# LIN CHEN

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Department of Computer Science and Engineering

The Hong Kong University of Science and Technology

## RESEARCH INTERESTS

Urban Mobility, Urban Science, Computational Social Science, Graph Neural Networks.

## **EDUCATION**

The Hong Kong University of Science and Technology, Hong Kong
Ph.D. Candidate in Department of Computer Science and Engineering
Advisor: Prof. Pan Hui

Tongji University, Shanghai
B.S. in Department of Electronics and Information Engineering
Summa cum laude (GPA: 4.86/5)

Sept. 2020 - Present
Sept. 2020 - Present

# RESEARCH EXPERIENCE

The Hong Kong University of Science and Technology, Hong Kong Research Assistant @ SyMLab Advisor: Prof. Pan Hui (Director of SyMLab)	Sept. 2020 - Present
Tsinghua University, Beijing Visiting Researcher @ Future Intelligence Lab (FIB) Advisor: Prof. Yong Li (Director of FIB)	Apr. 2023 - Nov 2023
University of Chicago, Chicago Visiting Researcher @ Knowledge Lab Advisor: Prof. James Evans (Director of Knowledge Lab)	Dec. 2022 - Apr. 2023
Feng Chia University, Taichung Summer School, Innovation for Aging in Place	Jul. 2017

## SELECTED AWARDS

Rising Stars Women in Engineering Workshop, Asian Deans' Forum	2023
ICWSM Student Travel Grant	2023
HKUST Overseas Research Award	2022
Hong Kong PhD Fellowship (HKPFS)	2020-2024
Shanghai Outstanding Bachelor Graduate	2020
Outstanding Student of Tongji University	2019
China National Scholarship	2019
China National Scholarship	2018
China National Scholarship	2017

## **PUBLICATIONS**

- [6] Zhenyu Han, **Lin Chen**, Qianyue Hao, Qiwei He, Katherine Budeski, Depeng Jin, Fengli Xu, Kun Tang, and Yong Li. How enlightened self-interest guided global vaccine sharing benefits all: a modelling study. To appear in *Journal of Global Health*. (2023)
- [5] Lin Chen, Qianyue Hao, Fengli Xu, Yong Li, and Pan Hui. Getting Back on Track: Understanding COVID-19 Impact on Urban Mobility and Segregation with Location Service Data. *Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)*, 17(1), 126-136. (2023)
- [4] Qianyue Hao, Fengli Xu, **Lin Chen**, Pan Hui, and Yong Li. Hierarchical Multi-agent Model for Reinforced Medical Resource Allocation with Imperfect Information. *ACM Transactions on Intelligent Systems and Technology (TIST)*, Volume 14, Issue 1, pp 1–27. (2022)
- [3] Lin Chen\*, Fengli Xu\*, Zhenyu Han, Kun Tang, Pan Hui, James Evans, Yong Li. Strategic COVID-19 vaccine distribution can simultaneously elevate social utility and equity. *Nature Human Behaviour* (IF=24.252), Volume 6, Issue 11, pp 1503–1514. (2022)
- [2] Qianyue Hao, Fengli Xu, **Lin Chen**, Pan Hui, Yong Li. Hierarchical Reinforcement Learning for Scarce Medical Resource Allocation with Imperfect Information. *Proceedings of the 27th ACM SIGKDD Conference on Knowledge Discovery & Data Mining (SIGKDD)*, pp. 2955-2963. (2021)
- [1] Qianyue Hao\*, Lin Chen\*, Fengli Xu, Yong Li. Understanding the Urban Pandemic Spreading of COVID-19 with Real World Mobility Data. Proceedings of the 26th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining (SIGKDD), pp. 3485-3492. (2020)

#### WORKING PAPERS

- [3] Lin Chen, Yong Li, and Pan Hui. VulnerabilityMap: An Open Dataset for Mapping Vulnerability among Urban Disadvantaged Populations in the United States. Under review in *TheWebConf Web4Good Special Track*.
- [2] Yunke Zhang, Fengli Xu, **Lin Chen**, Yuan Yuan, James Evans, Luis Bettencourt, and Yong Li. Counterfactual Mobility Network Embedding Reveals Prevalent Accessibility Gaps in U.S. Cities. Under review in *Humanities and Social Sciences Communications*.
- [1] **Lin Chen**, Fengli Xu, Yong Li, Pan Hui. Heterogeneous Mobility Response in Complex Urban Networks. Ongoing work.

#### TEACHING EXPERIENCE

COMP 4641: Social Information Network Analysis and Engineering @HKUST Spring 2021 Teaching Assistant; Instructor: Prof. Pan Hui

COMP 4021: Internet Computing @HKUST Teaching Assistant; Instructor: Prof. Dik-Lun Lee

Fall 2021

## ACADEMIC SERVICE

Conference Reviewer: TNSE'20, TheWebConf'22, IC2S2'22, IMWUT'22, WSDM'23 Journal Reviewer: Journal of Social Computing (JSC)

#### LANGUAGE

Chinese (native, both Putonghua and Teochew), English (proficient), Korean (beginner)

## TALKS AND POSTERS

<sup>\*</sup> indicates equal contribution.

[Sept 2023] "Strategic COVID-19 vaccine distribution can simultaneously elevate social utility and equity", Poster @ the 3rd International Forum on Big Data for Sustainable Development Goals (FBAS'23).

[Aug 2023] "Strategic COVID-19 vaccine distribution can simultaneously elevate social utility and equity", Poster @ the First Research Summit for Urban Science (RSUS'23).

[Jun 2023] "Getting Back on Track: Understanding COVID-19 Impact on Urban Mobility and Segregation with Location Service Data", Oral @ the International AAAI Conference on Web and Social Media (ICWSM'23).