

Bonan Wang

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Education

University of Macau	Aug. 2023 - Present
• M.s in Computer Science	Taipa, Macau, China
• GPA: 3.53/4.00	
• Supervisor: Prof. Zhenning Li	
Shaanxi University of Science & Technology	Aug. 2019 - June 2022
• B.S. in Data Science and Big Data Technology (Mathematics)	Xi'an, Shaan'xi, China
• GPA: 85.8 / 100.0, Top 4	

Research Experiences

State Key Laboratory of Internet of Things for Smart City	Sept. 2023 - Present
• Research Assistant, Supervisor: Prof. Zhenning Li	Taipa, Macau, China

Publications

- [1] **B. Wang**, H. Liao, and Z. Li[†], "Beyond Patterns: Harnessing Causal Logic for Autonomous Driving Trajectory Prediction", *The 34rd International Joint Conference on Artificial Intelligence (IJCAI, Under review)*, 2025
- [2] H. Liao*, **B. Wang***, and Z. Li[†], "SA-TP: A Safety-Aware Trajectory Prediction Model for Connected and Autonomous Driving", *IEEE Transactions on Robotics (IEEE TRO, Major revision)*. **Co-first Author**
- [3] H. Liao, **B. Wang***, Z. Li[†], Z. He and G.Zhang, "Addressing Corner Cases in Autonomous Driving Trajectory Prediction: A Hybrid Approach using Mixture of Experts", *Transportation Research Part C (Under review)*. **Co-first Author**
- [4] C. Wang, H. Liao, **B. Wang**, Y. Guan, B. Rao, Z. Pu, Z. Cui, C. Xu, and Z. Li[†], "NEST: A Neuromodulated Small-world Hypergraph Trajectory Prediction Model for Autonomous Driving.", The 39th Annual AAAI Conference on Artificial Intelligence (AAAI), 2025. [Oral Presentation, AR: 600/12957=4.6%]
- [5] H. Liao*, H. Kong*, **B. Wang**, Y. Wang, Z. He, C. Xu, and Z. Li[†], "CoT-Drive: Efficient Trajectory Prediction for Autonomous Driving with LLMs and Chain-of-Thought Prompting", *IEEE Transactions on Artificial Intelligence (IEEE TAI)*, 2025.
- [6] H. Liao*, Z. Li[†], C. Wang, **B. Wang**, H. Kong, Y. Guan, G. Li, Z. Cui, and C. Xu, "A Cognitive-Driven Trajectory Prediction Model for Autonomous Driving in Mixed Autonomy Environment.", *International Joint Conference On Artificial Intelligence (IJCAI)*, 2024.
- [7] H. Liao*, C. Wang*, Z. Li[†], Y. Li, **B. Wang**, G. Li, and C. Xu, "Physics-Informed Trajectory Prediction for Autonomous Driving under Missing Observation.", *International Joint Conference on Artificial Intelligence (IJCAI)*, 2024.
- [8] H. Liao*, Z. Li[†], C. Wang, H. Shen, **B. Wang**, D. Liao, G. Li, and C. Xu, "MFTraj: Map-Free, Behavior-Driven Trajectory Prediction for Autonomous Driving.", *International Joint Conference On Artificial Intelligence (IJCAI)*, 2024.
- [9] H. Liao*, X. Li*, Y. Li, H. Kong, C. Wang, **B. Wang**, Y. Guan, KH. Tam, Z. Li[†], and C. Xu, "Characterized Diffusion and Spatial-Temporal Interaction Network for Trajectory Prediction in Autonomous Driving.", *International Joint Conference On Artificial Intelligence (IJCAI)*, 2024.

Awards

- China Graduate Contest on Smart-City Technology and Creative Design, **National Second Prize**, 2024
- The International Mathematical Contest in Modeling, **Outstanding Winner (23/15,105=0.15%)**, 2022
- China Undergraduate Mathematical Contest in Modeling, **National Second Prize (1,197/45,075= 2.6%)**, 2021