Zhidan Liu

Assistant Professor

Intelligent Transportation Thrust, System Hub

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EMPLOYMENT

- 2024.08 - Now   Assistant Professor, **The Hong Kong University of Science and Technology (Guangzhou)**, China
- 2022.07 - 2024.07   Associate Professor (tenured), **Shenzhen University**, China
- 2017.07 - 2022.06   Assistant Professor, **Shenzhen University**, China
- 2015.01 - 2017.06   Research Fellow, **Nanyang Technological University**, Singapore (Advisor: *Prof.* **Mo Li**)

EDUCATION

- 2009.09 - 2014.09   Ph.D. in Computer Science, **Zhejiang University**, Hangzhou, China, Advisor: *Prof.* **Dongming Lu**
- 2012.10 - 2013.11   Visiting student, **Nanyang Technological University**, Singapore, Advisor: *Prof.* **Mo Li**
- 2005.09 - 2009.07   B.E. in Computer Science, **Northeastern University**, Shenyang, China

RESEARCH INTERESTS

Artificial Internet of Things, Urban Computing, Mobile Computing, Data Mining and Analytic

HONORS AND AWARDS

- 2025.08   CCF Transactions on Pervasive Computing and Interaction *Best Reviewer Award*
- 2021.04   Outstanding Undergraduate Teacher Award (Shenzhen University)
- 2020.12   Excellent Class Director of Shenzhen University Tencent Mentor Award
- 2020.12   IEEE ICPADS'20 Best Paper Award
- 2018.12   Award of Tencent "Rhinoceros Birds" - Scientific Research Foundation for Young Teachers
- 2018.06   Shenzhen Nanshan District Pilot Talent Award
- 2018.01   Shenzhen Peacock Plan Talent Award

PUBLICATIONS

(† indicates the students I advised or co-advised, * indicates the corresponding author)

Refereed Journal Publications

1. [**TMC**] Xiaosi Liu†, Xiaowen Xu†, **Zhidan Liu***, Zhenjiang Li, Kaishun Wu. "Spatio-Temporal Diffusion Model for Cellular Traffic Generation", *IEEE Transactions on Mobile Computing*, Vol. xx, Issue xx, Pages xxxx-xxxx, July 2025. (IF: 7.700, CCF-Rank A, JCR Q1)

2. [**TITS**] **Zhidan Liu**, Zhengze Sun†, Junru Zhang, Bolin Zhang†, Panrong Tong. "Regional Knowledge Transfer for Urban Traffic Flow Prediction via Satellite Imagery Assisted Contrastive Domain Adaptation", *IEEE Transactions on Intelligent Transportation Systems*, Vol. 26, Issue 11, Pages 19120-19134, November 2025. (IF: 8.400, CCF-Rank B, JCR Q1)

3. [**TMC**] Zixiao Wang†, Qi Dong, Tianzhang Xing*, **Zhidan Liu***, Zhenjiang Li, Xiaojiang Chen. "Enabling Effective OOD Detection via Plug-and-Play Network for Mobile Visual Applications", *IEEE Transactions on Mobile Computing*, Vol. 24, Issue 11, Pages 12471-12486, November 2025. (IF: 7.700, CCF-Rank A, JCR Q1)

4. [**TMC**] Junru Zhang, Cheng Peng, **Zhidan Liu**, Lang Feng, Yuhan Wu, Yabo Dong, Duanqing Xu. "DI2SDiff++: Activity Style Decomposition and Diffusion-Based Fusion for Cross-Person Generalization in Activity Recognition", *IEEE Transactions on Mobile Computing*, Vol. 24, Issue 10, Pages 10760-10777, October 2025. (IF: 7.700, CCF-Rank A, JCR Q1)

5. [**TMC**] **Zhidan Liu**, Guofeng Ouyang†, Bolin Zhang†, Bo Du, Chao Chen, Kaishun Wu. "Joint Order Dispatching and Vehicle Repositioning for Dynamic Ridesharing", *IEEE Transactions on Mobile Computing*, Vol. 24, Issue 4, Pages 2628-2643, April 2025. (IF: 7.700, CCF-Rank A, JCR Q1)

6. [**TKDE**] **Zhidan Liu**, Yingqian Zhou†, Xiaosi Liu†, Haodi Zhang, Yabo Dong, Dongming Lu, Kaishun Wu. "Learning Road Network Index Structure for Efficient Map Matching", *IEEE Transactions on Knowledge and Data Engineering*, Vol. 37, Issue 1, Pages 423-437, January 2025. (IF: 8.900, CCF-Rank A, JCR Q1)

7. [**TBD**] Biyao Gong†, Tianzhang Xing*, **Zhidan Liu***, Wei Xi, Xiaojiang Chen. "Adaptive Client Clustering for Efficient Federated Learning over Non-IID and Imbalanced Data", *IEEE Transactions on Big Data*, Vol. 10, Issue 6, Pages 1051-1065, December 2024. (IF: 3.344, JCR Q1)

8. **[TMC]** Xianjing Wu[†], **Zhidan Liu***, Zhenjiang Li, Shengjie Zhao*. "*Greta*: Towards A General Roadside Unit Deployment Framework", *IEEE Transactions on Mobile Computing*, Vol. 23, Issue 7, Pages 7602-7617, July 2024. (IF: 7.900, CCF-Rank A, JCR Q1)

9. **[TMC]** Biyao Gong[†], Tianzhang Xing*, **Zhidan Liu***, Wei Xi, Xiaojiang Chen. "Towards Hierarchical Clustered Federated Learning with Model Stability on Mobile Devices", *IEEE Transactions on Mobile Computing*, Vol. 23, Issue 6, Pages 7148-7164, June 2024. (IF: 7.900, CCF-Rank A, JCR Q1)

10. **[TMC]** **Zhidan Liu**, Hongquan Zhang[†], Guofeng Ouyang[†], Junyang Chen, Kaishun Wu. "Data-Driven Pick-Up Location Recommendation for Ride-Hailing Services", *IEEE Transactions on Mobile Computing*, Vol. 23, Issue 2, Pages 1001-1015, February 2024. (IF: 7.900, CCF-Rank A, JCR Q1)

11. **[TMC]** **Zhidan Liu**, Jiancong Liu[†], Xiaowen Xu[†], Kaishun Wu. "*DeepGPS*: Deep Learning Enhanced GPS Positioning in Urban Canyons", *IEEE Transactions on Mobile Computing*, Vol. 23, Issue 1, Pages 376-392, January 2024. (IF: 7.900, CCF-Rank A, JCR Q1)

12. **[TMC]** **Zhidan Liu**, Junhong Zheng[†], Jinye Lin[†], Liang Wang, Kaishun Wu. "*Radar*: Adversarial Driving Style Representation Learning with Data Augmentation", *IEEE Transactions on Mobile Computing*, Vol. 22, No. 12, Pages 7070-7085, December 2023. (IF: 7.900, CCF-Rank A, JCR Q1)

13. **[MONE]** Biyao Gong[†], Tianzhang Xing*, **Zhidan Liu***, Junfeng Wang, Xiuya Liu. "Adaptive Clustered Federated Learning for Heterogeneous Data in Edge Computing", *Mobile Networks and Applications*, DOI: https://doi.org/10.1007/s11036-022-01978-8, 2022. (IF: 3.426, JCR Q2)

14. **[CJC]** **Zhidan Liu**, Weixin Lin[†], Kaishun Wu. "A Spatial Structure Matching Algorithm for Large Spatial-Textual Datasets" (in Chinese), *Chinese Journal of Computers*, Vol. 45, Issue 6, Pages 1261-1275, June 2022. (CCF-Rank A)

15. **[TIST]** Liang Wang, Zhiwen Yu, Bin Guo, Dingqi Yang, Lianbo Ma, **Zhidan Liu**, Fei Xiong. "Data-Driven Targeted Advertising Recommendation System for Outdoor Billboard", *ACM Transactions on Intelligent Systems and Technology*, Vol. 13, No. 2, Article 29, Pages 1-23, January 2022. (IF: 10.489, JCR Q1)

16. **[IOTJ]** **Zhidan Liu**, Zengyang Gong[†], Jiangzhou Li[†], Kaishun Wu, "mT-Share: A Mobility-Aware Dynamic Taxi Ridesharing System", *IEEE Internet of Things Journal*, Vol. 9, Issue 1, Pages 182-198, January 2022. (IF: 10.238, JCR Q1)

17. **[TITS]** **Zhidan Liu**, Jiangzhou Li[†], Kaishun Wu. "Context-Aware Taxi Dispatching at City-Scale Using Deep Reinforcement Learning", *IEEE Transactions on Intelligent Transportation Systems*, Vol. 23, Issue 3, Pages 1996-2009, March 2022. (IF: 9.551, ESI Highly Cited Paper, CCF-Rank B, JCR Q1)

18. **[IOTJ]** Shiwei Song, **Zhidan Liu**, Zhenjiang Li, Tianzhang Xing, Dingyi Fang. "Coverage-Oriented Task Assignment for Mobile Crowdsensing", *IEEE Internet of Things Journal*, Vol. 7, Issue 8, Pages 7407-7418, April 2020. (IF: 9.936, JCR Q1)

19. **[IOTJ]** **Zhidan Liu**, Zhenjiang Li, Kaishun Wu. "UniTask: A Unified Task Assignment Design for Mobile Crowdsourcing based Urban Sensing", *IEEE Internet of Things Journal*, Vol.6 Issue 4, Pages 6629-6641, August 2019. (IF: 9.936, JCR Q1)

20. **[TMC]** **Zhidan Liu**, Pengfei Zhou, Zhenjiang Li, Mo Li. "Think Like A Graph: Real-Time Traffic Estimation at City-Scale", *IEEE Transactions on Mobile Computing*, Vol. 18, Issue 10, Pages 2446-2459, October 2019. (IF: 5.112, CCF-Rank A, JCR Q1)

21. **[IEEENet]** **Zhidan Liu**, Zhenjiang Li, Kaishun Wu, Mo Li. "Urban Traffic Prediction from Mobility Data Using Deep Learning", *IEEE Network Magazine*, Vol. 32, Issue 4, Pages 40-46, August 2018. (IF: 8.808, JCR Q1)

22. **[TITS]** **Zhidan Liu**, Shiqi Jiang, Pengfei Zhou, and Mo Li. "A Participatory Urban Traffic Monitoring System: The Power of Bus Riders", *IEEE Transactions on Intelligent Transportation Systems*, Vol. 18, Issue 10, Pages 2851-2864, October 2017. (IF: 4.051, CCF-Rank B, JCR Q1)

23. **[TON]** **Zhidan Liu**, Zhenjiang Li, Mo Li, Wei Xing, and Dongming Lu. "Path Reconstruction in Dynamic Wireless Sensor Networks Using Compressive Sensing", *IEEE/ACM Transactions on Networking*, Vol. 24, Issue 4, Pages 1948-1960, August 2016. (IF: 3.376, CCF-Rank A, JCR Q1)

24. **[TITS]** **Zhidan Liu**, Zhenjiang Li, Mo Li, Wei Xing, and Dongming Lu. "Mining Road Network Correlation for Traffic Estimation via Compressive Sensing", *IEEE Transactions on Intelligent Transportation Systems*, Vol. 17, Issue 7, Pages 1880-1893, July 2016. (IF: 3.724, CCF-Rank B, JCR Q1)

25. **[IJDSN]** Bo Zeng, Yabo Dong, **Zhidan Liu**. "A Negotiation-Based TDMA Scheduling with Consecutive Slots Assignment for Wireless Sensor Networks", *International Journal of Distributed Sensor Networks*, 2014. (IF: 1.239, JCR Q4)

26. **[IJDSN]** **Zhidan Liu**, Wei Xing, Yongchao Wang, Dongming Lu. "Hierarchical Spatial Clustering in Multihop Wireless Sensor Networks", *International Journal of Distributed Sensor Networks*, 2013. (IF: 1.239, JCR Q4)

Refereed Conference Publications

1. **[GPC'25]** Yaqi Huang†, Zhengze Sun†, **Zhidan Liu***. "Accelerating Graph Similarity Search with Maximum Common Subgraphs", In *The 20th International Conference on Green, Pervasive, and Cloud Computing (GPC)* , Kuala Lumpur, Malaysia, December 2025.

2. **[CIKM'25]** Bolin Zhang†, **Zhidan Liu***. "DSETA: Driving Style-Aware Estimated Time of Arrival", In *ACM CIKM*, Seoul, Korea, November 2025. (Acceptance Rate: 443/1627 = 27%, CCF-Rank B)

3. **[ICDM'24]** **Zhidan Liu**, Jinye Lin†, Zhiyu Xia†, Chao Chen, Kaishun Wu. "Towards Efficient Ridesharing via Order-Vehicle Pre-Matching Using Attention Mechanism", In *IEEE ICDM*, Abu Dhabi, UAE, December 2024. (Acceptance Rate: 66/604 = 11%, CCF-Rank B)

4. **[KDD'24]** Junru Zhang, Lang Feng, **Zhidan Liu**, Yuhan Wu, Yang He, Yabo Dong, Duanqing Xu. "Diverse Intra- and Inter-Domain Activity Style Fusion for Cross-Person Generalization in Activity Recognition", In *ACM KDD*, Barcelona, Spain, August 2024. (Acceptance Rate: 20%, CCF-Rank A)

5. **[ICPADS'23]** Meiquan Lai†, Yaqi Huang†, **Zhidan Liu***, Kaishun Wu. "An Optimized Lossless Graph Summarization for Large-Scale Graphs", In *IEEE ICPADS*, Ocean Flower Island, Hainan, China, December 2023.

6. **[MM'23]** Mengzhu Wang, Junyang Chen, Huan Wang, Huisi Wu, **Zhidan Liu**, Qin Zhang. "Interpolation Normalization for Contrast Domain Generalization", In *ACM MM*, Ottawa, Canada, October 2023. (CCF-Rank A)

7. **[ICPADS'22]** Jianlong Xu, Zhiyu Xia†, Yuhui Li, Yuxiang Zeng, **Zhidan Liu**. "Subgraph Sampling for Inductive Sparse Cloud Servives QoS Prediction", In *IEEE ICPADS*, Nanjing, China, January 2023.

8. **[DASFAA'21]** **Zhidan Liu**, Junhong Zheng†, Zengyang Gong†, Haodi Zhang, Kaishun Wu. "Exploiting Multi-Source Data for Adversarial Driving Style Representation Learning", In *DASFAA*, Taipei, Taiwan, April 2021. (CCF-Rank B)

9. **[HPCC'20]** Baofu Huang†, **Zhidan Liu***, Kaishun Wu. "Structure Preserved Graph Reordering for Fast Graph Processing Without the Pain", In *IEEE HPCC*, Fiji, December 2020. (Acceptance Rate: 58/379 = 15%)

10. **[ICPADS'20]** Baofu Huang†, **Zhidan Liu***, Kaishun Wu. "Accelerating PageRank in Shared-Memory for Efficient Social Network Graph Analytics", In *IEEE ICPADS*, HongKong, China, December 2020. (**Best Paper Award**)

11. **[ICCCN'20]** Zengyang Gong†, Bo Du, **Zhidan Liu**, Wei Zeng, Pascal Perez, Kaishun Wu. "SD-seq2seq: A Deep Learning Model for Bus Bunching Prediction Based on Smart Card Data", In *IEEE ICCCN*, Honolulu, Hawaii, USA, August 2020.

12. **[ICDE'20]** **Zhidan Liu**, Zengyang Gong†, Jiangzhou Li†, Kaishun Wu. "Mobility-Aware Dynamic Taxi Ridesharing", In *IEEE ICDE*, Dallas, Texas, USA, April 2020. (CCF-Rank A, CSRanking Conference)

13. **[MSN'19]** **Zhidan Liu**, Mingliang Huang†, Zhi Ye†, Kaishun Wu. "DeepRTP: A Deep Spatio-Temporal Residual Network for Regional Traffic Prediction", In *IEEE MSN*, Hong Kong, China, December 2019. (Invited paper)

14. **[MobiSys'19]** Yang Liu, Zhenjiang Li, **Zhidan Liu**, Kaishun Wu. "Real-time Arm Skeleton Tracking and Gesture Inference Tolerant to Missing Wearable Sensors", In *ACM MobiSys*, Seoul, Republic of Korea, June 2019. (Acceptance Rate: 40/174 = 22%, CCF-Rank B, CSRanking Conference)

15. **[IPSN'18]** Chu Cao, **Zhidan Liu**, Mo Li, Qin Zheng, Wenqiang Wang. "Walkway Discovery from Large Scale Crowdsensing", In *ACM/IEEE IPSN*, Porto, Portugal, April 2018. (Acceptance Rate: 22/82 = 26%, CCF-Rank B)

16. **[MobiHoc'14]** **Zhidan Liu**, Zhenjiang Li, Mo Li, Wei Xing, Dongming Lu. "Path Reconstruction in Dynamic Wireless Sensor Networks using Compressive Sensing", In *ACM MobiHoc*, Philadelphia, USA, August 2014. (Acceptance Rate: 40/211 = 18%, CCF-Rank B)

17. **[ICCC'13]** **Zhidan Liu**, Wei Xing, Yongchao Wang, Dongming Lu. "Hierarchical Spatial Clustering in Multi-hop Wireless Sensor Networks", In *IEEE ICCC*, Xi'an, China, August 2013.

18. [**AINA'13**] **Zhidan Liu**, Wei Xing, Bo Zeng, Yongchao Wang, Dongming Lu. "Distributed Spatial Correlation-based Clustering for Approximate Data Collection in WSNs", In *IEEE AINA*, Barcelona, Spain, March 2013.

19. [**ICACT'13**] **Zhidan Liu**, Wei Xing, Yongchao Wang, Dongming Lu. "An Energy-Efficient Data Collection Scheme for Wireless Sensor Networks", In *IEEE ICACT*, PyeongChang, Korea, January 2013.

20. [**CyberC'12**] Bo Zeng, Yabo Dong, **Zhidan Liu**, Dongming Lu. "A Workload-Aware Link Scheduling for Heterogeneous Wireless Sensor Networks", In *IEEE CyberC*, Sanya, China, October 2012.

21. [**WiCom'12**] **Zhidan Liu**, Wei Xing, Yongchao Wang, Dongming Lu. "Adaptive Data Storage for Querying in Wireless Sensor Networks", In *IEEE WiCom*, Shanghai, China, September 2012.

Books, Poster, and Demo

1. [**MobiCom'25**] Xiaowen Xu, Xiaosi Liu, **Zhidan Liu***, Zhenjiang Li, Kaishun Wu. "Poster: Diffusion-Driven Spatio-Temporal Modeling of Cellular Traffic Generation", In *ACM MobiCom*, Hong Kong, China, November 2025.

2. [**Book'21**] **Zhidan Liu**, Kaishun Wu. "Mobility Data-Driven Urban Traffic Monitoring", *Springer*, Singapore, May, 2021.

3. [**MobiSys'19**] Yang Liu, Chengdong Lin, Zhenjiang Li, **Zhidan Liu**, Kaishun Wu. "Poster: When Wearable Sensing Meets Arm Tracking", In *ACM MobiSys*, Seoul, Republic of Korea, June 2019.

4. [**IPSN'18**] Chu Cao, **Zhidan Liu**, Mo Li, Qin Zheng, Wenqiang Wang. "Demo Abstract: Walkway Discovery from Large Scale Crowdsensing", In *ACM/IEEE IPSN*, Porto, Portugal, April 2018.

Patents

1. **Zhidan Liu**, Jiayue Ruan, Kaishun Wu. *Method and System for Adversarial Domain Adaptation-Based Human Activity Recognition Using IMU Data* (ZL202310336403.2), 2025.10.31, Chinese invention patent

2. **Zhidan Liu**, Yingqian Zhou, Kaishun Wu. *A Method for Constructing Road Network Spatial Index Based on Learned Index* (ZL202310321722.6), 2025.10.03, Chinese invention patent

3. **Zhidan Liu**, Yaqi Huang. *Graph Similarity Search Method, Device, Computer-Readable Storage Medium, and Program* (ZL202410540182.5), 2025.09.12, Chinese invention patent

4. **Zhidan Liu**, Weixin Lin, Kaishun Wu. *A Spatial Structure Matching Method for Large Spatial-Textual Datasets* (ZL202111190044.1), 2024.12.31, Chinese invention patent

5. **Zhidan Liu**, Jiancong Liu, Kaishun Wu. *A Deep Learning-Based GPS Enhancement Positioning Method and System for Urban Canyons* (ZL202210425764.X), 2024.10.29, Chinese invention patent

6. **Zhidan Liu**, Baofu Huang, Kaishun Wu. *A Lightweight and Efficient Method for Vertex Reordering in Graphs* (ZL202011134445.0), 2023.12.12, Chinese invention patent

7. **Zhidan Liu**, Baofu Huang, Mingliang Huang, Kaishun Wu. *Parallel Computing Acceleration Method for PageRank on Social Network Graph Data* (ZL201910999376.0), 2023.10.13, Chinese invention patent

8. **Zhidan Liu**, Junhong Zheng, Kaishun Wu. *A Method for Learning Driving Style Representation based on Multi-context Data* (ZL202011431508.9), 2023.01.13, Chinese invention patent

9. **Zhidan Liu**, Kaishun Wu. A Unified Mobile *Crowdsourcing Task Allocation Method for Urban Sensing* (ZL201910121165.7), 2022.09.20, Chinese invention patent

10. **Zhidan Liu**, Zenyang Gong, Jiangzhou Li, Kaishun Wu. *A Mobility-Aware Dynamic Ridesharing System* (ZL201910515242.7), 2022.09.20, Chinese invention patent

11. **Zhidan Liu**, Pengfei Zhou, Zhenjaing Li, Mo Li, Kaishun Wu. *A Traffic Estimation Method for Urban Road Networks* (ZL201811140012.9), 2021.09.24, Chinese invention patent

12. **Zhidan Liu**, Jiangzhou Li, Kaishun Wu. *A Deep Reinforcement Learning based Taxi Dispatching Method* (ZL202010521882.1), 2021.07.13, Chinese invention patent

SELECTED PROJECTS/GRANTS

- **[PI] Dynamic Optimization and Cooperative Decision-Making Mechanisms for Crowd-Powered Shared Mobility**, National Natural Science Foundation of China (General Program), No.62572416, 2026.01 - 2029.12, 500K CNY. (Approved)

- **[PI] Research on the Key Technologies of Mobility Context Aware Personalized Ridesharing**, National Natural Science Foundation of China (General Program), No.62172284, 2022.01 - 2025.12, 752K CNY. (Ongoing)

- **[PI] Research on Exploiting Big Mobility Trajectory Data for Smart Sensing of Urban Traffic**, National Natural Science Foundation of China (Young Scientists Fund), No.61802261, 2019.01 - 2021.12, 300K CNY. (Completed)

- **[PI] Research on the Key Technologies of Shared Memory based Social Network Graph Computing**, National Natural Science Foundation of Guangdong (General Program), No.2022A1515010155, 2022.01 - 2024.12, 100K CNY. (Completed)

- **[PI] Joint Research of Crowdsensing and Data Analytic for Smart City**, National Natural Science Foundation of Guangdong (General Program), No.2020A1515011502, 2019.10 - 2022.09, 100K CNY. (Completed)

- **[PI] Research on Crowdsensing based Urban Sensing Framework**, Natural Science Foundation of Shenzhen University Grant, No.2018061, 2018.01 - 2022.12, 200K CNY. (Completed)

- **[PI] Research on Big Mobility Trajectory Data based Intelligent Transport Systems**, Startup Fund for Shenzhen Overseas High-Caliber Personnel, No.827/000344, 2018.01 - 2021.12, 2700K CNY. (Completed)

- **[PI] Research on Exploiting Big Trajectory Data for Intelligent Transport Sensing and Computing**, Tencent "Rhinoceros Birds" - Scientific Research Foundation for Young Teachers of Shenzhen University, No.201802, 2019.01 - 2020.12, 50K CNY. (Completed)

- **[Co-I] Multi-dimensional and Deep Perception Information based Social Computing**, Joint Funds of National Natural Science Foundation of China (Key Program), No.U2001207, 2021.01 - 2024.12, 2550K CNY. (Completed)

ACADEMIC COMMUNITY SERVICE

Membership:
- **IEEE Senior Member** (since 2024)
- **CCF Senior Member** (since 2023)
- Member of ACM (since 2018)
- Member of ACM SIGMOBILE (since 2021)
- Executive member of CCF Ubiquitous Computing Technical Committee (since 2022)
- Executive member of CCF Internet of Things Technical Committee (since 2023)
- Executive member of CCF Intelligent Transportation Division (since 2023)
- Executive member of ACM SIGSpatial China (since 2023)

Editorial Board:
- Young Editorial Board Member of **Journal of Social Computing**, 2024.02 - Now
- Lead Guest Editor: *Special Issue on Ubiquitous Sensing and Computing for Intelligent Transportation* in **Data Science for Transportation**

Conference Organization Chair:
- Special session Chair: IEEE CSCWD 2022
- Local Chair: EAI ICECI 2021
- Conference Finance Chair: IEEE ICPADS 2017
- Conference Finance Chair: IEEE ICPADS 2018

Technical Program Committee Member:
- 2025: ACM CSCW (**Associate Chair**), ACM KDD (**Outstanding Reviewer** for August Cycle), IEEE MSN, Australasian Database Conference (ADC)
- 2024: ACM KDD, IEEE ICDE (demo track), IEEE MSN
- 2023: ACM CIKM, IEEE ICPADS
- 2022: ACM KDD, ACM WSDM, IEEE ICPADS
- 2021: IEEE ICDCS, IEEE MASS
- 2020: IEEE ICDCS, IEEE HiPC
- 2019: IEEE MASS, IEEE MSN

- 2018: IEEE ICPADS, IEEE ICCCN
- 2017: IEEE ICPADS

Transaction and Journal Reviewer (selected):
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IEEE Transactions on Mobile Computing (TMC)
- IEEE Transactions on Intelligent Transportation Systems (TITS)
- IEEE/ACM Transactions on Networking (TON)
- ACM Transactions on Spatial Algorithms and Systems (TSAS)
- IEEE Transactions on Wireless Communications (TWC)
- IEEE Transactions on Parallel and Distributed Systems (TPDS)
- ACM Transactions on Sensor Networks (TOSN)
- IEEE Transactions on Communications (TOC)
- IEEE Internet of Things Journal (JIOT)
- IEEE Communications Magazine
- IEEE Computational Intelligence Magazine
- Elsevier Pervasive and Mobile Computing (PMC)
- Ad Hoc & Sensor Wireless Networks (AHSWN)
- Elsevier Computer Networks

INVITED TALKS

- *"AI-Driven Dynamic Ridesharing"*, HMCC 2025 & HHME 2025, Dalian, China, August 2025
- *"AI-Driven Dynamic Ridesharing"*, UGOD 2025 Summer AI Symposium, HKUST (GZ), Guangzhou, China, July 2025
- *"The New Era of Artificial Intelligence: Opportunities and Challenges"*, Guangzhou Foreign Language School, Guangzhou, February 2025
- *"Data-Driven Pick-Up Location Recommendation for Ride-Hailing Services"*, CCF HHME 2024, Taiyuan, China, August 2024
- *"Deep Learning Enhanced GPS Positioning in Urban Canyons"*, Embedded AI Summit 2024, Dunhuang, China, August 2024
- *"Trajectory Data Driven Smart Mobility: Sensing, Computing, and Applications"*, HKUST (GZ), Guangzhou, China, September 2023
- *"Trajectory Data Driven Smart Transportation Research: Sensing and Computing"*, Zhejiang University, Hangzhou, China, April 2023
- *"Trajectory Data Driven Smart Transportation Research: Sensing and Computing"*, online, CCF HHME 2022, September 2022

TEACHING

Teaching Courses (at HKUST (Guangzhou)):

• (UG) C++ Programming (**UFUG2601**)	Fall 2025
• (PG) Mobile Sensing and Computing for Transportation (**INTR6000N**)	Spring 2025

Teaching Courses (at Shenzhen University):

• (UG) Intelligent Networking and Computing	Spring 2023	
• (UG) Introduction to Wireless Sensor Networks	Spring 2017-2022	
• (UG) Internet Programming (in JAVA)	Fall	2017-2023
• (PG) Guidance on Academic Writing	Fall	2021-2023

Teaching Achievements:
- 2023.09   I was awarded "Outstanding Advisor of Guangdong Collegiate Computing Competition (2023)"
- 2023.09   Guiding the undergraduate students (Haotian Zhong and Jiahao Liu) to win "Second Prize of Guangdong Collegiate Computing Competition"
- 2023.06   My supervised master student Hongquan Zhang was awarded "Excellent Graduate of Shenzhen University"
- 2023.06   My supervised undergraduate students Bolin Zhang and Xiaowen Xu were awarded "Excellent Undergraduate of Shenzhen University"
- 2022.09   Guiding undergraduate students (Wenxuan Xia, Zikai Du, and Yujun Ji) to win "Second Prize of Guangdong Collegiate Computing Competition"
- 2022.06   My supervised undergraduate Jiancong Liu was awarded "Excellent Undergraduate of Shenzhen University"

- 2022.06 My supervised undergraduate Jiancong Liu was awarded "100 Outstanding Undergraduate Thesis (Design) of Shenzhen University"
- 2021.12 I was awarded "Rising-Star Graduate Advisor"
- 2021.09 I was awarded "Outstanding Advisor of Guangdong Collegiate Computing Competition"
- 2021.08 Guiding undergraduate students (Bolin Zhang, Weixin Xu, and Yuanchu Zheng) to win "National Second Prize of The 14th Chinese Collegiate Computing Competition"
- 2021.05 I was awarded "Second Prize in CSSE of The 10th Lecture Competition for Young Teachers of Shenzhen University"
- 2021.04 I was awarded with "Outstanding Undergraduate Teaching Award for the 2019-2020 Academic Year"
- 2020.12 I was awarded "Outstanding Advisor of The 13th Chinese Collegiate Computing Competition"
- 2020.12 I was awarded "Excellent Class Director of Shenzhen University Tencent Mentor Award"
- 2020.08 Guiding undergraduate students (Linhua Chen, Yuliang Li, and Jiancong Liu) to win "National First Prize of The 13th Chinese Collegiate Computing Competition" (203 out of 30,000)
- 2020.06 My supervised master student Zengyang Gong was awarded "Excellent Graduate of Shenzhen University"
- 2019.06 I was awarded "Second Prize in CSSE of The 9th Lecture Competition for Young Teachers of Shenzhen University"
- 2019.04 Guiding undergraduate students (Zhubang Huang, Jincheng Zhong, and Hulin Yang) to win "Honorable Mention of 2019 Mathematical Contest In Modeling"

RESEARCH GROUP

Ph.D. Students @ The Hong Kong University of Science and Technology (Guangzhou):
- **Xiaowen Xu** (2024.09 -)
  B.E. of Computer Science and Technology, Shenzhen University, Shenzhen, China, 2023 ("Excellent Undergraduate of Shenzhen University")

- **Jiyu Wang** (2025.02 -)
  M.E. of Transportation Engineering, Sun Yat-sen University (Shenzhen campus), Shenzhen, China, 2024

Research Assistant @ The Hong Kong University of Science and Technology (Guangzhou):
- **Zhenyu Yang** (2025.07 -)
  M.E. of Computer Science and Technology, Shenzhen University, Shenzhen, China, 2025

- **Jinsong Luo** (2025.07 -)
  B.E. of Artificial Intelligence, Central South University, Changsha, China, 2025

- **Zitong Yu** (2025.07 -)
  B.E. of Information Management and System, China University of Geosciences (Wuhan), Wuhan, China, 2025

- **Yanlin YU** (2025.08 -)
  MSc of Information Business Management, University of Warwick, Coventry, UK, 2025

- **Guangyu Wang** (2025.08 -)
  Undergraduate student of Data Science and Big Data Technology, Dongbei University of Finance and Economics, Dalian, China, 2025

- **Yuhang Guan** (2025.08 -)
  B.E. of Computer Science and Technology, Shandong University, Qingdao, China, 2025

Master Students @ Shenzhen University:
- **Bolin Zhang** (Master student, 2023.09 -)
  B.E. of Software Engineering, Shenzhen University, Shenzhen, China, 2023 ("Excellent Undergraduate of Shenzhen University")

- **Chang Liu** (Master student, 2023.09 -)
  B.E. of Internet of Things Engineering, Jinan University, Guangzhou, China, 2023

- **Yuhao Ouyang** (Master student, 2023.09 -)
  B.E. of Data Science and Big Data Technology, Beijing Forestry University, Beijing, China, 2023

Alumni of Shenzhen University:

1. **Zengyang Gong** (Master 2017.09 - 2020.06)
   - Awards: "Excellent Graduate of Shenzhen University"
   - Publications: IEEE ICDE'20, IEEE ICCCN'20, IEEE IOTJ'22
   - Employment: Ph.D candidate in The Hong Kong university of Science and Technology (HKUST)
   - B.S. of Computer Science and Technology, Wuhan University of Science and Technology, Wuhan, China, 2017

2. **Mingliang Huang** (Master 2017.09 - 2020.06)
   - Publications: IEEE MSN'19
   - Employment: Sangfor Technologies
   - B.S. of Computer Science and Technology, Lanzhou University, Lanzhou, China, 2017

3. **Jiangzhou Li** (Master 2018.09 - 2021.06)
   - Publications: IEEE TITS'22
   - Employment: Sangfor Technologies
   - B.S. of Software Engineering, Qingdao University, Qingdao, China, 2018

4. **Baofu Huang** (Master 2018.09 - 2021.06)
   - Awards: "Best Paper Award" of IEEE ICPADS'20
   - Publications: IEEE HPCC'20, IEEE ICPADS'20
   - Employment: Tencent
   - B.E. of Computer Science, Guangdong University of Finances and Economics, Guangzhou, China, 2018

5. **Weixin Lin** (Master 2019.09 - 2022.06)
   - Publications: CJC'22
   - Employment: JinTeng Technologies
   - B.E. of Computer Science and Technology, Shenzhen University, Shenzhen, China, 2019

6. **Junhong Zheng** (Master 2019.09 - 2022.06)
   - Publications: DASFAA'21, IEEE TMC'23
   - Employment: Tencent
   - B.S. of Software Engineering, Zhuhai College of Science and Technology, Zhuhai, China, 2019

7. **Jiancong Liu** (B.S. 2018.09 - 2022.06)
   - Awards: "Excellent Undergraduate of Shenzhen University"
   - Publications: IEEE TMC'24
   - Employment: Master student in Harbin Institute of Technology (Shenzhen)
   - B.E. of Computer Science and Technology, Shenzhen University, Shenzhen, China, 2022

8. **Hongquan Zhang** (Master 2020.09 - 2023.06)
   - Awards: "Excellent Graduate of Shenzhen University"
   - Publications: IEEE TMC'24
   - Employment: HUAWEI
   - B.E. of Internet of Things Engineering, Hunan Agricultural University, Changsha, China, 2020

9. **Meiquan Lai** (Master 2020.09 - 2023.06)
   - Publications: IEEE ICPADS'24
   - Employment: SICS
   - B.S. of Mathematics, Shenzhen University, Shenzhen, China, 2020

10. **Yingqian Zhou** (Master 2020.09 - 2023.06)
    - Publications: IEEE TKDE'25
    - Employment: BOCOM
    - B.E. of Computer Science and Technology, Guangdong University of Technology, Guangzhou, China, 2020

11. **Jiayue Ruan** (Master 2020.09 - 2023.06)
    - Employment: BYD company
    - B.E. of Computer Science and Technology, North China University of Technology, Beijing, China, 2020

12. **Wenxuan Xia** (B.S. 2020.09 - 2023.06)
    - Awards: "Excellent Undergraduate of Shenzhen University"
    - Employment: Ph.D. student at HKUST (GZ))
    - B.S. of Software Engineering, Shenzhen University, Shenzhen, China, 2023

13. **Yaqi Huang** (Master 2021.09 - 2024.06)
    - Publications: GPC'25
    - Employment: Tencent Music
    - B.E. of Internet of Things Engineering, Hunan Agricultural University, Changsha, China, 2021

14. **Guofeng Ouyang** (Master 2021.09 - 2024.06)
    - Publications: IEEE TMC'25
    - Employment: FUTU
    - B.E. of Electronical Information Science and Technology, Zhaoqing University, Zhaoqing, China, 2021

15. **Jinye Lin** (Master 2021.09 - 2024.06)
    - Publications: IEEE ICDM'24
    - Employment: FUTU
    - B.E. of Internet of Things Engineering, Shenzhen University, Shenzhen, China, 2021

16. **Xiaosi Liu** (Master 2022.09 - 2025.06)
    - Publications: IEEE TMC'25, IEEE TKDE'25
    - Employment: BYD company
    - B.E. of Software Engineering, Nanchang University, Nanchang, China, 2022

17. **Zhiyu Xia** (Master 2022.09 - 2025.06)
    - Employment: HSBC Group
    - B.E. of Computer Science and Technology, Shantou University, Shantou, China, 2022

18. **Zhengze Sun** (Master 2022.09 - 2025.06)
    - Publications: IEEE TITS'25, GPC'25
    - Employment: HUAWEI
    - B.E. of Data Science and Big Data Technology, Wuhan University of Technology, Wuhan, China, 2022

19. **Zhenyu Yang** (Master 2022.09 - 2025.06)
    - Publications: IEEE TMC'25 (under review)
    - Employment: RA @ HKUST(GZ)
    - B.E. of Computer Science and Technology, Henan University, Kaifeng, China, 2022

20. **Haotian Zhong** (B.E 2022.06 - 2025.06)
    - Awards: "Excellent Undergraduate of Shenzhen University"
    - Employment: Ph.D. student at Zhejiang University
    - B.S. of Software Engineering, Shenzhen University, Shenzhen, China, 2025

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