Zhiyuan Wang

(Updated: November 23, 2021)

Professional Experience

- **Associate Professor** *Oct. 2021 - Present*
  - School of Computer Science & Engineering, Beihang University

- **Post-Doctoral Fellow** *Oct. 2019 - Oct. 2021*
  - Computer Science & Engineering, The Chinese University of Hong Kong
  - Advisor: Prof. John C.S. Lui (ACM Fellow, IEEE Fellow)

Education Experience

- **The Chinese University of Hong Kong**, Hong Kong *Aug. 2016 - Sept. 2019*
  - Ph.D., Information Engineering
  - Advisor: Prof. Jianwei Huang (IEEE Fellow)
- **Southeast University**, Nanjing *Aug. 2012 - June 2016*
  - B.Eng., Information Engineering (GPA:3.9/4.0, Ranking: 1/243)
  - Excellent Graduate Student Award

Research Interests

- **Research Field & Applications**
  - Edge and cloud computing
  - Internet of Things (IoT), Age of Information (AoI), Smart city
  - Network economics and pricing

- **Major Methodologies**
  - Algorithmic game theory, Mechanism design
  - Online learning and optimization
  - Stochastic modeling, mean filed analysis

Awards & Honors

- Best In-Session Presentation Award, IEEE INFOCOM, 2019
- Student Travel Grant (ACM MobiHoc 2018, IEEE WiOpt 2018)
- Best Student Presentation Award, NCEL Spring Workshop, 2018, 2019
- **Hong Kong PhD Fellowship**
  - One of 231 awardees in 2016/17
- **Person of the Year Finalist** in Jiangsu Province, May 2016
- **Baosteel Fellowship**, Baosteel, December 2015
  - One of the 25 award winners in mainland China (only 5 undergraduates)
- **National Scholarship**, Southeast University 2013/14
- The Most Influential Graduate Student Finalist, Southeast University, June 2016
- Excellent Graduate Student Award, Southeast University, June 2016
- Excellent Academic Performance Award, Southeast University, 2012/13 & 2013/14
  - GPA Top 3%, 6 out of 243.

- Meritorious Winner of the Interdisciplinary Contest in Modeling (ICM), COMAP, April 2014

Publications

- **Conference Papers**

  [C1] **Z. Wang**, J. Ye, and John C.S. Lui, "An Online Mean Field Approach for Hybrid Edge Server Provision", *ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, July, 2021 (Acceptance rate 20.1%, CCF B).

  [C2] **Z. Wang**, J. Ye, D. Lin, Y. Chen, and John C.S. Lui, "Design Approximate and Deployable SRPT: A Unified Theoretical Framework" *IEEE/ACM International Symposium on Quality of Service (IWQoS)*, Short Paper, June, 25-28, 2021 (CCF B).

  [C3] **Z. Wang**, L. Gao, and J. Huang, "Taming Time-Varying Information Asymmetry in Fresh Status Acquisition" *IEEE International Conference on Computer Communications (INFOCOM)*, May 10-13, 2021 (Acceptance rate 19.9%, CCF A).

  [C4] **Z. Wang**, L. Gao, and J. Huang, "Travel with Your Mobile Data Plan: A Location-Flexible Data Service", *IEEE International Conference on Computer Communications (INFOCOM)*, April 27-30, 2020 (Acceptance rate 19.8%, CCF A).

  [C5] **Z. Wang**, L. Gao, J. Huang, and B. Shou "Economic Viability of Data Trading with Rollover", *IEEE International Conference on Computer Communications (INFOCOM)*, Paris, France, 29 April - 2 May, 2019 (Acceptance rate 19.7%, CCF A).

  [C6] **Z. Wang**, L. Gao, and J. Huang, "Multi-Dimensional Contract Design for Mobile Data Plan with Time Flexibility", *ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, Los Angeles, CA, USA, June 26-29, 2018 (Acceptance rate 16.9%, CCF B).

  [C7] **Z. Wang**, L. Gao, and J. Huang, "Pricing Competition of Rollover Data Plan", *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Shanghai, China, May 7-11, 2018.

  [C8] **Z. Wang**, L. Gao, and J. Huang, "A Contract-Theoretic Design of Mobile Data Plan with Time Flexibility", *ACM Workshop on the Economics of Networks, Systems and Computation (NetEcon)*, MIT, Cambridge, MA, USA, June 27, 2017 (in conjunction with ACM EC 2017).

  [C9] **Z. Wang**, L. Gao, and J. Huang, "Pricing Optimization of Rollover Data Plan", *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Paris, France, May 15-19, 2017.

- **Journal Papers**

  [J1] **Z. Wang**, L. Gao, and J. Huang*, "Location-Flexible Mobile Data Service in Overseas Market," *IEEE Transactions on Mobile Computing (TMC)*, 2020 (CCF A)

  [J2] **Z. Wang**[†], L. Gao[†], T. Wang*, and J. Luo, "Monetizing Edge Computing Service in Mobile Internet Ecosystem", *IEEE Transactions on Mobile Computing (TMC)*, 2020 (CCF A)

  [J3] **Z. Wang**, L. Gao, J. Huang*, and B. Shou, "Toward Flexible Wireless Data Services," *IEEE Communication Magazine*, vol. 57, no. 12, pp. 25-30, December, 2019 (IF: 11.052).

  [J4] **Z. Wang**, L. Gao, and J. Huang*, "Multi-Cap Optimization for Wireless Data Plans with Time Flexibility," *IEEE Transactions on Mobile Computing (TMC)*, vol. 19, no. 9, pp. 2145-2159, September, 2019 (CCF A)

  [J5] **Z. Wang**, L. Gao, and J. Huang*, "Duopoly Competition for Mobile Data Plans with Time Flexibility," *IEEE Transactions on Mobile Computing (TMC)*, vol. 19, no. 6, pp. 1286-1298, June, 2019. (CCF A)

  [J6] **Z. Wang**, L. Gao, and J. Huang*, "Exploring Time Flexibility in Wireless Data Plans," *IEEE Transactions on Mobile Computing (TMC)*, vol. 18, no. 9, pp. 2048-2061, September, 2018 (CCF A)

- **Submitted Papers**

  [S1] **Z. Wang**, J. Ye, D. Lin, Y. Chen, and John C.S. Lui, "Approximate and Deployable Shortest Remaining Processing Time Scheduler" submitted to *IEEE/ACM Transactions on Networking (ToN)*

Professional Activities

- **Organizing Committee Members**
  - Publicity Chair of International Teletraffic Congress (ITC) 2021

- **Technical Program Committee (TPC) Members**
  - IEEE International Conference on Communications (ICC), Mobile and Wireless Networks Symposium, June 2020
  - International Conference on Computer Communications and Networks (ICCCN), Cognitive, Ad Hoc, Mobile, and Mesh Networks track, August 2020.

- **Technical Review**
  - IEEE Journal on Selected Areas in Communications (JSAC)
  - IEEE Transactions on Mobile Computing (TMC)
  - IEEE Transactions on Cognitive Communications and Networking (TCCN)
  - IEEE Communications Letters
  - China Communications
  - IEEE International Conference on Computer Communications (INFOCOM)
  - IEEE International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt)
  - IEEE International Conference on Communications (ICC)
  - IEEE Wireless Communications and Networking Conference (WCNC)