LSTM can help NLP tasks including POS tagging, sentiment analysis, semantic relationship classification, and event extraction. [paper][ppt]

ES-CAD Lab, University of Illinois at Urbana-Champaign (UIUC)

Real time facial recognition system from video

Advisor: Prof. Deming Chen, Co-Advisor: Prof. Zuofu Cheng

- · Proposed a new eigen-face frame selection algorithm.
- · Designed a hardware integrated real time facial recognition pipeline aiming to move computation forward to front-end hardware, which improved the computation efficiency of servers by 37%.

Big Data Mining Group (BDM), Microsoft Research Asia (MSRA) Oct 2017 - Jun 2018 Conversation understanding tool research

Advisor: Wenhao Huang

· Researched and built conversation understanding tools for future Microsoft Office products.

### **HONORS**

- IEEE BIBM 2017 Technical Committee on Computational Life Sciences (TCCLS) Student Award
- Innovative Researcher Award of Peking University, 2017
  - One of the 37 undergraduate students selected from 50,000+ students including all master and PhD students in Peking University
- Academic Performance Award
  - 1st Three Year Overall Academic Performance in my department
- Shouren Chen Research Scholarship, 2017
  - Highest Student Research Scholarship of Peking University (0.2%)
- Student Excellent Research Award, 2017 (2%)
- Student Excellent Research Award, 2016 (2%)
- Honorable Mention Award in Mathematical Contest in Modeling (MCM) (10%)

### **SKILLS**

Programming: C, C++, Python (Theano), Java, HTML, JavaScript, JQuery, CSS, Linux, Vim

Language: English (fluent), Mandarin Chinese (native)

- GRE: Verbal 158, Quantitative 167, Analytical Writing 3.5
- TOEFL: Total 112 (Reading 30, Listening 27, Speaking 27, Writing 28)

**Teaching:** Advanced Algorithm and Programming — Teaching Assistant

Music: Lead guitarist in a famous school band GentleMonster