

QINGYU GUO

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Clear Water Bay, Kowloon, Hong Kong

EDUCATION

Hong Kong University of Science and Technology (HKUST), Hong Kong, China 2020 - Present

PhD candidate in Computer Science and Engineering

Topics: Computer Supported Cooperative Work (Understanding and Facilitating Online Communication); Social Computing; Human-Centered Machine Learning; Healthcare

Advisor: [Xiaojuan Ma](#)

University of the Chinese Academy of Sciences, Beijing, China 2014 - 2018

B.E. in Materials Science and Engineering

RESEARCH EXPERIENCE

Human-Computer Interaction Lab, HKUST 2020.09 - Present

Graduate Research Assistant, advisor: [Xiaojuan Ma](#)

Projects: Social Computing, Perception Modeling

- Led multiple research projects. Selected project:
 - Designed and conducted crowdsourced experiments to investigate the role of images in online medical crowdfunding campaigns; derived computational models to predict the level of first impressions conveyed from images in online medical crowdfunding campaigns [C.3].

Business Intelligence Lab, Baidu Research 2019.11 - 2020.08

Research Intern, advisors: [Hao Liu](#), [Fuzhen Zhuang](#), and [Hui Xiong](#)

Projects: Time-series Forecasting, Machine Learning on Graphs, Recommender Systems

- Finished one survey paper on knowledge graph-based recommender systems [J.1].
- Conducted statistical analysis to explore factors related to team performance in four data science competitions; developed models to predict the team's future rank [J.2].
- Characterized the urban vibrancy using a data-driven framework with multi-sourced data (user check-in data, POI data); developed graph-based models for urban vibrancy evolution forecasting [J.3].

Human-Computer Interaction Lab, HKUST 2019.05 - 2019.10

Visiting Research Intern, advisor: [Xiaojuan Ma](#)

Projects: Writing Support Tool, Online Communication, Online Social Support, Social Computing

- Implemented a writing support system (based on content assessment and recommendation) to facilitate users to increase the quality of responses in an online mental health community; conducted thematic analysis of the user perception toward the developed prototype system [C.1].
- Collected and annotated data for support-seeking intention expressed in posts from an online mental health community [C.2].
- Conducted the quantitative analysis of the user behavior data and self-reported questionnaires in using a text messaging prototype for romantic conversation online [S.1].

PUBLICATIONS

CONFERENCE PAPERS

[C.3] **Qingyu Guo**, Siyuan Zhou, Yifeng Wu, Zhenhui Peng, Xiaojuan Ma, “Understanding and Modeling Viewers’ First Impressions with Images in Online Medical Crowdfunding Campaigns”, in *Proceedings of the ACM Conference on Human Factors in Computing Systems* (CHI 2022)

[C.2] Zhenhui Peng, Xiaojuan Ma, Diyi Yang, Ka Wing Tsang, **Qingyu Guo**, “Effects of Support-Seekers’ Community Knowledge on their Expressed Satisfaction with the Received Comments in Mental Health Communities”, in *Proceedings of the ACM Conference on Human Factors in Computing Systems* (CHI 2021)

[C.1] Zhenhui Peng, **Qingyu Guo**, Ka Wing Tsang, Xiaojuan Ma, “Exploring the Effects of Technological Writing Assistance for Support Providers in Online Mental Health Community”, in *Proceedings of the ACM Conference on Human Factors in Computing Systems* (CHI 2020)

JOURNAL PAPERS

[J.3] Hao Liu, **Qingyu Guo**, Hengshu Zhu, Yanjie Fu, Fuzhen Zhuang, Xiaojuan Ma, Hui Xiong, “Characterizing and Forecasting Urban Vibrancy Evolution: A Multi-View Graph Mining Perspective”, in *ACM Transactions on Knowledge Discovery from Data* (TKDD 2023, to appear)

[J.2] Hao Liu, **Qingyu Guo**, Hengshu Zhu, Fuzhen Zhuang, Shenwen Yang, Dejing Dou, Hui Xiong, “Who will Win the Data Science Competition? Insights from KDD Cup 2019 and Beyond”, in *ACM Transactions on Knowledge Discovery from Data* (TKDD 2022)

[J.1] **Qingyu Guo**, Fuzhen Zhuang, Chuan Qin, Hengshu Zhu, Xing Xie, Hui Xiong, Qing He, “A Survey on Knowledge Graph-based Recommender Systems”, in *IEEE Transactions on Knowledge and Data Engineering* (TKDE 2020)

SHORT PAPERS, POSTERS AND WORKSHOPS

[S.1] Taewook Kim, **Qingyu Guo**, Hyeonjae Kim, Wenjie Yang, Meiziniu Li, Xiaojuan Ma “Facilitating Continuous Text Messaging in Romantic Encounters Online by Expanded Keywords Enumeration”, in *Computer Supported Cooperative Work and Social Computing Conference* (CSCW 2022)

SKILLS

Programming: Python, MATLAB, web development (JavaScript, HTML, Node.js), Bash

Quantitative research: survey, statistical analysis and modeling, machine learning, natural language processing, computer vision

Qualitative research: interview, thematic analysis

TEACHING ASSISTANT EXPERIENCE

COMP1029V Excel VBA Programming Bridging Course 2022 Fall

COMP4461 Human-Computer Interaction 2022 Spring

CSIT6000N Advanced Topics in Human-Computer Interaction 2022 Spring

COMP1021 Introduction to Computer Science 2021 Fall

COMP3711 Design and Analysis of Algorithms 2021 Spring

ACADEMIC EXPERIENCE

Reviewers: CHI 2023 (Outstanding Reviews × 2), CSCW 2022, WWW 2021, TKDE 2021