FENG QIAN

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Room 608, 38 Building, Peking University, Beijing, 100871, China

EDUCATION

Peking University (PKU), Beijing, China

Sep 2014 - Jul 2018

Bachelor of Management in Information Management & Information System

	Second Year	Third Year
GPA	3.74	3.89
Ranking/61	3^{rd}	2^{nd}

Bachelor of Science in Electronic Engineering & Computer Science (Dual Major, GPA 3.63)

University of Southern California, LA, USA

Jun 2017 - Sep 2017

Full-time Researcher at the Melady Group, CS Department on fake news detection under the supervision of Prof. Yan Liu

University of Illinois, Champaign Urbana, IL, USA

Jun 2016 - Sep 2016

Full-time Researcher at the ES-CAD Lab, ECE Department on video face recognition under the supervision of Prof. Deming Chen.

Microsoft Research Asia (MSRA)

Oct 2017 - Jun 2018

Full-time researcher in Big Data Mining Group (BDM) on conversation understanding tools for future Microsoft Office® products.

PUBLICATIONS AND MANUSCRIPTS

PUBLICATIONS

- 1. 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]
- 2. **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]
- 3. 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: Structured Prediction for NLP (SP-NLP). 2017. [paper][ppt]
- 4. 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]
- 5. 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]

MANUSCRIPTS

- 6. **Feng Qian**, Natali Ruchansky, Yan Liu. Fake News Detection Technology: A Survey. With more than 15 pages and 70 references included. Finished and in submission.
- 7. Feng Qian, Natali Ruchansky, Prajwal Anad, Yan Liu. Dataset: Fake News Detection Dataset with Both Article Body and User Responses. Finished and to appear soon.
- 8. Feng Qian, Chengyue Gong, Natali Ruchansky, Lei Sha, Ming Zhang, Yan Liu. Neural User Response Generator: Early Fake News Detection with Wisdom of the Crowd. To be submitted to a top conference in data mining.
- 9. Chengyue Gong, **Feng Qian**, Lei Sha. Natural Language Generation from Multi-Relational Data. Finished and to be submitted to *International Joint Conferences on Artificial Intelligence (IJCAI)*. 2018.

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%)

RESEARCH EXPERIENCES

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

- · Finished a first author 15-page survey paper on fake news detection with more than 70 papers included after reading more than 100 papers. [[Manuscript 6.]]
- · 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. [[Manuscript 7.]]
- 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. [[Manuscript 8.]]

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. [[Publication 1.]] [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. [[Publication 3.]] [paper][ppt]
- · Further developed and adapted SA technique to event extraction task. Work published on AAAI. 2018. [[Publication 2.]] [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. [[Publication 4.]] [paper][ppt]

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

Real time facial recognition system form 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%.

Other Collaborative Research Projects

- · Contributed to part of coding and part of paper writing. [[Publication 5.]] [paper][ppt]
- · Contributed to brainstorming, idea proposal, part of coding and paper writing. [[Manuscript 9.]]

ENTREPRENEURSHIP

Technique Consultant at Summit Education Enterprise^(R)

Aug 2015 - Present

- \cdot Established sales channels with more then 10 top universities in China. Keep donating 10% of all my income.
- · 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.
- \cdot Enhanced sales by 28% in the year of 2016 and 18% in 2017.

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