JIAYING GONG

Torgerson Hall 3160Q, Blacksburg
+1-540-998-8206 ⋄ gjiaying@vt.edu

EDUCATION

Virginia Polytechnic Institute and State University 2019 - Present
Ph.D Student in Department of Computer Science.
Beijing University of Posts and Telecommunications 2015 - 2019
Queen Mary University of London(Joint Programme with BUPT)
Bachelor of Science in Telecommunications Engineering with Management (Multimedia).
Degree with First Class Honours.
Advisor: Ignacio de Castro Arribas (Research Associate of QMUL).

RESEARCH EXPERIENCE

Graduate Research Assistant, Department of Computer Science, Virginia Tech August 2019 - Present
• Crawled information from news websites and used NLP techniques (Name Entity Recognition, Coreference Resolution, Sentiment Analysis) to extract relevant information and pre-process text data.
• Build new features and predict the stock price movement through machine learning algorithms.

Research Intern, Research Institute of Information Technolgy, Tsinghua University May 2017 - Jan 2019
• Used docker to conduct cross-platform crawling tasks on the large scale distributed crawling systems.
• Proposed a quality-biased ranking algorithm based on Lucene scoring and quality of apps predicted through machine learning methods according to user interface features.
• Developed a mobile content search engine to recommend high-quality Apps from queries.
• Conducted a large-scale app quantitative analysis by a new mobile crawler which can automatically acquire application contents based on data from both user interface design and network performance.
• Transformed the qualitative analysis criteria into quantitative analysis through a cluster process on snapshots of apps, and analyzed the consistency of applications through pHash algorithm and DBSCAN algorithm.

PUBLICATIONS

1. Zexun Jiang, Hao Yin, Yan Luo, **Jiaying Gong**, *AMACS: Automated Mobile Application Content Sensing* In IEEE Transactions on Computational Social Systems (2020).
2. Pengpeng Zhou, Baoli Zhang, Bin Wu, Yao Luo, Nianwen Ning, **Jiaying Gong**, *A Novel Event Detection Model via Graph convolutional Network.* In 2019 International Conference on Web Information Systems Engineering (WISE).
3. Zexun Jiang, Hao Yin, Yan Luo, **Jiaying Gong**, Yuannan Yang, Manshan Lin, *Quantitative Analysis of Mobile App User Interface Design.* In Proceedings of 38th International Performance Computing and Communications Conference (IPCCC 2019). (Acceptance rate 29.2%)
4. Zexun Jiang, Ruifeng Kuang, **Jiaying Gong**, Hao Yin, Yongqiang Lyu, Xu Zhang, *What Makes a Great Mobile App? A Quantitative Study Using a New Mobile Crawler.* In 2018 IEEE Symposium on Service-Oriented System Engineering (SOSE)

TALKS

Guest Lecture at CS 4984: Machine Learning Capstone, Virginia Tech 28/01/2019

PROJECTS

Text Analysis and Machine Learning, CS 5604 Information Storage and Retrieval Aug 2019 - Dec 2019
• Implemented text summarization based on a new proposed model which combines feature-based, graph-based, and topic-based models on 1 million tobacco data set.
Report Link: (https://vtechworks.lib.vt.edu/handle/10919/96226)

Rumors Identification and Spread in WeChat, Graduation Project (Thesis) Aug 2018 - June 2019

• Built an important dataset of both rumors and non-rumors in WeChat Moments, including Uniform Resource Locations (URLs), titles, contents, accounts and timestamps.

• Proposed a novel Automatic Crawling and Identification System Model to detect and identify rumors in WM.

• Analyzed rumor diffusion based on Susceptible Infected Model, user location, WM views and page life time.

Report Link: (https://github.com/gjiaying/CV/blob/master/Rumors%20in%20WeChat.pdf)

HONORS/AWARDS

Outstanding Graduation Project (Top 1%), Beijing Municipal Commission of Education Dec 2019

IET Best Student Award (1 out of 589), The Institution of Engineering and Technology June 2019

BUPT Outstanding Project Prize (Top 2%), BUPT June 2019

Undergraduate College Prize 2019 (Top 3%), Queen Mary University of London June 2019

Scholarship of Beijing University of Posts and Telecommunications 2018 & 2017 & 2016

Honorable Mention in Interdisciplinary Contest In Modeling, COMAP April 2018 & April 2017

TECHNICAL SKILLS

C, JAVA, Python, HTML, MATLAB, Linux, OpenGL, VM, etc.