个人简介

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谷歌学术总引次数 4562，H 指数 38（2026.1）

教育背景

2024.5-至今 青岛港集团有限公司，博士后

2020.4-2022.12：复旦大学大气科学与海洋系，博士后

2013.09-2018.06：上海海事大学商船学院，博士

2015.09-2016.09：华盛顿大学环境与市政工程系，国家留学基金委公派博士联合培养

2010.09-2012.07：上海海事大学商船学院，硕士

工作履历

2025.07-至今：上海海事大学物流科学与工程研究院，教授，博导

2022.07-2025.6：上海海事大学物流科学与工程研究院，副教授，博导

2022.11-2023.11 上海海事大学 科技处 处长协理

2018.09-2022.06：上海海事大学物流科学与工程研究院，讲师，硕导

2022.9-2023.6：同济大学交通运输工程学院，高级访问学者

个人简介

主研领域为船舶智能航行视觉感知、自动化码头视觉定位与导航、交通大数据挖掘、智能交通视频理解、计算机视觉等。担任 **IET Intelligent Transportation Systems (SCI, JCR Q3)，Measurement & Control (SCI, JCR Q3)、International Journal of Advanced Robotic Systems (SCI)等期刊副主编，Discover Applied Sciences (EI, ESCI)副主编，Journal of Marine Science and Engineering (SCI，JCR Q1)和 Sustainability (SCI)编委，Transportation Safety and Environment（EI, ESCI）编委，Frontiers of Engineering Management 特约通讯专家，《公路交通科技》青年编委（北大核心）、《交通信息与安全》（北大核心）青年编委**，在 IEEE Transactions on Intelligent Transportation Systems 等交通、航运、物流等研究领域的顶级期刊、会议发表论文 100 余篇，其中以第一作者/通信作者发表 SCI 期刊论文 50 余篇，以**第一作者发表 ESI/热点论文 21 篇**，并入选 **2022、2024、2025 年度全球高倍引科学家榜单，上海市教委记功奖励、上海海事大学刘浩清"教育优秀"奖**。申请和授权美国、加拿大学等国际/国内发明专利共 20 余项。作为项目负责人承担国家自然科学基金项目面上、青年等纵向/横向课题 10 余项，作为项目组核心成员参与国家自然科学基金重点项目、国家重点研发项目等 10 余项。

研究领域

1. 视频数据驱动的复杂交通/水上通航环境智能感知与理解

2. 自动化码头 IGV 视觉导航、智能航海

3. 交通大数据建模与分析

4. 交通安全分析

5. 绿色航运、船舶/AGV 能耗管理

部分学术荣誉及奖励：
- 中国航海学会科技进步奖一等奖（2025，排名第 1）
- 中国商业联合会科技进步一等奖（2025，排名第 1）
- 中国商业联合会青年科技奖（2025，排名第 1）
- 山东省海洋科技创新奖-青年海洋科技奖（2025，排名第 1）
- 第八届船舶与海洋工程行业专利银奖（2025，排名第 1）
- 中国造船工程学会科技进步奖一等奖（2025，9/15）
- 中国物流联合与采购联合会科技进步二等奖（2025，9/9）
- 入选 2022、2024、2025 年爱思唯尔全球前 2%顶尖科学家榜单
- 上海市教委"记功"奖励（2025 年）
- 上海海事大学优秀硕士论文指导教师（2025 年）
- 上海海事大学刘浩清"教育优秀"奖（2025 年）
- 中国航海学会航海科学技术创新团队（2025 年，排名 9/10）
- 《中国舰船研究》十佳审稿人（2025 年）
- "船视宝"杯第二十届全国大学生交通运输科技大赛三等奖（2025）
- 上海海事大学 2024 年度教职工考核优秀
- 上海海事大学 2022 年度教职工考核优秀
- 上海海事大学 2022 年度嘉奖
- 第五届"新时代 大航海 强国梦"智能航运发展大会优秀论文（2024，排名第 1）
- 2024 Onsite 虚实融合自动驾驶实车挑战赛荣获"优胜奖"
- 第二届 Onsite 自动驾驶算法挑战赛优胜者"第六名"（2024）
- 第二届 Onsite 自动驾驶算法挑战赛优胜者"第八名"（2024）
- 《交通信息与安全》期刊 2022 年度优秀论文（2022）
- 第十三届全国交通运输领域青年学术会议优秀论文（10%, 2019）

已出版著作/专报

● 《船舶智能航行视觉感知技术》，人民交通出版社，2025 年 11 月，第 1 编著

● 关于加快*****，A2 专报批示；

部分发表（录用）的论文，*为通信作者：

1.**Xinqiang Chen,** Chenxin Wei, Yang Yang, Lijuan Luo, Salvatore Antonio Biancardo, Xiaojun Mei (2024)**.** " *Personnel trajectory extraction from port-like videos under varied rainy interferences*" IEEE Transactions on Intelligent Transportation Systems, 25(7): 6567-6579. (**1 区 top SCI，ESI 高被引**)

2.**Xinqiang Chen**, Zichuang Wang, Qiaozhi Hua, Wen-long Shang, Qiang Luo, Keping Yu (2023). "*AI-Empowered Speed Extraction via Port-like Videos for Vehicular Trajectory Analysis*" IEEE Transactions on Intelligent Transportation Systems, 24(4): 4541-4552. **(1 区 top SCI, ESI 高被引).**

3.**Xinqiang Chen**, Zhibin Li, Yongsheng Yang, Lei Qi, Ruimin Ke (2021). "*High-Resolution Vehicle Trajectory Extraction and Denoising From Aerial Videos*" IEEE Transactions on Intelligent Transportation Systems, 22(5): 3190-3202. **(1 区 top，ESI 高被引，热点论文，入选 2022 年交通运输重大科技成果库).**

4.**Xinqiang Chen**, Fei Ma, Yuzhen Wu , Bing Han, Lijuan Luo, Salvatore Antonio Biancardo. (2025)."*MFMDepth: MetaFormer-based monocular metric depth estimation for distance measurement in ports* " Computers & Industrial Engineering, 207(2025), 111325 **(2 区 SCI, ESI 高被引，ESI 热点).**

5.**Xinqiang Chen**, Ruiyang Hu, Kai Luo, Huafeng Wu*, Salvatore Antonio Biancardo, Yiwen Zheng, Jiangfeng Xian* (2025). *"Intelligent Ship route planning via an A* search model enhanced double-deep Q-Network*" Ocean Engineering, 327(2025), 1-13 **(1 区 SCI，ESI 高被引，热点论文).**

6.**Xinqiang Chen**, Weiping Chen, Bing Wu*, Huafeng Wu, Jiangfeng Xian (2024). " *Ship visual trajectory exploitation via an ensemble instance segmentation framework* " Ocean Engineering, 313(2024), 119368 **(1 区 SCI, ESI 高被引，热点论文).**

7.**Xinqiang Chen**, Shuhao Liu, Jiansen Zhao, Huafeng Wu*, Jiangfeng Xian, Jakub Montewka. "*Autonomous port management based AGV path planning and optimization via an ensemble reinforcement learning framework* " Ocean & Coastal Management, 251(2024):107087 **(1 区 SCI, ESI 高被引、热点论文).**

8.**Xinqiang Chen**, Siying Lv, Wen-long Shang*, Huafeng Wu, Jiangfeng Xian, Chengcheng Song, "S*hip energy consumption analysis and carbon emission*

exploitation via spatial-temporal maritime data" Applied Energy, 2024, 360: 122886 **(1 区 SCI, ESI 高被引、热点)**.

9. **Xinqiang Chen**, Meiling Wang, Jun Ling, Huafeng Wu, Bing Wu*, Chaofeng Li. "*Ship imaging trajectory extraction via an aggregated you only look once (YOLO) model*" Engineering Applications of Artificial Intelligence, 130(2024): 1-9 **(1 区 SCI, ESI 热点论文)**.

10. **Xinqiang Chen**, Shuting Dou, Tianqi Song, Huafeng Wu, Yang Sun*, Jiangfeng Xian, (2024). "*Spatial-Temporal Ship Pollution Distribution Exploitation and Harbor Environmental Impact Analysis via Large-Scale AIS Data*". Journal of Marine Science and Engineering, 12(6): 1-17 **(2 区 SCI，ESI 高被引、热点论文)**.

11. **Xinqiang Chen**, Dongfang Ma, Wen Ryan Liu, (2024). "*Application of Artificial Intelligence in Maritime Transportation*". Journal of Marine Science and Engineering 12(3): 439 **(2 区 SCI，ESI 高被引)**.

12. **Xinqiang Chen**, Hao Wu, Bing Han, Wei Liu, Jakub Montewka, Ryan Wen Liu* (2023). "*Orientation-aware ship detection via a rotation feature decoupling supported deep learning approach*" Engineering Applications of Artificial Intelligence, 125(2023), 1-16 **(1 区 SCI, ESI 高被引)**.

13. **Xinqiang Chen,** Jinbiao Zheng, Chaofeng Li, Bing Wu*, Huafeng Wu, Jakub Montewka (2024). " *Maritime traffic situation awareness analysis via high-fidelity ship imaging trajectory* " Multimedia tools and applications, (2024)83:48907-48923 **(2 区 SCI, ESI 热点论文)**.

14. **Xinqiang Chen**, Shuhao Liu, Wen Liu, Huafeng Wu*, Bing Han, Jiansen Zhao. (2022)"*Quantifying Arctic oil spilling event risk by integrating analytic network process and fuzzy comprehensive evaluation model*" Ocean & Coastal Management, 228: 106326. **(1 区 SCI, ESI 高被引)**.

15. **Xinqiang Chen**, Jun Ling, Shengzheng Wang, Yongsheng Yang, Lijuan Luo, Ying Yan (2021). "*Ship Detection from Coastal Surveillance Videos via an Ensemble Canny-Gaussian-Morphology Framework*" Journal of Navigation, 74(6): 1252-1266. **(2 区 SCI，热点论文)**.

16. **Xinqiang Chen,** Huixing Chen, Yongsheng Yang, Huafeng Wu, Wenhui Zhang, Jiansen Zhao, Yong Xiong (2021). "*Traffic flow prediction by an ensemble framework with data denoising and deep learning model*" Physica A: Statistical Mechanics and its Applications, 565(2021), 1-11. **(2 区 SCI, ESI 高被引)**.

17. **Xinqiang Chen**, Yongsheng Yang, Shengzheng Wang, Huafeng Wu, Jinjun Tang, Jiansen Zhao, Zhihuan Wang (2020). "*Ship Type Recognition via a Coarse-to-Fine Cascaded Convolution Neural Network*", Journal of Navigation, 73(4), 813-832. **(2 区 SCI, ESI 高被引)**.

18. **Xinqiang Chen**, Lei Qi, Yongsheng Yang, Qiang Luo, Octavian Postolache, Jinjun Tang, Huafeng Wu (2020). "*Video-Based Detection Infrastructure*

Enhancement for Automated Ship Recognition and Behavior Analysis", Journal of Advanced Transportation, 2020, 1-12. **(3 区 SCI, ESI 高被引).**

19. **Xinqiang Chen**, Xueqian Xu, Yongsheng Yang, Huafeng Wu, Jinjun Tang, Jiansen Zhao (2020). "*Augmented Ship* Tracking *under Occlusion Conditions From Maritime Surveillance Videos*" IEEE ACCESS, 8(1), 42884-42897. **(2 区 SCI, ESI 高被引).**

20. **Xinqiang Chen**, Shubo Wu, Chaojian Shi Yanguo Huang, Yongsheng Yang, Ruimin Ke, Jiansen Zhao. (2020). "*Sensing Data Supported Traffic Flow Prediction via Denoising Schemes and ANN: A Comparison*" IEEE Sensors Journal, 20(23), 14317-14328. **(SCI, ESI 高被引，2 区).**

21. **Xinqiang Chen***, Shengzheng Wang, Chaojian Shi, Huafeng Wu, Jiansen Zhao, Junjie Fu (2019). "*Robust ship tracking via multi-view learning and sparse representation*", Journal of Navigation, 72(1), 176-192. **(2 区 SCI，ESI 高被引，入选 2021 年交通运输重大科技成果库).**

22. Guangnian Xiao, Tian Wang, **Xinqiang Chen***, Lizhen Zhou. "*Evaluation of Ship Pollutant Emissions in the Ports of Los Angeles and Long Beach*" Journal of Marine Science and Engineering, 2022, 10(9): 1206 **(SCI, ESI 热点论文).**

23. **Xinqiang Chen,** Peishi Wu, Yajie Zhang, Xiaomeng Wang, Jiangfeng Xian, Han Zhang (2025). "*Smart Maritime Transportation-Oriented Ship-Speed Prediction Modeling Using Generative Adversarial Networks and Long Short-Term Memory*" Journal of Marine Science and Engineering 13(6), 1-30 **(3 区 SCI).**

24. **Xinqiang Chen,** Chenxin Wei, Zhengang Xin, Jiansen Zhao*, Jiangfeng Xian (2023). *" Ship Detection under Low-Visibility Weather Interference via an Ensemble Generative Adversarial Network "* Journal of Marine Science and Engineering, 1-17. **(2 区 SCI).**

25. **Xinqiang Chen**, Xingyu Wu, Dilip K. Prasad, Bing Wu*, Octavian Postolache, Yongsheng Yang (2022). "*Pixel-wise Ship Identification from Maritime Images via a Semantic Segmentation Model*" IEEE Sensors Journal, 22(18):18180-18191. **(2 区 SCI).**

26. **Xinqiang Chen**, Chenxin Wei, Guiliang Zhou, Huafeng Wu, Zhengyi Wang, Salvatore Antonio Biancardo. (2022) "*Automatic Identification System (AIS) Data Supported Ship Trajectory Prediction and Analysis via a Deep Learning Model*" Journal of Marine Science and Engineering, 10(9):1314 **(2 区 SCI).**

27. **Xinqiang Chen,** Huixing Chen, Xianglong Xu, Lijuan Luo, Salvatore Antonio Biancardo (2022). "*Ship tracking for maritime traffic management via a data quality control supported framework*" Multimedia tools and applications, 81(5):7239-7252. **(2 区 SCI).**

28. **Xinqiang Chen**, Qianli Ma, Huafeng Wu, Wenlong Shangh, Bin Han, Salvatore Antonio Biancardo (2025) "*Autonomous port traffic safety oriented vehicle kinematic information exploitation via port-like videos*" Transportation Safety and Environment, 7(3), 1-15. **(EI)**

29. **Xinqiang Chen**, Zhanhao Zhang, Zhibin Li*, Bing Han, Yiwen Zheng, Salvatore Antonio Biancardo (2025) "*Microscopic aggerated traffic parameter extraction against complex camera motion interference*" Transportation Safety and Environment, Accepted. **(EI)**

30. **Xinqiang Chen**, Rui Yang, Yuzhen Wu*, Han Zhang, Prakash Ranjitkar, Octavian Postolache, Yiwen Zheng, Zichuang Wang (2025). " *Towards intelligent shipping: image-enhanced ship detection and situation analysis in low-light scenes* " Intelligence & Robotics, 5(3), 662-678. (ESCI)

31. **Xinqiang Chen**, Peiyang Wu, Yuzhen Wu, Loay Aboud, Octavian Postolache, Zichuang Wang (2025). "*Ship trajectory prediction via a transformer-based model by considering spatial-temporal dependency*" Intelligence & Robotics, 5(3), 526-578. **(ESCI)**

32. **Xinqiang Chen**, Chen Chen, Huafeng Wu, Octaivan Postolache, Yuzhen WU* (2025). "*An improved artificial potential field method for multi-AGV path planning in ports*" Intelligence & Robotics, 5(1):19-33. **(ESCI)**

33. **陈信强**, 樊家畅, 吴华锋, 吴宇震, 李世博*, 鲜江峰. "融合可逆实例归一化及 Informer 编解码的船速预测" 上海海事大学学报,2025,46(04):1-9. **(北大核心，CSCD 扩展).**

34. **陈信强**, 陈伟平, 韩冰, 李朝锋, 吴华锋, 朱宗良. "*融合图卷积神经网络与循环注意力机制的船舶航迹预测*" 中国航海,2025,48(03):41-48+64. **(北大核心，CSCD 扩展).**

35. **陈信强**, 陈建慧, 刘恕浩, 韩冰, 赵建森, 李朝锋 (2024). "*基于语义分割和霍夫变换的可见光图像海天线检测方法*" 中国航海, 47(4): 65-72. **(北大核心，CSCD 扩展).**

36. **陈信强**, 戴锦宇, 刘恕浩, 韩冰. "考虑岸桥缓存区和能耗节约的 AGV 协同调度研究 " 中国航海, 2024, 47(3):72-80. **(北大核心，CSCD 扩展).**

37. **陈信强**, 高原, 赵建森, 周亚民, 梅骁峻, 鲜江峰(2024). "*基于 Chebnet-LSTM 的区域船舶交通流量预测*"上海海事大学学报, 45(1): 32-38 **(北大核心).**

38. **陈信强**, 王美琳, 李朝锋, 杨洋, 梅骁峻 (2023). "*基于深度学习与多级匹配机制的港区人员轨迹提取*"交通运输系统工程与信息, 23(4): 70-79. **(EI).**

39. *陈信强*, 史飞翔, 王梓创, 杨勇生, 刘卫, 孙洋 (2022). "*基于模糊逻辑方法的多船会遇安全态势评估* " 广西大学学报(自然科学版)，47(5): 1327-1336 **(北大核心).**

40. **陈信强**，郑金彪, 凌峻, 王梓创, 吴建军, 阎莹 (2022). "*基于异步交互聚合网络的港船作业区域人员异常行为识别*" 交通信息与安全, 40(2): 22-29 **(北大核心，CSCD 扩展).**

41. **陈信强**，徐祥龙，彭静，孙洋，王梓创，阎莹(2022). "*基于 Douglas-Peucker 和 Quick Bundles 算法的水上交通模式识别*"上海海事大学学报, ,43(03):1-6.**(北大核心).**

42. **陈信强**，郑金彪，陈伟平，王美琳(2022). "*新时代"智能交通系统"课程改革研究*" 科教导刊, 32: 130-132. **(教改论文)**

43. **Xinqiang Chen**, Xueqian Xu, Yongsheng Yang, Yanguo Huang, Jing Chen, Ying Yan. (2021). "*Visual Ship Tracking via a Hybrid Kernelized Correlation Filter and Anomaly Cleansing Framework*" Applied Ocean Research, 106(2021), 1-10. **(1 区 SCI).**

44. **陈信强，**凌峻，齐雷，杨勇生，周亚民(2021). "*多特征融合和尺度变化估计的船舶跟踪方法*"，计算机工程与应用, 57(13), 246-250 **(北大核心，CSCD 扩展).**

45. **Xinqiang Chen,** Jun Ling, Yongsheng Yang, Hailin Zheng, Pengwen Xiong, Octavian Postolache, Yong Xiong. (2020). "*Ship Trajectory Reconstruction from AIS Sensory Data via Data Quality Control and Prediction*" Mathematical Problems in Engineering, 2020, 1-9. **(4 区 SCI).**

46. **Xinqiang Chen**, Jinquan Lu, Jiansen Zhao, Zhijian Qu, Yongsheng Yang, Jiangfeng Xia. (2020). "*Traffic Flow Prediction at Varied Time Scales via Ensemble Empirical Mode Decomposition and Artificial Neural Network*" Sustainability, 12(9), 1-17. **(3 区 SCI).**

47. **Xinqiang Chen**, Huixing Chen, Huafeng Wu, Yanguo Huang, Yongsheng Yang, Wenhui Zhang, Pengwen Xiong. (2020). "*Robust Visual Ship Tracking with an Ensemble Framework via Multi-View Learning and Wavelet Filter*" Sensors, 20(3), 1-17. **(2 区 SCI).**

48. **Xinqiang Chen**, Zhibin Li, Yinhai Wang, Jinjun Tang, Wenbo Zhu, Chaojian Shi, Huafeng Wu. (2018). "*Anomaly Detection and Cleaning of Highway Elevation Data from Google Earth Using Ensemble Empirical Mode Decomposition*", Journal of Transportation Engineering, Part A: Systems, 144(5), 1-14. **(4 区 SCI).**

49. **Xinqiang Chen**, Zhibin Li, Yinhai Wang, Zhiyong Cui, Chaojian Shi, Huafeng Wu. (2017). "*Evaluating the impacts of grades on vehicular speeds on interstate highways*", PloS one, 12(9), 1-15. **(3 区 SCI).**

50. Yuqing Wang, **Xinqiang Chen***, Yuzhen Wu, Jiansen Zhao, Octavian Postolache, Shuhao Liu. "*Visual Navigation Systems for Maritime Smart Ships: A Survey*". Journal of Marine Science and Engineering. 2024; 12(10):1781 **(2 区 SCI).**

51. Shubo Wu, **Xinqiang Chen***, Chaojian Shi, Junjie Fu, Ying Yan, Shengzheng Wang (2022). "*Ship Detention Prediction via Feature Selection Scheme and*

Support Vector Machine (SVM)" Maritime Policy & Management, 49(1):140-153. **(2 区 SCI).**

52. Junjie Fu, **Xinqiang Chen*,** Shubo Wu, Chaojian Shi,Jiansen Zhao,Jiangfeng Xian. (2020). "*Ship Detention Situation Prediction via Optimized Analytic Hierarchy Process and Naive Bayes Model*" Mathematical Problems in Engineering, 2020, 1-11. **(SCI).**

53. Junjie Fu, **Xinqiang Chen***, Shubo Wu*, Chaojian Shi, Huafeng Wu, Jiansen Zhao, Pengwen Xiong. (2020). "*Mining Ship Deficiency Correlations from Historical Port State Control (PSC) Inspection Data*" PloS one, 15(2), 1-19. **(SCI).**

54. Xiaolei Ma, **Xinqiang Chen**, Zhuang Dai. (2024).*"Special issue on transportation big data and its applications "*. Applied Sciences, 14(4), 1517. **(3 区 SCI)**

55. Xueqian Xu, **Xinqiang Chen**, Bing Wu*, Zichuang Wang, Jinbiao Zhen. "*Exploiting high-fidelity kinematic information from port surveillance videos via a YOLO-based framework*" Ocean & Coastal Management, 222(2022): 1-10. **(1 区 SCI).**

56. Yang Sun, **Xinqiang Chen**, Jun Ling, Jiansen Zhao, Qinyou Hu, Xianghui Fang, Ying Yan. (2021), "*Ship trajectory cleansing and prediction with historical ais data using an ensemble ANN framework*" International journal of innovative computing information and control, 17(2): 443-459. **(EI)**

57. Qiang Luo, **Xinqiang Chen**, Jie Yuan, Xiaodong Zang, Junheng Yang, Jing Chen. (2020). "*Study and Simulation Analysis of Vehicle Rear-End Collision Model considering Driver Types*" Journal of Advanced Transportation, 2020, 1-11. **(3 区 SCI).**

58. Shubo Wu, **Xinqiang Chen**, Huixing Chen and Jinquan Lu. (2020). "*Intelligent fire early warning and monitoring system for ship bridge based on WSN."* International Journal of Science, 7(8), 248-255. （**4 区 SCI**）

59. Jinjunn Tang, **Xinqiang Chen**, Zheng Hu, Fang Zong, Chunyang Han, Leixiao Li. "*Traffic flow prediction based on combination of support vector machine and data denoising schemes*" Physica A: statistical mechanics and its applications, 534(2019), 1-19. **(2 区 SCI).**

60. Jiansen Zhao, **Xinqiang Chen**, Shengzheng Wang, Wei Liu, Baoxian Ji, Yue Liu, Zhen Sun, Tie Xu. (2017). "*A Study of the Characteristics of a Deformable Antenna Based on Gas Discharge*" IEEE Transactions on Antennas and Propagation, 66(1), 59-70. **(1 区 SCI).**

61. 张亮，**陈信强**．"船舶航行会遇风险评价体系研究"．水运管理,2024,46(04):22-24, 41.

62. 俞毅，高迎，**陈信强***，钱愈，方圆，辛政昂，王杰. *"基于尺度特征交互改进的 YOLOV8 在低能见度环境下的船舶目标检测"*. 上海海事大学,2025,46(03):29-35.（北大核心）

63. Yang Sun, Yuchen Cao, **Xinqiang Chen***, Liang Chen, Qinyou Hu (2025). "*Marine accident black spot clustering and search and rescue resource optimization based on multiple features* " Ocean Engineering, 333(2025): 1-15. **(2 区 SCI).**

64. Yuzhen Wu, Yucheng Suo, **Xinqiang Chen***, Yongsheng Yang, Han Zhang, Zichuang Wang, ·Octavian·Postolache (2025). "*Monocular Unmanned Boat Ranging System Based on YOLOv11-Pose Critical Point Detection and Camera Geometry*" Journal of Marine Science and Engineering 13(6): 1-19. **(3 区 SCI).**

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部分会议论文及受邀请的报告：

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部分申请及授权发明专利、软著：

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Chaofeng Li, Jiangfeng Xian, Wei Liu. method for vessel traffic pattern identification via data quality control and data compression, 申请号: 17976816 **(美国发明专利，授权).**

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8. **Xinqiang Chen**, Siying Lv, Yongsheng Yang, Huafeng Wu, Bing Han, Zhongdai Wu, Xiaojun Mei, Qiannan Zhang, Jiangfeng Xian, Yamin Zhou. "Ship detection method based on machine vision"，授权号：2023/05030 **(国际发明专利，授权).**

9. **Xinqiang Chen**, Feixiang Shi, Bangping Gu, et al., "A method for evaluating water traffic conditions based on fuzzy rules"，授权号：202200772 **(国际发明专利，授权).**

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12. **Xinqiang Chen**, Weiping Chen, Yongsheng Yang, et al., Ship imaging trajectory extraction under discontinuous visual interferences，申请号：202210337 **(国际发明专利，授权).**

13. **陈信强**，陈辉兴，杨勇生等，*一种车头时距建模方法及一种最小绿灯时间计算方法*，申请号：201910461276.2 **(发明专利，授权).**

14. **陈信强**，魏晨鑫，杨勇生等，*一种不同能见度环境中人员轨迹的智能提取与识别方法*，申请号：202210997576.4 **(发明专利).**

15. **陈信强**，吴昊，杨勇生等，一种基于船艏向识别的船舶图像轨迹跟踪与预测方法，申请号：202210789127.0(**发明专利**).

16. **陈信强**，史飞翔，顾邦平等，一种基于模糊规则的水上交通态势评估方法，申请号：202210007481.3 (**发明专利**).

17. **陈信强**，王梓创，杨勇生等，面向港航环境下的工作人员异常行为识别方法，申请号：202210006996.1 (**发明专利**).

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20. **陈信强**，吕思盈，吴华锋等，基于大数据的水上交通安全监管系统，登记号：2023SR1507310 (**授权，软著**)

21. **陈信强**，王美琳，吴昊等，基于倾斜船舶成像检测的航迹识别程序，登记号：2022SR1015915 (**授权，软著**)

22. **陈信强**，王秋英，陈建慧等，海上船舶航行速度预测分析系统，登记号：2023SR0022403(**授权，软著**)

23. **陈信强**，马千里，鲜江峰等，船舶航行轨迹数据智能强化学习系统，登记号：2023SR0420021(**授权，软著**)

部分主持/参与科研项目：

1. 国家自然科学基金（面上项目），面向自主航行的水上交通态势主动认知与统一表达研究，2025/01-2028/12，主持.

2. 国家自然科学基金（青年项目），通航环境混合干扰的船舶图像航迹跟踪研究，2022/01-2024/12，主持.

3. 中国博士后基金，复杂通航环境干扰下的高精度船舶跟踪机理研究，2022-2023，主持，结题.

4. 上海市教委，人工智能新范式驱动的智能船舶自主航行控制关键技术研究，2024-2025，主持，结题.

5. 中国船级社，拖轮感知测试场景数据集标注，2025.10-2026.2，主持

6. 交通运输部北海救助局，北海救助局曹妃甸工作船码头工程航标配布专项方案研究，2025.9-2025.12，主持，结题.

7. 水路交通控制全国重点实验室开放课题，基于随机最优的船舶自主航行智能策略研究，2025/01-2025/12，主持.

8. 绿色物流智能技术重庆市重点实验开放基金（重点项目），面向港船协同控制的港航物流系统韧性研究—以船舶自主决策及航线优化为例，2024/11-2025/10，主持.

9. 智能机器人江西省重点实验室开放课题（一般项目），基于多模态数据融合的船舶自主航行与智能决策研究，2025/1-2026/12，**主持**.

10. 交通运输部东海航海保障中心，IALA 国际航标协会事务跟踪研究，2024/6-2024/12，**主持，结题**

11. 上海船舶运输科学研究所有限公司，高精度图像航迹数据驱动的船舶智能航行通航态势感知与分析研究，2022/1-2023/12，**主持，结题**.

12. 交通运输部东海航海保障中心，水上安全通信技术数字化发展研究，2023/8-2023/12，**主持，结题**

13. 国家水运安全工程技术研究中心开放基金，2022，**主持，结题**.

14. 江苏省交通运输与安全保障重点建设实验室开放基金，2022/01-2023/12，**主持，结题**.

15. 内河航运技术湖北省重点实验室开放基金，2022/01-2023/12，**主持，结题**.

16. 上海海事大学，控制科学与工程研究生重点课程任务，2020-2021，**主持，结题**.

17. 上海市教委，上海高校青年教师培养资助计划，2019，**主持，结题**.

18. 上海海事大学，国际专利（PCT）培育基金，2019，**主持，结题**.

19. 国家自然科学基金，海洋传感网三维动态定位与数据高效传输关键技术研究，30 万，2023.1-2025.12，30 万，在研，**第二参与人**.

20. 国家自然科学基金，基于量子优化框架的海洋传感网鲁棒性定位与追踪研究，30 万，2023.1-2025.12，30 万，在研，**第二参与人**.

21. 上海市晨光计划，海洋立体观测网数据鲁棒高效传输关键技术研究，2024.1-2025.12，在研，**第二参与人**.

22. 中国博士后科学基金会，基于量子耦合优化框架的水下传感网目标定位与追踪研究，2022.6-2024.6，8 万，在研，**第二参与人**.

23. 上海市科学技术委员会，基于 AIS 数据的港口水域船舶交通流量预测，2023.3-2024.2，在研，**第三参与人**.

24. 上海市科学技术委员会，基于深度强化学习的海洋智能集群传感网分布式估计与优化关键技术研究，2023.1-2025.12，在研，**第四参与人**.

25. 国家重点研发计划，北极航道船舶航行导航优化技术及应用系统研发，2021/01-2024/12，60 万，在研，**参加**.

26. 国家重点研发计划，北极航道通信导航保障关键技术研究与系统研发，2021/01-2024/12，20 万，在研，**参加**.

27. 国家自然科学基金面上项目，52072237，事故信息不完备环境下水上交通救援资源调控研究，2021/01-2024/12，60 万，在研，**参加**.

28. 国家山区公路工程技术研究中心，高速公路特殊路段主动安全防控技术与装备，2022/01-2023/06，29 万，在研，**参加**.

29. 国家自然科学基金面上项目，52071200，基于动态自适应成簇的海洋传感网智能数据预测与重构，2021/01-2024/12，58 万，在研，参加.

30. 国家自然科学基金青年科学项目，51709167，船载北斗多面化、可控式四臂螺旋天线阵列性能调控机理研究，2018/01-2020/12，22 万，结题，参加.

31. 国家自然科学基金面上项目，51579143，基于海浪遮蔽效应模型的海洋传感网三维动态协同定位机制，2016/01-2019/12，63 万，结题，参加.

32. 美国联邦公路局资助项目：Highway Grade Characterization and Operating Efficiency Methods, Tools and Data Development，36 万（美金），已结题，参加.

部分期刊客座编辑：

- Frontier in Marine Science 期刊特刊: Big Data and AI for Sustainable Maritime Operations, 2025 年 4 月至 2025 年 10 月，客编(SCI，JCR Q1)
- Frontier in Marine Science 期刊特刊: Smartization and Resilience of Ports and Shipping, 2025 年 5 月至 2025 年 12 月，客编(SCI，JCR Q1)
- Sustainability 期刊特刊：Sustainable Intelligent Transport Systems: AI-Driven Multi-Modal Fusion for Green Development，2025 年 5 月至 2026 年 9 月，首席客座编辑(SCI，JCR Q2)
- IET Intelligent Transport Systems 期刊特刊: Innovations in Shipping Industry: AI-supported resilient and smart multi-modal transportation development，2024 年 10 月至 2025 年 8 月，首席客座编辑 (SCI，JCR Q1)
- Journal of Marine Science and Engineering 期刊特刊：Smart and Low Carbon Emission-Oriented Maritime Traffic Management and Controlling，2023 年 12 月至 2025 年 6 月，首席客座编辑 (SCI，JCR Q1)
- Sustainability 期刊特刊: Sustainable and Smart Traffic Variation, Development and Analysis toward Multi-model and Multi-source Data，永久有效 (SCI，JCR Q2)
- IEEE Open Journal of Intelligent Transportation Systems 期刊特刊：Transport Research Supported by Remote Sensing Data，2024 年 4 月至 2024 年 10 月，客座编辑 (EI)
- Journal of Marine Science and Engineering 期刊特刊：Application of Artificial Intelligence in Maritime Transportation，2022 年 6 月至 2023 年 12 月，首席客座编辑 (SCI，JCR Q1)
- Journal of Advanced Transportation 期刊特刊：Transportation Traffic Safety Analysis and Prevention via Multiple Data Sources and Artificial Intelligence Techniques，2020 年 9 月至 2021 年 9 月，首席客座编辑 (SCI，JCR Q3)
- Applied Sciences-Basel 期刊特刊：Transportation Big Data and Its Applications，2021 年 7 月至 2023 年 5 月，客座编辑 (SCI，JCR Q2)

部分学术兼职：

- IET Intelligent Transportation Systems (SCI, JCR Q3)副主编（2024-）

- Measurement and Control(SCI, JCR Q3)副主编（2024-）
- International Journal of Advanced Robotic Systems (SCI)副主编（2024-）
- Discover Applied Sciences (EI, ESCI)副主编（2024-）
- Journal of Shipping and Ocean Engineering 副主编（2023-）
- Transportation Safety and Environment（EI, ESCI）编委（2024-2026）
- Frontiers of Engineering Management 特约通讯专家（2025-2027）
- Journal of Marine Science and Engineering (SCI，JCR Q1)编委（2024-）
- Sustainability (SCI)编委（2024-, JCR Q2）
- Intelligence & Robotics 编委（2025-）
- Journal of Marine Science and Engineering (SCI)客座编辑 （2022-2024）
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- Sustainable Horizon 期刊青年编委
- Frontier in Future Transportation 客座编辑（2021）
- 《公路交通科技》青年编委（北大核心期刊，CSCD 权威期刊）
- 《交通信息与安全》第九届编委会青年编委（北大核心期刊，CSCD 扩展版）
- 《佳木斯大学学报（自然科学版）》青年编委
- 国际交通科技年会 Area Editor （获 CICTP 2020-21 最佳区域编辑）
- 国际交通科技年会(CICTP 2022)交通资产管理分论坛主持人（2022）
- "河海联运学术研讨会"国际会议智能化水运系统设计与管理分论坛主持人（2022）
- "第三届长江研究与创新协同平台"国际会议信息技术的高级应用分论坛主持人（2020）
- 国家自然科学基金评审专家（工程与材料学部）
- 黑龙江省大学生交通科技大赛评审专家（2021，2022）
- 船舶运输控制系统国家工程研究中心常驻专家（2018-2023）
- SSCI 国际期刊 Maritime Policy & Management 杰出审稿人.
- SCI 国际期刊 Journal of King Saud University-Computer and Information Sciences 杰出审稿人.