# Wei Quan

**Assistant Professor** 

Faculty of Science and Technology

Beijing Normal University - Hong Kong Baptist University United International College Zhuhai, Guangdong, China

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#### RESEARCH KEYWORDS

Opinion Mining, Computational Social Science, Data Science, Natural Language Processing, Deep Learning, Big Data, Information Visualization, Cross Cultural Communication, Computermediated Communication

#### **EDUCATION**

2020	Ph.D. Information Science
	College of Computing and Informatics, Drexel University, Philadelphia, PA
2015	M.S. Library & Information Science
	School of Information Studies, Syracuse University, Syracuse, NY
2013	B.S. Information & Computing Science
	School of Science, Beijing University of Posts and Telecommunications, Beijing,
	China

#### **EMPLOYMENT**

2022 – Assistant Professor

Guangdong Provincial Key Laboratory of Interdisciplinary Research and Application for Data Science (IRADS), Zhuhai, Guangdong, China

2022 – **Associate Fellow** 

HKBU-UIC Research Postgraduate Studies Joint Board, Beijing Normal University - Hong Kong Baptist University United International College, Zhuhai, Guangdong, China

2022 – Assistant Professor

Faculty of Science and Technology, Beijing Normal University - Hong Kong Baptist University United International College, Zhuhai, Guangdong, China

#### 2020 – 2021 Research Associate

Social Research and Public Policy, New York University Abu Dhabi, Abu Dhabi, UAE

#### 2020 - 2021 Lecturer

School of Convergence, Sungkyunkwan University, Seoul, South Korea

## 2015 – 2020 **Doctoral Research/Teaching Fellow**

College of Computing and Informatics, Drexel University, Philadelphia, PA

#### 2018 – 2019 **Data Scientist**

Department of Biomedical and Health Informatics, Children's Hospital of Philadelphia, Philadelphia, PA

#### 2017 – 2018 **Data Scientist**

Information Services Department, Children's Hospital of Philadelphia, Philadelphia, PA

#### NPR Labs Intern

NPR, Washington, DC

### **2014 – 2015 Faculty Assistant**

School of Information Studies, Syracuse University, Syracuse, NY

## 2014 – 2015 Cataloging Assistant

College of Law Library, Syracuse University, Syracuse, NY

#### **SPONSORED PROJECTS**

#### 2022-2025 **Opinion Mining on Digital Media**

60K, UIC Research Grant - Start-up Research Fund, UICR0700038-22 PI: **Wei Quan** 

#### **PUBLICATIONS**

#### **Conference Full Papers**

- [P12] Kim, W., Quan, W. (2022). Instagram Users' Reactions towards Virtual Influencers: Revisiting Uncanny Valley with the Text Ming Approach. 2022 Korea Advertising Society Global Colloquium, Sokcho, Korea, July 6-7, 2022
- [P11] Han, S., Zhang, R. F., Shi, L., Richie, R., Liu, H., Tseng, A., **Quan, W.**, Ryan, N., Brent, D., Tsui, F. R. (2022). Classifying Social Determinants of Health from Unstructured Electronic Health Records Using Deep Learning-based Natural Language Processing. *Journal of biomedical informatics*, 103984.

- [P10] **Quan, W.** (2021, November). Challenges of Online Learning During the COVID-19: What Can We Learn on Twitter?. In *International Conference on Advanced Research in Technologies, Information, Innovation and Sustainability* (pp. 524-535). Springer, Cham.
- [P9] **Quan, W.**, Zhang, J., Hu, X. (2019). End-to-End Joint Opinion Role Labeling with BERT. 2019 IEEE International Conference on Big Data. Los Angeles, CA, December 9-12, 2019
- [P8] Zhang, J., Hu, X., Jiang, Z., Song, B., **Quan, W.** (2019). Predicting Disease-related RNA Associations based on Graph Convolutional Attention Network. IEEE International Conference on Bioinformatics and Biomedicine 2019. San Diego, CA, November 18-21, 2019
- [P7] Ruiz, V., Shi, L., **Quan, W.**, Ryan, N., Biernesser, C., Brent, D., Tsui, R. (2019). CLPsych2019 Shared Task: Predicting Suicide Risk Level from Reddit Posts on Multiple Forums. CLPsych at NAACL 2019. Minneapolis, USA, June 2-7, 2019
- [P6] **Quan, W.**, Chen, Z., Hu, X. (2018). BANN: A framework for aspect-level opinion mining. The 6th International Conference on Information Technology: IoT and Smart City. Hong Kong, China, December 29-31, 2018
- [P5] Chen, Z., Yu, X., Ling, Y., Song, B., **Quan, W.**, Hu, X. and Yan, E. (2018). Correlated Anomaly Detection from Large Streaming Data. 2018 IEEE International Conference on Big Data. Seattle, WA, December 10-13, 2018
- [P4] **Quan, W.**, Chen, Z., Gao, J., Hu, X. (2018). Comparative Study of CNN and LSTM based Attention Neural Networks for Aspect-Level Opinion Mining. 2018 IEEE International Conference on Big Data. Seattle, WA, December 10-13, 2018
- [P3] Guerra, J., **Quan, W.**, Li, K., Ahumada, L., Winston, F., Desai, B. (2018). Scosy: A Biomedical Collaboration Recommendation System. 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Honolulu, HI, July 17-21, 2018.
- [P2] **Quan, W.**, Hu, X. (2018). Which airline tops on social media: visualization of Twitter U.S. airline sentiment. 2018 International Conference on Business and Information Winter Session. Okinawa, Japan, January 23-25, 2018
- [P1] Zhao, C., Zang, Y., **Quan, W.**, Hu, X., Sacan, A. (2017). HIV-1, Human Protein-protein Interaction Prediction Based on Interface Architecture Similarity. IEEE International Conference on Bioinformatics and Biomedicine 2017. Kansas City, MO, November 13-16, 2017

## **Short Papers & Posters**

[SP11] **Quan, W.**, Li, Z., Kim, W. (2022). Implicit Discriminatory Bias Reflected in Yelp Reviews - A case study. 2022 IEEE International Conference on Big Data. Osaka, Japan, December 17-20, 2022

- [SP10] Feng, C., Wei, M., **Quan, W.**, Li, D. (2020). Who Gets Hired by Top LIS Schools in China? iConference 2020. Borås, Sweden, March 23-26, 2020
- [SP9] Wang, W., Feng, C., **Quan, W.** (2019). Data-driven control of a class of discrete-time linear complex dynamical networks. 2019 IEEE International Conference on Big Data. Los Angeles, CA, December 9-12, 2019
- [SP8] Zhang, J., Hu, X., Jiang, Z., **Quan, W.** (2019). Predicting Disease-related Associations based on A Novel Graph Adversarial Network. 2019 Mid-Atlantic Bioinformatics Conference. Philadelphia, PA, Oct. 11, 2019
- [SP7] Su, R., **Quan, W.** (2019). Visualizing periodicals published in Guangdong during the Republican Era. iConference 2019. Washington, DC, March 31-April 3, 2019
- [SP6] **Quan, W.**, Hu, X. (2018). Opinion Mining and Visualization Framework. 2nd Annual Drexel Emerging Graduate Scholars Conference. Philadelphia, PA, April 19, 2018
- [SP5] Feng, C., **Quan, W.** (2018). Data Analytics in Healthcare: A Case Study of Mining Electronic Health Records, iConference 2018. Sheffield, UK, March 25-28, 2018
- [SP4] Guerra, J., **Quan, W.**, Li, K., Ahumada, L., Desai, B. (2018). SchoSys: A collaboration recommendation system. 1st CHOP Education Symposium: Healthcare Professionals Teaching and Learning Together. Philadelphia, PA, January 24, 2018
- [SP3] **Quan, W.**, Ahumada, L., Zhang, Y., Pappas, J., Desai, B. (2017). Electronic Health Record Clustering Analysis: Association rule mining applied to medications and labs for Pneumonia and Urinary Tract Infections. 2017 Mid-Atlantic Bioinformatics Conference. Philadelphia, PA, Oct. 10, 2017
- [SP2] **Quan, W.**, Park, J. (2017). Use of Paralinguistic Features on Twitter across Chinese, English and Korean Cultures. 46th Annual Mid-Atlantic Region Association for Asian Studies Conference. Philadelphia, PA, October 6-8, 2017
- [SP1] **Quan, W.**, He, J. (2017). Detecting and Visualizing Topic Evolution of a Knowledge Domain in Scientific Literature. 9th Annual Drexel IEEE Graduate Forum's Research Symposium. Philadelphia, PA, Mar. 3, 2017

#### **Presentations & Invited Talks**

- [PIT12] Opinion Mining on Digital Media Data. Invited Talk at UIC DS Sharing Session. April 6, 2022. BNU-HKBU UIC.
- [PIT11] Opinion Mining on Digital Media Data. Invited Talk at IBS Seminar. May 12, 2021. KAIST.
- [PIT10] Opinion Mining on Digital Media Data and Beyond. Job Talk. October 23, 2020. Sungkyunkwan University.

- [PIT9] Opinion Mining on Digital Media Data: Advancing State-of-the-art Methods with Deep Learning. Final Defense. May 4, 2020. College of Computing and Informatics, Drexel University.
- [PIT8] End-to-End Joint Opinion Role Labeling with BERT. 2019 IEEE International Conference on Big Data. Los Angeles, CA, December 10, 2019.
- [PIT7] Technical Masterclasses: Digital and Online Portfolios. Invited Talk by Drexel Career Cornerstone Group & Drexel Data Science Club. May 31, 2019. College of Computing and Informatics, Drexel University.
- [PIT6] Opinion Mining from Online Platforms: Advancing state-of-the-art methods with Deep Learning and NLP. Proposal Defense. April 23 & 24, 2019. College of Computing and Informatics, Drexel University.
- [PIT5] BANN: A framework for aspect-level opinion mining. The 6th International Conference on Information Technology: IoT and Smart City. December 30, 2018. Hong Kong, China.
- [PIT4] Comparative Study of CNN and LSTM based Attention Neural Networks for Aspect-Level Opinion Mining. 2018 IEEE International Conference on Big Data. Dec. 11, 2018. Seattle, WA.
- [PIT3] Overview of Opinion Mining. Guest presentation for INFO 821 PhD Seminar on Topics in Information Science. May. 08, 2018. College of Computing and Informatics, Drexel University.
- [PIT2] Which airline tops on social media: visualization of Twitter U.S. airline sentiment. 2018 International Conference on Business and Information Winter Session. Jan. 24, 2018. Okinawa, Japan
- [PIT1] Opinion mining in NLP & Deep Learning. Candidacy Exam. June 15, 2017. College of Computing and Informatics, Drexel University.

#### **TEACHING**

## Assistant Professor, BNU-HKBU UIC

Instructor

Python Programming for Beginners (DS 1013)

Spring 2022; Fall 2022
Social Computing (DS 4063)

• Fall 2022

Ethics in An Era of Artificial Intelligence and Robotics (GFVM 1033)

• Spring 2022

## Lecturer, Sungkyunkwan University

Instructor Applied Natural Language Processing (DSC3025-01)

• Fall 2020

PhD Candidate, Drexel University

Doctoral

Math/Prog Foundations for DSCI (INFO T780)

Teaching Fellow

• Winter 2019 Computing and Informatics Design III (CI 103)

• Spring 2017

Computing and Informatics Design II (CI 102)

• Winter 2016

Software Project Management (INFO 638)

• Spring 2016

Information Systems Management (INFO 646)

• Spring 2016

#### **COURSE & CURRICULAR DESIGN**

• Course Designer, Social Computing (UIC, DS4063)

• Course Designer, Applied Natural Language Processing (SKKU, DSC3025-01)

#### **ADVISING & MENTORING**

#### **Undergraduate Students**

2022 – Guocheng Feng, Data Science

Huaiyu Cai, Data Science

Junlin Zhu, Data Science

#### **Senior Thesis Advising**

2022 – Thesis: Opinion Leader Detection in SNS Cyberspace: based on LDA topic

model about Juvenile Delinquency of bilibili.com

Yunan Li, Data Science

Qirui He, Data Science

Deran Kong, Data Science

#### **SERVICE & LEADERSHIP**

2022 - 2023	Graduate Student Mentor
2022 - 2023	Mentor Caring Program Mentor
2022	Special Intake Oral Examiner
2022	CEAE Oral Examiner
2021	TheWebConf 2021 Reviewer
2017 - 2020	Volunteer, Philadelphia Animal Welfare Society, Philadelphia, PA
2019	Resident Advisor at IHP, Philadelphia, PA
2018 - 2019	Front Desk Worker at IHP, Philadelphia, PA
2016 – 2017	Secretary, College of Computing and Informatics Doctoral Student Association, Philadelphia, PA
2016	Student Volunteer, iConference 2016, Philadelphia, PA
2014	Student Volunteer, Computers in Libraries 2014, Washington, D.C.
2014	Student Volunteer, Fayetteville Free Library, Fayetteville, NY
2014	Student Volunteer, Syracuse University Bird Library, Syracuse, NY

## PROFESSIONAL AFFILIATIONS

Upsilon Pi Epsilon, Pi Lambda Sigma Chapter of Beta Phi Mu

## **AWARDS**

[A10]	2019-2020 Teck-Kah Lim Graduate Student Domestic Travel Subsidy Award
[A9]	2019-2020 Drexel University College of Computing and Informatics Travel Award
[A8]	2018-2019 Drexel University College of Computing and Informatics Travel Award
[A7]	2018 International Conference on Business and Information Outstanding Paper Award
[A6]	2017-2018 Drexel University Office of International Programs International Travel Award
[A5]	2017-2018 Drexel University College of Computing and Informatics Travel Award

[A4] 2013-2015 D. Whitney Coe Graduate Scholarship
[A3] 2014-2015 Patricia Hallock Mautino Scholarship
[A2] 2011 1st Prize China Undergraduate Mathematical Contest in Modeling
[A1] 2010 Beijing University of Posts & Telecommunications Scholarship

### Referees

Name: Xiaohua Tony Hu

Title: Professor

Email Address: xh29@drexel.edu

Name: Yongjun Zhu Title: Assistant Professor

Email Address: zhu@yonsei.ac.kr

Name: Yujia Hu

Title: Assistant Professor

Email Address: yujiahu@uic.edu.cn

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