Quyu Kong

Contact Information

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Github:	https://github.com/qykong
Google Scholar:	https://scholar.google.com.au/citations?user=0EXa6lkAAAAJ

Research Interests

Information diffusion modeling in social media: stochastic modeling, online networks, computational social socience, Hawkes processes, epidemic models

Education

Present - Mar 2018 | The Australian National University
PhD candidate in Computer Science, affiliated with Data61, CSIRO.
Advised by Dr. Marian-Andrei Rizoiu, Prof. Lexing Xie, and Dr. Stephen Wan
Thesis Proposed Topic: *Linking Epidemic Models and Hawkes Point Processes for Modeling Information Diffusion*

Dec 2017 - Feb 2016 | The Australian National University
Advanced Master of Computing
Advised by Dr. Marian-Andrei Rizoiu
Research Topic: *Modeling Information Diffusion in Social Network*

Aug 2011 - Jun 2015 | *Zhejiang University*
Bachelor of Agronomy

Publications

[1] **Kong, Quyu**, Rohit Ram, Marian-Andrei Rizoiu. "Evently: Modeling and Analyzing Reshare Cascades with Hawkes Processes" *In Proceedings of the 14th ACM International Conference on Web Search and Data Mining (WSDM), Demo Track. 2021.*

[2] Rohit Ram, **Kong, Quyu**, Marian-Andrei Rizoiu. "Birdspotter: A Tool for Analyzing and Labeling Twitter Users" *In Proceedings of the 14th ACM International Conference on Web Search and Data Mining (WSDM), Demo Track. 2021.*

[3] **Kong, Quyu**, Marian-Andrei Rizoiu, Lexing Xie. "Describing and Predicting Online Items with Reshare Cascades via Dual Mixture Self-exciting Processes." *In Proceedings of the 13th ACM International Conference on Information and Knowledge Management (CIKM). 2020.*

[4] **Kong, Quyu**, Marian-Andrei Rizoiu, Lexing Xie. "Modeling Information Cascades with Self-exciting Processes via Generalized Epidemic Models" *In Proceedings of the 13th ACM International Conference on Web Search and Data Mining (WSDM). 2020.*

[5] **Kong, Quyu**. "Linking Epidemic Models and Hawkes Point Processes for Modeling Information Diffusion." *In Proceedings of the 12th ACM International Conference on Web Search and Data Mining (WSDM). 2019.*

[6] Rizoiu, Marian-Andrei, Swapnil Mishra, **Quyu Kong**, Mark Carman, and Lexing Xie. "SIR-Hawkes: Linking Epidemic Models and Hawkes Processes to Model Diffusions in Finite Populations." *In Proceedings of the Web Conference (WWW). 2018.*

[7] **Kong, Quyu**, Marian-Andrei Rizoiu, Siqi Wu, and Lexing Xie. "Will This Video Go Viral: Explaining and Predicting the Popularity of Youtube Videos." *In Companion Proceedings of the The Web Conference (WWW). 2018.*

Awards

Sep 2020, Jan 2021	SIGIR Student Travel Grant
Nov 2019	ANU CECS Dean's Travel Award
Mar 2018	Data61 PhD Scholarship
Dec 2017	ANU University Medal

Work experience

Sep 2020 - Now | *Research intern at Max Planck Institution, Berlin*
Measuring effectiveness of contact tracing and testing strategies for controlling epidemics.

Jan 2021 - Now | *Part-time Research Assistant at University of Technology, Sydney*
Enhancing topic detection of online postings through active machine learning.

Feb 2020 - Dec 2020 | *Part-time Research Assistant at ANU*
Developing an open source tool for modeling online information diffusions.

Dec 2017 - Nov 2016 | *Working Part-time at Spinify*
Fullstack Developer
Building an interactive web app for visualising staff performance in workplace.
Highlights: web app, reactjs, nodejs, Amazon Lambda

Teaching experience

Jun 2019 - Jul 2017 | *Teaching Assistant at ANU*
COMP4650/COMP6490 Document Analysis, 2018
COMP4880/8880 Computational Methods for Network Science, 2019

Technical Skills

Programming Languages: R, Python (Django, Flask), Javescript (React, Node.js)
Web: Fullstack development and maintenance (Computational Media Lab Webmaster)

Open Source Projects

- **evently:** A package designed for simulating and fitting the Hawkes processes and the HawkesN processes with several options of kernel functions. Code is available at: https://github.com/behavioral-ds/evently
- **Hip-demo:** An interactive web visualizer written in R language with Shiny library which is deployed on hipie.ml. Code is available at: github.com/qykong/hipdemo