Anping Zhang

Ph.D. student at Institute of Data and Information
Tsinghua University
University Town of Shenzhen, NanShan District, Shenzhen, P.R. China.

Tel: (+86) 15998344635
zap21@mails.tsinghua.edu.cn
[GitHub]
[Homepage]
[Google scholar]

Research Interests: Data Mining, Graph, Topological Data Analysis

EDUCATION

Ph.D.   Data Science and Information Technology, Tsinghua-Berkeley Shenzhen Institute, Tsinghua University, China, 2021-2026 (expected) (Supervisor: Prof. Li Yang)

Visiting Scholar, Human Mobility and Networks Lab, UC Berkeley, 2024-2025 (Host: Prof. Marta C. González)

M.Sc.   Data Science for Cultural Heritage (with distinction), The Bartlett, University College London, The United Kingdom, 2019-2020

B.Sc.   Mathematics with Statistics for Finance (with honors), Department of Mathematics, Imperial College London, The United Kingdom, 2015-2019

PUBLICATIONS

Journal Articles

2025   **Anping Zhang**, Dexu Kong, Jiahao Lai, Guoqing Zhang, Yue Wang, Yang Li and Marta C. González. "How Group Collaboration Evolves and Drives Impact in Crisis Response?" Under review at *Communications Physics*, 2025

2022   **Anping Zhang**⋆, Ke Zhang⋆, Wanda Li, Yue Wang, Yang Li and Lin Zhang. "Optimising Self-organised Volunteer Efforts in Response to the COVID-19 Pandemic." *Humanities and Social Sciences Communications (**Humanit Soc Sci Commun**)* 9.1 (2022): 1-12. doi:https://doi.org/10.1057/s41599-022-01127-2

Conference Articles

2024   Dexu Kong, **Anping Zhang**, Yang Li. "Learning Persistent Community Structures in Dynamic Networks via Topological Data Analysis." *The 38th Annual AAAI Conference on Artificial Intelligence.* Vol. 38. No. 8. 2024.

2023   Shutong Chen⋆ , **Anping Zhang**⋆, Qiqi Chen⋆, Yang Li. "Volunteer Retention and Future Collaboration Prediction in Volunteer Crowdsourcing Platforms." *In 2023 IEEE 33rd International Workshop on Machine Learning for Signal Processing (MLSP), pp. 1-5. IEEE, 2023.*

RESEARCH EXPERIENCE

2024 - Now   **Burstness of collective actions** advised by Prof Marta Gonzalez and Prof. Yang Li.

2022 - 2024   **Topological Data Analysis** advised by Prof. Yang Li.

- We proposed a novel deep graph clustering framework with temporal consistency regularization on inter-community structures, inspired by the concept of minimal network topological changes within short intervals. [AAAI 2024]

- We proposed a topological-based framework to quantify dynamic collaboration patterns in a large-scale, dynamic volunteer collaboration network. [Under Review at Communications Physics]

2020 - 2021 **Volunteer Behavior Analysis** advised by Prof. Yang Li, Yue Wang and Lin Zhang.

- We proposed a quantitative way to measure self-organization in volunteer behaviors based on normalized conditional entropy.
- Analyzed causal effects of volunteer behaviors using a modified version of PCMCI+ algorithm.
- Homepage of this work : https://anpingzzzz.github.io/pioneers2021.github.io/

2019 - 2020 **Statistical Analysis of Paper Collections Data** advised by Dr. Josep Grau-Bove and Prof. Tom Fearn.

- We proposed a second-order Markov Chain model to predict the future number of paper visits in the City Archives of Amsterdam.

SERVICE

2023 Autumn Teaching Assistant of The Strategic Value of Innovation Technology by Prof. Xiaoquan (Michael) Zhang, Tsinghua University

2023.8 Teaching Assistant of Summer Camp by Prof. Xiao-Ping Zhang, Prof. Wenbo Ding, and Prof. Yansong Tang, X-institute

2022 Autumn Class and Student Representative at SIGS, Tsinghua University

2021 & 2022 Autumn Teaching Assistant of Writing Scientific Papers & Making Presentations in English by Prof. Faisal Nadeem Khan, TBSI.

2021.7 Member of the executive committee of TBSI Workshop on Learning Theory (TBSI-WOLT'21).

2019 Academic Representative at University College London

HONORS & AWARDS

2023.7 Best Poster Award in *International Workshop on Learning and Information Theory 2023 (WOLIT'23)*

2023.5 Best Report & Distinguished Paper Award in 15th Nanshan Academic Forum for Doctoral Students in the Guangdong Hong Kong-MacaoGreater Bay Area, in conjunction with the 706th Doctoral Forum of Tsinghua University.

2022.12 The Second Prize Scholarship of SIGS, Tsinghua University

2020.6 Shortlisted for the academic representative of the year at University College London.

2014.6 Copper Award in the Cambridge Chemistry Challenge 2014

2014.3 Bronze Certificate in the 46th International Chemistry Olympiad UK Round One

2013.11 Gold Certificate in UK Senior Mathematical Challenge 2013 with *full mark 125/125 on the paper*

2013.8 Gold Prize in The 28th China Adolescents Science & Technology Innovation Contest

Updated September 2025