

Hongbo Li

(Updated: July 28, 2023)

Address: 714-S03, Building 1, 8 Somapah Road, Singapore, 487372

Tel: +65-89420248 E-mail: hongbo_li@mymail.sutd.edu.sg

Homepage: <https://lihongbo97.github.io/>

RESEARCH INTERESTS

- Network Economics and Game Theory
- Mobile Crowdsourcing and Networked AI
- Multi-agent Learning

EDUCATION BACKGROUND

- 09/2020-Present** Singapore University of Technology and Design (SUTD), Ph.D.
Engineering Systems and Design (ESD) Pillar
Advisor: Duan Lingjie, Associate Professor
- 09/2015-06/2019** Shanghai Jiao Tong University (SJTU), BSc
School of Electronic Information and Electrical Engineering, IEEE Honor Class (Top 10% of the entrance examination)

WORK EXPERIENCE

- 06/2020-08/2020** Shanghai Jiao Tong University **Research Assistant**
- Independently created a virtual testbed in Robot Operating System (ROS) to facilitate virtual-physical modeling within our digital-twin system.
- 07/2019-06/2020** AI Lab., Chang Hong Electric Co., Ltd **Assistant Engineer**
- Developed algorithms for 1cm-precision AGV (Automated Guided Vehicle) mapping, path planning, and navigation using multiple sensors.
 - Successfully applied the algorithms in real-world scenarios on intelligent manufacturing production lines.
- 03/2018-06/2019** Shanghai Jiao Tong University **Research Assistant**
- Established a virtual-physical robot experimental platform using Turtlebot2, Turtlebot3 robots, and ROS.
 - Developed algorithms for multi-robot formation consensus and machine learning based robot attack and defense (More than 200 stars and forks on GitHub).

PUBLICATIONS

contributed equally: [†]

Journal Articles.....

- [1] H. Li and L. Duan, "Online Pricing Incentive to Sample Fresh Information," in *IEEE Transactions on Network Science and Engineering*, 10(1), 514-526. 2023. (JCR Q1, 中科院二区)

Conference Papers.....

- [1] H. Li and L. Duan, "When Congestion Games Meet Mobile Crowdsourcing: Selective Information Disclosure," In *The Proceedings of 37th AAAI Conference on Artificial Intelligence*, 37(5), 5739-5746. 2023. (Oral, CCF A)

Please note that there are **3 more** papers (first-author) under review.

Preprints

[1] X. Ding[†], H. Wang[†], **H. Li[†]**, H. Jiang, and J. He, “Robopheus: A Virtual-physical Interactive Mobile Robotic Testbed,” *arXiv preprint arXiv:2103.04391*.

PATENTS

- **H. Li**, X. Ding, Y. Li, and J. He, “Particle Filter Based Multi-Robot Formation Localization Method and Robot Devices”, application number: 202010128966.9, under the substantive examination.

PAPER REVIEW

- ACM Mobihoc 2022 Conference.

Teaching Experience

- **Game Theory**, teaching assistant, undergraduate course, Singapore University of Technology and Design, Engineering Systems and Design Pillar, 2022 May.
- **Data and Business Analytics**, teaching assistant, undergraduate course, Singapore University of Technology and Design, Engineering Systems and Design Pillar, 2022 June.

Talks

- [04/2023] “When Mobile Crowdsourcing Meets Congestion Games: Selective Information Disclosure”, Shanghai Jiao Tong University, Shanghai, China.

AWARDS & ACHIEVEMENTS

05/2019	Outstanding Graduates of Shanghai (Top 2% in SJTU)
12/2017	Student of the Year (Nomination Award), SJTU (Top 15/40000)

STUDENT EMPLOYMENT

12/2017-12/2018	Students' Association Union, SJTU	Executive President
➤	Took charge of the operation and daily matters of over 200 student clubs in SJTU.	
➤	In charge of anniversary projects of SJTU, coordinated more than 300 activities each year.	