

Jun. Prof. Dr. Ziyue LI (Bonald)

Assistant Professor in Machine Learning
The Cologne Institute of Information Systems, WiSo Faculty
University of Cologne

Chief Machine Learning Scientist
EWI gGmbH

Email: zlibn@wiso.uni-koeln.de

Personal Website (Updated: 10 2023): <https://bonaldli.github.io>

Official Website: <https://wiso.uni-koeln.de/de/forschung/find-an-expert/expertinnen/jun-prof-dr-ziyue-li>

Education

Ph.D. in Industrial Engineering and Decision Analytics 09.2017-09.2021
The Hong Kong University of Science and Technology QS: 27th Hong Kong
- **Concentration:** Knowledge-enhanced Machine Learning.

Bachelor Program in Mechanical and Manufacturing Engineering 2015-2015
University of New South Wales Sydney, Australia
- Funded by National Scholarship Council Scholarship

Bachelor of Engineering in Mechanical Engineering 2013-2017
Bachelor of Economics in Finance 2015-2017
Xi'an Jiaotong University Xi'an, China
- Outstanding Graduates Award, National Scholarship

Research Interests

My research interests focus on **resource-efficient machine learning models for spatiotemporal decision intelligence**, with the main two streams: ***Data Efficiency*** including High-dimensional tensor, and ***Model Efficiency*** including self-supervised learning, meta-learning, transfer learning, and Large-Language Models (LLMs). Our methods have been published in top-tier AI venues (AAAI, KDD, NeurIPS, etc.), awarded with **8+ best paper awards** and also deployed in real industries as **well-proven products**, especially in smart mobility.

Selected Awards

- **Peter Luh Young Researcher Award**, IEEE Robotics and Automation Society (2023): **Runner-up**, selected 2/600, highly prestigious.
- **National Scientific and Technological Progress Award**, Society of Image and Graphics (2023): **Nominated and under review**, highly prestigious, to recognize our contribution to vision-based smart mobility.
- **ACM Travel Grant Award**, ACM SIGSPATIAL (2023): **Winner**.
- **Best Paper Award**, Institute of Industrial and Systems Engineers (IISE), Quality Control and Reliability Engineering (QCRE) (2023): **Runner-up**.
- **Best Student Paper Award**, IISE QCRE (2022): Finalist.
- **Best Applied Paper Award**, INFORMS Data Mining and Decision Analytics (DMDA) Workshop (2021): **Winner**.
- **Best Theoretical Paper Award**, INFORMS DMDA (2021): **Runner-up**.
- **2nd Runners-up**, HKUST Three Minute Thesis Competition (2021).
- **Best Conference Paper Award**, IEEE International Conference on Automation Science and Engineering (CASE) (2020): **Winner**, selected from 1/500.
- **Best Student Paper Award**, INFORMS Data Mining (2020): Finalist.
- **Best Student Paper Award**, INFORMS Quality, Statistics, and Reliability (QSR) Section (2020): Finalist.

**Professional
Experience**

Assistant Professor *03.2022 - present*
University of Cologne (Universität zu Köln) **Cologne, Germany**

- Conduct research in spatiotemporal and resource-efficient machine learning.
- Design and instruct three master courses (Advanced Seminar Machine Learning, Advanced Data Analytics and Deep Learning, and Decision Making under Uncertainty) and one bachelor course (Bachelor Seminar Machine Learning).

Chief Machine Learning Scientist *03.2022 - present*
EWI gGmbH **Cologne, Germany**

- Conduct applied research in machine learning for the energy sector. Some of the works submitted to Nature Energy.
- Cultivate machine learning know-how and brains via designing and hosting “Machine Learning Summer School” and seminars.

Senior Research Scientist *03.2021 - 03.2022*
SenseTime Research **Hong Kong**

Data Mining Researcher *01.2020 - 02.2021*
SenseTime, Hong Kong Science and Technology Park **Hong Kong**

- Led a team of 10 researchers (3 full-time, 5 interns, 1 project manager), conducted front-tier research in smart mobility and spatiotemporal analysis, and delivered 5+ pipelines of AI-driven products, including:
 - One machine learning-based traffic data infrastructure platform
 - Traffic Signal Control Systems based on optimization-based and Reinforcement Learning: deployed in an actual city, with 26% higher efficiency.
 - One causal inference-based Traffic congestion management and cause analysis: deployed in an actual city.
 - Developed our own LLMs for traffic domain knowledge and traffic data analysis.
- Corresponding research work published in CIKM, KDD, AAAI, ICLR, AAMAS, TMM, and more, with topics including:
 - Self-supervised learning and contrastive learning.
 - Reinforcement Learning.
 - Resource-efficient domain adaptation, transfer learning, and meta-learning.
- Admin and Technical support for business needs: interviewed 100+ applicants, gave 5+ research seminars, and so on.

Research Project Manager *09.2020 - 08.2021*
Hong Kong Metro MTR Co.-HKUST R&D Project **Hong Kong**

- Research collaboration with MTR and Computer Science Dept, HKUST, developing an Intelligent Transport System (ITS) based on data-driven methods.
- Delivered the solution for demand prediction, station clustering, passenger individual pattern mining.

Cloud Computing Scientist (Intern) *09.2019 - 02.2020*
Nokia Bell Labs **Stuttgart, Germany**

Keywords: *cloud computing, distributed system, FaaS, machine learning system*

- Research in serverless computing, machine learning systems based on Amazon Web Service (AWS), and Bell Labs KNIX MicroFunctions.
- Conducted data transmission latency analysis, serverless system component profiling and optimization, and serverless machine learning inference and training (NLP, Computer Vision models) in AWS and KNIX.

Conference Publications

Track 1: High-dimensional Tensor (*Data Efficiency*)

[C13] **Z. Li***, H. Yan, C. Zhang, L. Sun, W. Ketter, and F. Tsung. [Tensor Dirichlet Process Multinomial Mixture Model with Graphs for Passenger Trajectory Clustering](#). International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL), 2023, Hamburg, Germany. (CORE Rank A);

- **ACM SIGSPATIAL Young Researcher Travel Grant Award, Winner.**

[C12] **Z. Li***, [Tensor Topic Models with Graphs and Applications on Individualized Travel Patterns](#), 2021 IEEE 37th International Conference on Data Engineering (ICDE), Crete, Greece, 2021., (Oral, CORE Rank A*).

- **Best Applied Paper Award**, INFORMS Data Mining and Decision Analytics Workshop 2021, **Finalist**.

[C11] **Z. Li***, H. Yan, C. Zhang and F. Tsung, [Long-Short Term Spatiotemporal Tensor Prediction for Passenger Flow Profile](#) in IEEE 16th International Conference on Automation Science and Engineering (CASE), 2020. (Qualis Rank A-);

- **Winner of IEEE CASE 2020 Best Conference Paper Award.**

[C10] **Z. Li***, N. D. Sergin, H. Yan, C. Zhang, and F. Tsung, “[Tensor Completion for Weakly-Dependent Data on Graph for Metro Passenger Flow Prediction](#)” Proceedings of the AAAI Conference on Artificial Intelligence, 2020, (Oral, CORE Rank A*).

- **Best Student Paper Award**, Quality, Statistics, and Reliability (QSR) Section, INFORMS 2020, **Finalist Award**.

Track 2: Self-Supervised Learning (*Model Efficiency*)

[C9] D. Li, **Z. Li***, Z. Li, L. Bai, Q. Gong, L. Sun, W. Ketter, and R. Zhao. [A Critical Perceptual Pre-trained Model for Complex Trajectory Recovery](#). International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL), 2023, Hamburg, Germany. (CORE Rank A);

- **ACM SIGSPATIAL Young Researcher Travel Grant Award, Winner.**

[C8] L. Wang, L. Bai, **Z. Li***, R. Zhao and F. Tsung, [Correlated Time Series Self-Supervised Representation Learning via Spatiotemporal Bootstrapping](#), 2023 IEEE 19th International Conference on Automation Science and Engineering (CASE), Auckland, New Zealand, 2023. (Qualis Rank A-);

[C7] H. Ruan, Q. Gong, Y. Chen, J. Chen, **Z. Li**, and X. Su. [A Privacy-preserving Heart Rate Prediction System for Drivers in Connected Vehicles](#). In Proceedings of the 21st Annual International Conference on Mobile Systems, Applications and Services, Association for Computing Machinery, New York, NY, USA, 2023.

[C6] Z. Mao, **Z. Li***, ¹, D. Li, L. Bai, & R. Zhao, (2022, October). [Jointly Contrastive Representation Learning on Road Network and Trajectory](#). In Proceedings of the 31st ACM International Conference on Information & Knowledge Management. (CORE Rank A)

Track 3: Causal Inference, Knowledge Adaption, LLM, and More

[C5] J. Lin, **Z. Li***, Z. Li, L. Bai, R. Zhao and C. Zhang, [Dynamic Causal Graph Convolutional Network for Traffic Prediction](#), 2023 IEEE 19th International Confer-

¹*: corresponding author

ence on Automation Science and Engineering (CASE), Auckland, New Zealand, 2023. (Qualis Rank A-);

- **Peter Luh Young Research Award**, IEEE Robotics and Automation Society 2023, **Runner-ups**.

[C4] T. Lan, **Z. Li**, Z. Li, L. Bai, M. Li, F. Tsung, W. Ketter, R. Zhao, and C. Zhang. [MM-DAG: Multi-task DAG Learning for Multi-modal Data - with Application for Traffic Congestion Analysis](#). In Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD '23). Association for Computing Machinery, New York, NY, USA, 2023. (CORE Rank A*)

[C3] J. Ruan, Y. Chen, B. Zhang, Z. Xu, T. Bao, G. Du, S. Shi, Ha. Mao, **Z. Li**, X. Zeng, and R. Zhao. [TPTU: Large Language Model-based AI Agents for Task Planning and Tool Usage](#). 37th Conference on Neural Information Processing Systems (NeurIPS 2023) - Workshop on Foundation Models for Decision Making. (CORE Rank A*)

[C2] Y. Chen, **Z. Li**, W. Ouyang and M. Lepech, [Adaptive Hierarchical SpatioTemporal Network for Traffic Forecasting](#), 2023 IEEE 19th International Conference on Automation Science and Engineering (CASE), Auckland, New Zealand, 2023. (Qualis Rank A-);

[C1] M. Jiang, A. Wang, **Z. Li**^{* 2} and F. Tsung, [A Unified Probabilistic Framework for Spatiotemporal Passenger Crowdedness Inference within Urban Rail Transit Network](#), 2023 IEEE 19th International Conference on Automation Science and Engineering (CASE), Auckland, New Zealand, 2023. (Qualis Rank A-);

Journal Publications

[J6] K. Liu, S. Tang, **Z. Li**^{*}, and et al., [Relation-Aware Distribution Representation Network for Person Clustering With Multiple Modalities](#), in IEEE Transactions on Multimedia, Vol. 14, No. 8, 2023.

[J5] Angelucci, A., **Li, Z.**, Stoimenova, N., & Canali, S. (2022). “The paradox of the artificial intelligence system development process: the use case of corporate wellness programs using smart wearables”. *AI & Society*, 1-11.

[J4] **Z. Li**^{*}, H. Yan, C. Zhang, and F. Tsung, “Individualized Passenger Travel Pattern Multi-Clustering based on Graph Regularized Tensor Latent Dirichlet Allocation”. *Data Mining and Knowledge Discovery*, Springer, published.

- **Best Student Paper Award**, Data Mining, INFORMS 2020, **Finalist Award**.

[J3] **Z. Li**, H. Yan, K. Zhang and F. Tsung, “Profile Decomposition based Hybrid Transfer Learning for Cold-start Data Anomaly Detection”. *The ACM Transactions on Knowledge Discovery from Data (TKDD)*, 2022, published.

- **Best Student Poster Award**, QSR, INFORMS 2020, **Finalist Award**.

[J2] **Z. Li**^{*}, H. Yan, C. Zhang and F. Tsung, “Long-Short Term Spatiotemporal Tensor Prediction for Passenger Flow Profile” *IEEE Robotics and Automation Letters*, 2020.

- **Winner of IEEE CASE 2020 Best Conference Paper Award**.

[J1] F. Tsung, **Z. Li**, “Discussion of ‘A novel approach to analysis of spatial and functional data over complex domains’” *Quality Engineering*, 2020, published.

²*: corresponding author

Track 1: Large Language Model and Foundation Model:

[R18] B. Zhang, H. Mao, **Z. Li**, J. Ruan, Y. Wen, Y. Li, S. Zhang, Z. Xu, D. Li, R. Zhao, L. Li, G. Fan, [Controlling Large Language Model-based Agents for Large-Scale Decision-Making: An Actor-Critic Approach](#). Under review of **NAACL 2024**.

[R17] Y. Kong, J. Ruan, Y. Chen, B. Zhang, T. Bao, S. Shi, G. Du, X. Hu, H. Mao, **Z. Li**, X. Zeng, R. Zhao, [TPTU-v2: Boosting Task Planning and Tool Usage of Large Language Model-based Agents in Real-world Systems](#). Under review of **ICML 2024**.

[R16] G. Sui, Z. Li, **Z. Li***³, S. Yang, J. Ruan, H. Mao, and R. Zhao. [Reboost Large Language Model-based Text-to-SQL, Text-to-Python, and Text-to-Function - with Real Applications in Traffic Domain](#). Under review of **ICDE 2023**.

[R15] H. Mao, R. Zhao, **Z. Li**, Z. Xu, H. Chen, Y. Chen, B. Zhang, Z. Xiao, J. Zhang and J. Yin, “[PDiT: Interleaving Perception and Decision-making Transformers for Deep Reinforcement Learning](#)”, **AAMAS-2024**, *under review*.

Track 2: Reinforcement Learning for Efficient Traffic Signal Control

[R14] H. Jiang, **Z. Li***, L. Bai, Z. Li, R. Zhao, [A General Scenario-Agnostic Reinforcement Learning for Traffic Signal Control](#), *IEEE Transactions on Intelligent Transportation Systems (TITS)*, *under review*.

[R13] J. Ruan, H. Jiang, **Z. Li***, J. Lu, H. Mao, R. Zhao, [CoSLight: Co-optimizing Collaborator Selection and Decision-making to Enhance Multi-intersection Traffic Signal Control](#), **AAAI-2024**, *under Phase-2 review*.

[R12] H. Jiang, **Z. Li***, X. Tang, J. Ruan, J. Lu, H. Mao, R. Zhao, [Transformer on Transformer as A Meta Multi-Agent Reinforcement Learner: Towards Cross-City Traffic Signal Control](#), **AAAI-2024**, *under Phase-2 review*.

[R11] J. Lu, J. Ruan, H. Jiang, **Z. Li***, H. Mao and R. Zhao, [DuaLight: Enhancing Traffic Signal Control by Leveraging Scenario-Specific and Scenario-Shared Knowledge](#), **AAMAS-2024**, *under review*.

[R10] H. Jiang, X. Xiong, **Z. Li***, H. Mao, G. Sui, J. Ruan, Y. Cheng, R. Zhao, “[Old-school” Guidance to Learn A Better Traffic Signal Control Agent](#), **ICRA-2024**, *under review*.

[R9] Du, X., Du, *, C. Long, Y. Xing, Philip Yu, H. Chen, “[FELight: Fairness-Aware Traffic Signal Control via Sample-Efficient Reinforcement Learning](#)”, *IEEE Transactions on Knowledge and Data Engineer (TKDE) 2023*, *major revision*.

Track 3: Self-Supervised Learning and Domain Adaptation

[R8] Y. Li, **Z. Li**, O. Ruhnau, P. Peter Kai, [Predict and Explain the Energy Crisis in Germany during the Russia-Ukraine War](#), **Nature Energy**, *under review*.

[R7] P. Guo, P. Jin, Y. Zhang, L. Bai, **Z. Li**, [Online Test-Time Adaptation of Spatial-Temporal Forecasting](#), **AAAI-2024**, *under Phase-2 review*.

³*: corresponding author

[R6] Z. Zhang, **Z. Li**, “Robust Self-Supervised Deep Tensor Decomposition for Corrupted Time Series Data”, **AAAI-2024**, *under Phase-2 review*.

[R5] Z. Li, Y Nie, **Z. Li**, L. Bai, Y. Lv, R. Zhao, “Non-Neighbors Also Matter to Kriging: A New Contrastive-Prototypical Learning”, **AISTATS-2024**, *under Phase-2 review, 3 Accept, 1 Weak Accept*.

[R4] Q. Xu, C. Long, Z. Li, S. Ruan, Z. Li, R. Zhao, “KITS: Inductive Spatio-Temporal Kriging with Increment Training Strategy”, **ICLR-2024**, *during Rebuttal*.

Track 4: High-dimensional Tensor

[R3] C. Martin Coor, **Z Li**, Understanding Advertisement-Click based on Mouse Trace Movement using Tensor Decomposition, The 32nd European Conference on Information Systems **ECIS-2024**, *under review*.

[R2] J. Hu, **Z. Li**, C. Zhang, F. Tsung, H. Yan, “Tensor Completion for High-dimensional Data with Graph-structured and Weakly-dependent Multi-Sample Dimensions”, IEEE Transactions on Automation Science and Engineering (**TASE**) 2023, *under review*.

[R1] N. Dorukhan Sergin, J. Hu, R. Zhao,, C. Zhang, F. Tsung, H. Yan, “Low-Rank Robust Subspace Tensor Clustering for Metro Passenger Flow Modeling”, INFORMS Journal on Data Science (**IJDS**) 2023, *major revision*.

External Funding

During the University of Cologne:

- **DFG**, “Towards Efficient Electricity Market based on Meta Reinforcement Learning Agents” *2024-2026, under review*
 - **PI**: Ziyue Li, Wolfgang Ketter.
- **S-Lab and Nanyang Technological University Joint Research, Singapore**, “On Developing Video Traffic Data based Intelligent Transport Fundamental Core Technique” *2023-2025*
 - **PI**: Prof Cheng Long; **Co-PI**: Prof. Ziyue Li; **Grant**: 867,000.00 S\$
- **Tsinghua Univesity-Industry Joint Research, China**, “Intelligent Traffic Congestion Decision Systems based on Spatiotemporal and Multi-modal Data” *2022-2023*
 - **PI**: Prof Chen Zhang; **Co-PI**: Prof. Ziyue Li; **Grant**: 300,000.00 CNY

During the Hong Kong University of Science and Technology

- **Foshan-Hong Kong Technology Funding**, “Multi-stage process monitoring and optimization based on big data analytics and machine learning” *2021-2023*
 - **PI**: Fugee Tsung, Ziyue Li, Yinghui Huang; **Grant**: 4,811,634 HK\$.
- **Innovation and Technology Commission**, “Trial: A Big Data Trial Scheme for Smart Transportation Crowd Monitoring ” *2019-2021*
 - **PI**: Fugee Tsung, Ziyue Li, Man Li, Zhenli Song; **Grant**: 1,175,300 HK\$.
- **RGC - General Research Fund**, “Statistical Transfer Learning with Applications to Quality Control and Monitoring” *2019-2021*

– **PI:** Fugee Tsung, Ziyue Li, Ke Zhang, Kai Wang, Longwei Chen, Zhenli Song; **Grant:** 632,421 HK\$.

- **RGC - General Research Fund**, “Statistical learning, prediction, and monitoring methods for urban rail transit systems” *2018-2020*

– **PI:** Fugee Tsung, Zhenli Song, Ziyue Li, Kai Wang, Yinghui Huang; **Grant:** 443,950 HK\$.

Teaching Experience

In the University of Cologne:

- **Instructor**, Advanced Data Analytics (Deep Learning) (PG) *WS 2023*
 - Design the contents from scratch, covering the deep learning topics including probabilistic theory, CNN, RNN, Transformer, GAN, Self-supervised Learning, etc.
 - Design the contents coding tutorial, homework, and assignment.
- **Instructor**, Decision Making under Uncertainty (PG) *2022, 2023*
 - Design the contents from scratch, covering the decision intelligence topics including probabilistic reasoning, sequential decision making, reinforcement learning, belief uncertainty, multi-agent systems, etc.
 - Design the contents coding tutorial, homework, and assignment.
- **Instructor**, Advanced Seminar in Machine Learning (UG, PG) *2022, 2023*
 - Design the contents from scratch, covering the most front-tier machine learning topics including self-supervised learning, tensor analysis etc.

In The Hong Kong University of Science and Technology

- **Teaching Assistant**, Engineering Management (UG) *Spring, 2020*
 - Took charge of all tutorials covering contents of production line optimization, time-series forecasting, inventory management and manufacturing strategy.
- **Co-instructor**, Quality Engineering (UG) *Spring, 2019*
 - Led all lab experiments including statistics, factorial design, control charts, and regression models.
- **Teaching Assistant**, Six Sigma Quality Management (PG) *Fall, 2018*
 - Took charge of all tutorials covering contents of statistical analysis, hypothesis testing, statistical process control.

Competitions

Finalist Award in Belt & Road Justice LawTech Hackathon *08.2018 - 10.2018*
HK Law Society Hong Kong

- Legal service recommender system based on NLP and Semantic & Cognitive analysis for domestic workers.

Top 10 in Global Big Data Competition *07.2018 - 08.2018*
JD.com Beijing, China

- Quantile boosting time-series prediction model with effective feature engineering and representation methods and improved forecast accuracy by 72%.

1st-Runners-up, Audience Award in Hackathon@UST *04.2018 - 05.2018*
Uber Smart Transportation Hong Kong

- Developed facial recognition model and integrated into vehicles to achieve facial car door unlocking, underage driving detection, and drowsy driving detection.

**Invited Talks
Session Chair**

15. **Invited Presenter**, “A Critical Perceptual Pre-trained Model for Complex Trajectory Recovery” 11.2023
ACM SIGSPATIAL 2023 Hamburg, Germany
14. **Session Chair**, “Structure Learning from Heterogeneous Data” and “Spatiotemporal Decision Intelligence” 10.2023
INFORMS Annual Meeting 2023 Phoenix, Arizona, U.S.A
13. **Invited Presenter**, “Advanced Machine Learning in Smart Mobility” 08.2023
Tsinghua University Beijing, China
12. **Session Chair**, “Spatiotemporal Decision Intelligence” 08.2023
IEEE CASE Conference 2023 Auckland, New Zealand
11. **Invited Presenter**, “MM-DAG: Multi-task DAG Learning for Multi-modal Data - with Application for Traffic Congestion Analysis” 08.2023
ACM SIGKDD 2023 Long Beach, California, U.S.A
10. **Data Challenge Organizers**, “CVPR Workshop on Vision-based Industrial Inspection” 05.2023
CVPR 2023 Vancouver, Canada
9. **Invited Presenter**, “Tensor Topic Models for Individual Travel Analysis” 05.2023
IISE Annual Meeting 2023 New Orleans, Louisiana, U.S.A
8. **Session Chair**, “Temporal Data” and “Clustering” 10.2022
CIKM 2022 Atlanta, Georgia, U.S.A
7. **Session Chair**, “High-dimensional data analytics for modeling, monitoring, and control” 10.2022
INFORMS QSR section 2022 Indianapolis, Indiana, U.S.A
6. **Invited Presenter**, “Jointly Contrastive Representation Learning on Road Network and Trajectory” 10.2022
3rd Workshop on Data-driven Intelligent Transportation, 2022 Atlanta, U.S.A
5. **Invited Presenter**, “Three Tensor Topic Models with Graphs and Their Applications on Individualized Travel Patterns” 10.2022
INFORMS QSR Flash Paper, 2022 Indianapolis, Indiana, U.S.A
IEEE ICDE 2021 Chania, Greece
4. **Session Chair**, “Knowledge-integrated Data-driven Smart Transportation” 10.2021
INFORMS Data Mining section 2021 Anaheim, California, U.S.A
3. **Invited Presenter**, “Individualized Passenger Travel Pattern Multi-Clustering based on Tensor Latent Dirichlet Allocation with Graph Structure” 11.2020
INFORMS Annual Meeting 2020 National Harbor, Maryland, U.S.A
2. **Invited Presenter**, “Tensor Completion for Weakly-dependent Data on Graph for Metro Passenger Flow Prediction” 10.2019 and 01.2020
Data Science Symposium Waseda University Tokyo, Japan

INFORMS Annual Meeting 2019

Seattle, Washington, U.S.A

1. **Invited Presenter**, “*Transfer-learning-based Anomaly Detection for Monitoring Profiles in the ‘Start-up’ State*” 11.2018

INFORMS Annual Meeting 2018

Phoenix, Arizona, U.S.A

Community Services

- **Committee Service:**
 - Elected Council Member of INFORMS QSR (Term of 2023-2024)
 - Elected Council Member of INFORMS Data Mining (Term of 2023-2024)
- **Reviewing Service:** CVPR, AAAI, ECAI, ECML-PKDD, ICRA, ICIS, IEEE CASE, IEEE T-ASE, PAAA, Transportation Research Part C, IEEE IoT, IET Software, IEEE T-ITS, INFORMS Best Paper Competition
- **Supervision Service:** 4 Ph.D. Supervision (as Second Advisor), 1 Master Thesis Supervision, 4 Bachelor Thesis Supervision

Other Awards

- **1st Runners-up, Audience Award, Hackathon@UST** - Uber Smart Transportation (2018).
- **Hong Kong Ph.D. Fellowship Scholarship Award** (2017-2020): Highly-selective and prestigious, 2 recipients in IEDA.
- **National Prize**, “Challenge Cup” National Curricular Academic Science and Technology Contest (2015): A data-driven study for land transfer in rural China (Applied Economics).
- **Honored Graduate Award**, Xi’an Jiaotong University 2017
- **Regional First Prize**, 7th Mechanical Innovation & Design Competition 2016
- **National Scholarship**, Xi’an Jiaotong University 2016
- **1st-Runners-up Award**, XJTU Entrepreneurship Competition 2015
- **National Encourage Scholarships**, Xi’an Jiaotong University 2014, 2015

Skills

- Python • R • Matlab • AWS • C++ • Hadoop, Map-Reduce
- TensorFlow • PyTorch • Keras • Scikit-learn
- Psychology • Consulting • Public Speaking
- **English** (Fully Professional) • **German** (B2, Fluent) • **Chinese** (Native)