EDUCATION

University of Macau

M.S. in Computer Science. GPA: 3.53/4.00

Taipa, Macau, China Aug. 2023 - Present

Shaanxi University of Science & Technology

Xi'an, Shaan'xi, China

B.S. in Data Science and Big Data Technology (Mathematics). GPA: 85.8/100.00, 4/32 Aug. 2019 - June 2023 EXPERIENCE

• State Key Laboratory of Internet of Things for Smart City, University of Macau
Research Assistant, Supervisor: Dr. Zhenning Li

Taipa, Macau, China Sept. 2023 - Present

PUBLICATIONS

- 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 2025, Expect).
- H. Liao, **B. Wang***, and Z. Li, "SA-TP: A Safety-Aware Trajectory Prediction Model for Connected and Autonomous Driving", *IEEE Transactions on Robotics (Under review, Major revision)*. Co-first Author
- 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).
- 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 Association for the Advancement of Artificial Intelligence (AAAI 2025 oral)*.
- H. Liao, H. Shen, **B. Wang**, C. Wang, B. Rao and Z. Li, "Improving Visual Grounding for Autonomous Driving with Large Language Models", *The 25th COTA International Conference of Transportation Professionals (CICTP)*.
- H. Liao, H. Kong, **B. Wang**, C. Wang and Z. Li, "CoT-Drive: Efficient Trajectory Prediction for Autonomous Driving with LLMs and Chain-of-Thought Prompting", *IEEE Transactions on Artificial Intelligence (Under review, Major revision)*.
- H. Liao, C. Wang, Z. Li, **B. Wang**, H, Sun, Z. Pu and Z. Cui, "Towards Efficient and Robust Autonomous Driving: A Map-Free, Behavior-Aware Trajectory Prediction Approach", *The 5th Symposium on Management of Future Motorway and Urban Traffic Systems (MFTS)*.
- H. Liao, Y. Li, Z. Li, C. Wang, **B. Wang**, Z. Cui, SE. Li, C. Xu, "A Cognitive-Driven Trajectory Prediction Model for Autonomous Driving in Mixed Autonomy Environments.", *The 33rd International Joint Conference On Artificial Intelligence (IJCAI 2024)*.
- 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.", *The 33rd International Joint Conference on Artificial Intelligence (IJCAI'24)*.
- H. Liao, Z. Li, C. Wang, H. Shen, B. Wang, D. Liao, G. Li, C. Xu"MFTraj: Map-Free, Behavior-Driven Trajectory Prediction for Autonomous Driving.", The 33rd International Joint Conference on Artificial Intelligence (IJCAI 2024).
- H. Liao, X. Li, Y. Li, H. Kong, C. Wang, **B. Wang**, Y. Guan, KH. Tam, Z. Li, "CDSTraj: Characterized Diffusion and Spatial-Temporal Interaction Network for Trajectory Prediction in Autonomous Driving.", *The 33rd International Joint Conference on Artificial Intelligence (IJCAI 2024)*.

AWARDS

• Outstanding Winner $(23/15105 \approx 0.15\%)$

The International Mathematical Contest in Modeling 2022

• National Second Prize $(1197/45075 \approx 2.6\%)$

China Undergraduate Mathematical Contest in Modeling 2021

• National Second Prize

China Graduate Smart City Technology and Creative Design Competition 2024

ACADEMIC PRESENTATIONS

• Macao Conference on Smart City Technologies: Poster Session

Nov. 2023

SKILLS

- Programming Languages: Proficient in Python, Matlab; experienced in lingo, C and Java.
- Tools and Frameworks: PyTorch, LaTeX, Git, TensorFlow