Anping Zhang

Visting Scholar at Human Mobility and Networks Lab at UCB
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Research Interests: Data Mining, Graph, Topological Data Analysis

EDUCATION

Ph.D.   Data Science and Information Technology, Tsinghua-Berkeley Shenzhen Institute, Tsinghua University, China, 2021-2025 (expected)

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

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

2023   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 to 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.

INNOVATIVE PROJECT

2013 **A Crawler Mobile Car** (The 28th China Adolescents Science & Technology Innovation Contest).
- Proposed properties such as light-driven and auto-adapting
- Constructed a prototype after studying implementation of existing crawler mobile cars
- Won the Gold prize and Ranked top five out of 350 participating teams worldwide

2013 **A Weighing Spoon** (National Utility Model Patent)
- Able to weight condiments using weighing sensors and signal magnifying modules.
- Patent No.: ZL 2013 2 0236015.9

2013 **A Smart Mouse** (National Utility Model Patent)
- Able to record online surfing time using temperature sensors, timing modules and vibration-detecting devices
- Patent No.: ZL 2013 2 0237167.0

INDUSTRY EXPERIENCES

2019.6 - 2019.9 **Chinese Desk Sales and Trading Intern** at *VORTO Trading Ltd* (London, UK)
- Cooperating with commercial banks, accountant company and property investment agents

2018.8 - 2018.10 **Auditing Intern** at Ernst & Young Global Shared Services Co. Ltd (Dalian, China)
- Collected enterprise information, prepared due diligence reports, contacted external suppliers

2018.7 - 2018.8 **Asset Management Intern** at *China Galaxy Financial Holdings Ltd* (Beijing, China)
- Financial Data Visualization and Analysis

2017.6 - 2017.7 **Financial Markets Intern** at *Bank of East Asia Ltd*. (Shanghai, China)
- Drafting reports on daily trading performance

2016.10 - 2017.1 **Part-time FX Trader** at *HooCapital Ltd*. (London, UK)
- Forex Trading for G10 Currency

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 August 2025