

SHI Rui, Ph.D. Candidate

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🌐 My Personal Homepage

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Research Interests

- Topics**
1. Economics of blockchain, blockchain governance, and decentralized community
 2. Financial technology (esp. regulatory technology) and supply chain finance
 3. Algorithmic fairness and human-algorithm interaction
 4. Data ownership and data trading
- Methodologies**
1. Analytical modeling
 2. Econometrics
 3. Machine learning and data mining
 4. Experiments
 5. Agent-based modeling and simulation

Education

- 2019 – Now
- 📖 **Ph.D. Student in Information Systems, City University of Hong Kong**
Tentative thesis title: *Incentive Schemes and Strategic Behaviors in Decentralized Two-Sided Market: towards Better Blockchain Systems.*
Supervisors: Prof. J. Leon Zhao and Prof. Wei Thoo Yue
- 2014 – 2018
- 📖 **B.A. in Information Management and Information Systems, Nanjing University**
Thesis title: *A Blockchain-Based Supply Chain Finance Optimization Solution.*
Supervisors: Prof. Sanhong Deng and Dr. Jiaqi Yan

Research Publications

Journal Articles

- 1 Leng, J., Jiang, P., Xu, K., Liu, Q., Zhao, J. L., Bian, Y., & **Shi, R.** (2019). Makerchain: A blockchain with chemical signature for self-organizing process in social manufacturing. *Journal of Cleaner Production*, 234, 767–778.
- 2 Leng, J., Yan, D., Liu, Q., Xu, K., Zhao, J. L., **Shi, R.**, ... Chen, X. (2019). Manuchain: Combining permissioned blockchain with a holistic optimization model as bi-level intelligence for smart manufacturing. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 50(1), 182–192.

Conference Papers

- 1 Hui, K.-L., **Shi, R.**, Yue, W. T., & Zhao, J. L. (2021). Permissioned blockchains, transaction fee, and strategic orderers: An economic analysis. In *The workshop on information technologies and systems (WITS)*. (**Alphabetic order**)
- 2 Chen, S., Zhang, J., **Shi, R.**, Yan, J., & Ke, Q. (2018). A comparative testing on performance of blockchain and relational database: Foundation for applying smart technology into current business systems. In *International conference on distributed, ambient, and pervasive interactions* (pp. 21–34). Springer. (**Corresponding author**)
- 3 Chen, S., **Shi, R.**, Ren, Z., Yan, J., Shi, Y., & Zhang, J. (2017). A blockchain-based supply chain quality management framework. In *2017 IEEE 14th International Conference on e-Business Engineering (ICEBE)* (pp. 172–176). IEEE.

Teaching Experience

Semester B, 2020/21

📖 **Python Programming for Business**

Lab Tutorial, Undergraduate Level

Teaching Rating: 5.79/7.00 (mean), 6.00/7.00 (median)

Students' Comments (Anonymous):

- "The tutor is rather helpful, and willing to answer every question."
- "The teacher tried to explain everything as best as he could no matter how silly the question was. He was very attentive to every student's comments and concerns. He helped a lot in my learning experience. Thank you!"
- "The tutor was patient and imported some knowledge that is out of the course."

Semester B, 2019/20

📖 **Blockchain Technology and Business Applications**

Technical Support, Graduate Level

Skills

- Languages 📖 English, Mandarin Chinese, and I'm learning Cantonese now.
- Coding 📖 Golang, JavaScript, Python, R, SQL, \LaTeX , ...
- Blockchain 📖 Hyperledger, Ethereum, ...
- Web Dev 📖 Node.js and Express, Python Falsk, HTML, CSS, ...

Miscellaneous Experience

Awards and Achievements

- 2021 📖 **First Prize Paper**, China Tourism Science Annual Conference.
- 2018 📖 **Global Best 50 Teams**, *Xunlei* Global Blockchain Application Challenge Competition.
- 📖 **Merit Award**, *Liangubei* Blockchain Application Innovation Competition.
- 📖 **Merit Award**, National College Students Data-Driven Research Innovation Competition.

Research Assistant and Internship

- 2019 📖 **Research Assistant**, EPIC Lab, CityU Shenzhen Research Institute.
- 2018 📖 **Blockchain Development Intern**, Jiangsu PeerFinTech Ltd.
- 2017 📖 **Research Assistant**, Peer Blockchain Lab, Nanjing University.