个人简介

陈信强，博士，副教授，博导、硕导

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教育背景

2020.04-2022.12：复旦大学大气科学与海洋系，博士后（**合作导师穆穆院士**）

2013.09-2018.06：上海海事大学商船学院，博士（**导师施朝健教授**）

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（**导师王印海教授**）

2010.09-2012.07：上海海事大学商船学院，硕士（**导师吴华锋教授**）

工作履历

2022.07-至今：上海海事大学物流科学与工程研究院，副教授，博导

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-至今：同济大学交通运输工程学院，高级访问学者，合作导师**孙剑教授**

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

科研成果简介

在 IEEE Transactions on Intelligent Transportation Systems，IEEE Sensors Journal，Ocean Engineering, Journal of Navigation，Transportation Research Board (TRB)等交通、航海、港航物流等研究领域的顶级期刊、会议发表论文 50 余篇，其中 SCI 收录期刊论文 50 篇，授权和申请发明专利共 7 项，受邀担任一区 SCI 期刊 Sensors 期刊客座编辑（Guest Editor），二区 SCI 期刊 Journal of Marine Science and Engineering 期刊客座编辑，三区 SCI 期刊 Sustainability 期刊客座编辑，三区 SCI 期刊 Applied Sciences 期刊客座编辑（Guest Editor），三区 SCI 期刊 Journal of Advanced Transportation 期刊客座编辑，COTA CICTP 区域编辑（2021），“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，受邀担任 IEEE Transactions on Intelligent Transportation Systems，IEEE Transactions on Neural Networks and Learning Systems，IEEE Transactions on Multimedia，Journal of Navigation，TRB 等计算机视觉、交通、航海领域内顶级 SCI 期刊、会议的审稿专家，并担任 Journal of Shipping and Ocean

Engineering，International Journal of Transportation Engineering and Technology，SCIREA Journal of Traffic and Transportation，SCIREA Journal of Computer 等 6 个国际期刊编委，并受邀担任世界交通运输大会（WTC）的水运信息工程学技术委员会委员及交通数据科学理论与方法技术委员会委员，2018 第一届（第二届）物联网感知与仪器国际会议（ISSI 2018，ISSI 2019）、2018 第三届电气工程与自动化国际会议（ECAE 2018）、2018 交通与市政结构国际会议（ISTTCA 2018）等 5 个 EI 收录国际会议的组委会成员。作为项目组核心成员，主持和参与国家自然科学基金（青年、面上）、交通运输部基础研究项目、美国联邦公路局研究项目等纵向课题 10 余项。

部分发表（录用）的论文，*为通信作者：

1. **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. **(ESI 高被引，热点论文，SCI，入选 2022 年交通运输重大科技成果库).**
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. **(SCI).**
3. **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. **(SCI，ESI 高被引，入选 2021 年交通运输重大科技成果库).**
4. **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. **(SCI, 热点论文).**

5. **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. **(SCI, ESI 高被引).**
6. **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. **(SCI, ESI 高被引).**
7. **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. **(SCI, ESI 高被引).**
8. **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. **(SCI, ESI 高被引).**
9. 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, 热点论文).**
10. **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. **(SCI).**
11. **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. **(SCI).**
12. **Xinqiang Chen**, Chenxin Wei, Guiliang Zhou, Huafeng Wu, Zhongyu 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. **(SCI).**

13. **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. **(SCI). 8**
14. **Xinqiang Chen**, Hao Wu, Bing Han, Wei Liu, Jakub Montewka, Ryan Wen Liu*. "*Orientation-aware ship detection via a rotation feature decoupling supported deep learning approach*" Engineering Applications of Artificial Intelligence, **(SCI, 已录用).**
15. **陈信强**，王美琳，李朝锋，杨洋，梅骁峻. "*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, **(EI, 已录用).**
16. **陈信强**，陈建慧，刘恕浩等. "*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, **(CSCD 扩展, 已录用).**
17. **陈信强**，戴锦宇，韩冰等. "考虑岸桥缓存区和能耗节约的 AGV 协同调度研究 " 中国航海, **(CSCD 扩展, 已录用).**
18. **陈信强**，史飞翔，王梓创等 (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).**
19. **陈信强，**郑金彪，凌峻等 (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).**
20. **陈信强**，徐祥龙，彭静等 (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).**
21. **陈信强**，郑金彪，陈伟平等(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)**
22. **Xinqiang Chen**, Xueqian Xu, Yongsheng Yang, et al. (2021). "*Visual Ship Tracking via a Hybrid Kernelized Correlation Filter and Anomaly Cleansing Framework*" Applied Ocean Research, 106(2021), 1-10. **(SCI).**

23. **陈信强，**凌峻，齐雷等(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).**
24. **Xinqiang Chen**, Shubo Wu, Chaojian Shi et al. (2020). "*Sensing Data Supported Traffic Flow Prediction via Denoising Schemes and ANN: A Comparison*" IEEE Sensors Journal, 20(23), 14317-14328. **(SCI).**
25. **Xinqiang Chen,** Jun Ling, Yongsheng Yang et al. (2020). "*Ship Trajectory Reconstruction from AIS Sensory Data via Data Quality Control and Prediction*" Mathematical Problems in Engineering, 2020, 1-9. **(SCI).**
26. **Xinqiang Chen**, Jinquan Lu, Jiansen Zhao et al. (2020). "*Traffic Flow Prediction at Varied Time Scales via Ensemble Empirical Mode Decomposition and Artificial Neural Network*" Sustainability, 12(9), 1-17. **(SCI).**
27. **Xinqiang Chen**, Huixing Chen, Huafeng Wu, et al. (2020). "*Robust Visual Ship Tracking with an Ensemble Framework via Multi-View Learning and Wavelet Filter*" Sensors, 20(3), 1-17. (**SCI).**
28. **Xinqiang Chen**, Zhibin Li, Yinhai Wang, et al. (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. **(SCI).**
29. **Xinqiang Chen**, Zhibin Li, Yinhai Wang, et al. (2017). "*Evaluating the impacts of grades on vehicular speeds on interstate highways*", PloS one, 12(9), 1-15. **(SCI).**
30. Shubo Wu, **Xinqiang Chen***, Chaojian Shi, et al (2022). "*Ship Detention Prediction via Feature Selection Scheme and Support Vector Machine (SVM)*" Maritime Policy & Management, 49(1):140-153. **(SCI).**
31. Junjie Fu, **Xinqiang Chen*,** Shubo Wu, et al. (2020). "*Ship Detention Situation Prediction via Optimized Analytic Hierarchy Process and Naive Bayes Model*" Mathematical Problems in Engineering, 2020, 1-11. **(SCI).**
32. Junjie Fu, **Xinqiang Chen***, Shubo Wu*, et al. (2020). "*Mining Ship Deficiency Correlations from Historical Port State Control (PSC) Inspection Data*" PloS one, 15(2), 1-19. **(SCI).**
33. Xueqian Xu, **Xinqiang Chen**, Bing Wu, et al. "*Exploiting high-fidelity kinematic information from port surveillance videos via a YOLO-based framework*" Ocean & Coastal Management, 222(2022): 1-10. **(SCI).**
34. Jiansen Zhao, Zhongwei Yan, **Xinqiang Chen***, et al. " *k-GCN-LSTM: A k-hop Graph Convolutional Network and Long Short-Term Memory for ship speed*

prediction" Physica A: Statistical Mechanics and its Applications, 606(2022), 1-14 **(SCI).**

35. Yang Sun, Jun Ling, **Xinqiang Chen***, et al. "*Exploring Maritime Search and Rescue Resource Allocation via an Enhanced Particle Swarm Optimization Method*" Journal of Marine Science and Engineering, 2022, 10 (7): 1-14. **(SCI).**

36. Jiansen Zhao, Lingjun Kong, **Xinqiang Chen***, et al. "Experimental Study on a Self-phase-shifting Cross Vibrator Plasma Antenna Array" IEEE Antennas and Wireless Propagation Letters, 2022, 21 (7): 1343-1347. **(SCI).**

37. Hu Liu, Xueqian Xu, **Xinqiang Chen***, et al. "Real-time ship tracking under challenges of scale variation and different visibility weather conditions" Journal of Marine Science and Engineering, 2022, 10(3): 1-16. **(SCI).**

38. Jiansen Zhao, Jinquan Lu, **Xinqiang Chen***, et al. "*High-Fidelity data supported Ship Trajectory Prediction via an Ensemble Machine Learning Framework*" Physica A: Statistical Mechanics and its Applications, 586(2022), 1-10. **(SCI).**

39. Jinjun Tang, Jin Hu, Wei Hao, **Xinqiang Chen*,** et al. "*Markov Chains based route travel time estimation considering link spatio-temporal correlation*" Physica A: Statistical Mechanics and its Applications, 545(2020), 1-13. **(SCI).**

40. Qiang Luo, Jie Yuan, **Xinqiang Chen***, et al. "*Analyzing start-up time headway distribution characteristics at signalized intersections*", Physica A: Statistical Mechanics and its Applications, 535(2019), 1-10. **(SCI).**

41. Zhijian Qu, Xubing Sun, **Xinqiang Chen***, et al. (2019). "*A novel RFID multi-tag anti-collision protocol for dynamic vehicle identification*" PloS one, 14(7), 1-25. **(SCI).**

42. Qiang Luo, Xiaodong Zang, Jie Yuan*, **Xinqiang Chen***, et al. (2020). "Research of Vehicle Rear-End Collision Model considering Multiple Factors" Mathematical Problems in Engineering, 2020, 1-11. **(SCI).**

43. Qiang Luo, Jie Yuan*, **Xinqiang Chen***, et al. (2019). "*Research on mixed user equilibrium model based on mobile internet traffic information service*" IEEE ACCESS, 7, 164775-164791. **(SCI).**

44. Jinjun Tang, Fan Gao, Fang Liu, **Xinqiang Chen*** (2020). "*A Denoising Scheme-Based Traffic Flow Prediction Model: Combination of Ensemble Empirical Mode Decomposition and Fuzzy C-means Neural Network*" IEEE ACCESS, 8, 11546-11559. **(SCI).**

45. Qiang Luo, **Xinqiang Chen**, Jie Yuan, et al. (2020). "Study and Simulation Analysis of Vehicle Rear-End Collision Model considering Driver Types" Journal of Advanced Transportation, 2020, 1-11. **(SCI).**

46. Jinjunn Tang, **Xinqiang Chen**, Zheng Hu, et al. "*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. **(SCI).**

47. Yang Sun, **Xinqiang Chen**, Jun Ling, et al. (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)

48. RyanWen Liu, Yuanqiao Wen, **Xinqiang Chen**, et al. (2021). "An enhanced CNN-enabled learning method for promoting ship detection in maritime surveillance system," Ocean Engineering, vol. 235, p. 109435. **(SCI)**.

49. Jinjun Tang, Shen Zhang, **Xinqiang Chen**, et al. "*Taxi trips distribution modeling based on Entropy-Maximizing theory: A case study in Harbin city-China*" Physica A: Statistical Mechanics and its Applications, 493(2018), 430-443. **(SCI).**

50. Jiansen Zhao, **Xinqiang Chen**, Shengzheng Wang, et al. (2018). "*A Study of the Characteristics of a Deformable Antenna Based on Gas Discharge*" IEEE Transactions on Antennas and Propagation, 66(1), 59-70. **(SCI).**

51. Huafeng Wu, Xiaojun Mei, **Xinqiang Chen**, et al. "*A novel cooperative localization algorithm using enhanced particle filter technique in maritime search and rescue wireless sensor network*" ISA transactions, 78(2018), 39-46. **(SCI).**

52. Haoyang Yan, Zhiyong Cui, **Xinqiang Chen**, et al. (2022). "*Distributed Multi-Agent Deep Reinforcement Learning for Multi-line Dynamic Bus Timetable Optimization*" IEEE Transactions on Industrial Informatics, 2022, 1-10. **(SCI).**

53. Zhijian Qu, Hanxin Liu, Hailin Wang, **Xinqiang Chen**, et al. (2020). "*Cluster equilibrium scheduling method based on backpressure flow control in railway power supply systems*" PLoS ONE, 15(12): 1-23. **(SCI).**

54. Salvatore Antonio Biancardo, Francesco Avella, Ernesto Di Lisa, **Xinqiang Chen**, et al. (2021). "*Multiobjective Railway Alignment Optimization UsingBallastless Track and Reduced Cross-Section in Tunnel*" Sustainability, 13(19): 1-19, (**SCI**).

55. Ruyi Feng, Changyan Fan, Zhibin Li, **Xinqiang Chen** (2020). "*Mixed Road User Trajectory Extraction from Moving Aerial Videos based on Convolution Neural Network Detection*" IEEE ACCESS, 8, 43508-43519 **(SCI).**

56. Jinjun Tang, Shaowei Yu, Fang Liu, **Xinqiang Chen**, et al. (2019). "*A hierarchical prediction model for lane-changes based on combination of fuzzy*

C-means and adaptive neural network" Expert Systems with Applications, vol. 130: 265-275. **(SCI).**

57. Wenhui Zhang, Yongmin Su, Ruimin Ke, and **Xinqiang Chen** (2018). "*Evaluating the influential priority of the factors on insurance loss of public transit*" PloS one, 13(1): 1-11. **(SCI)**.

58. Jiansen Zhao, Shengzheng Wang, Huafeng Wu, Yue Liu, Yongmeng Chang, *and* **Xinqiang Chen** (2017). "*Flexible plasma linear antenna*" Applied Physics Letters, 110(9): 094108. **(SCI)**.

部分会议论文及受邀请的报告：

1. **陈信强，“智慧水运视角下的车-港-船一体化交通态势感知研究”，**第三届交通运输物流创新发展大会暨全国运输与物流学术（科技）年会，2022 年 8 月，**高校青年学者论坛特邀报告**
2. **Xinqiang Chen,** Xingyu Wu, Dilip K. Prasad, et al. " *Accurate ship recognition from maritime surveillance videos via a semantic segmentation model* " 2022 河海联运学术研讨会, **(Presentation).**
3. **Xinqiang Chen,** Xingyu Wu, Bing Wu, et al. " *A High-Precision Semantic Segmentation Model for Ship Image Pedestrian and vehicle detection via port surveillance video*" 2022 World Transport Convention (WTC), **(Presentation).**
4. **Xinqiang Chen**, Zichuang Wang, Yonghsheng Yang, et al., " *Pedestrian and vehicle detection via port surveillance video*" 2021 6th International Conference on Transportation Information and Safety (ICTIS), 2021, pp. 59-62. (EI).
5. **Xinqiang Chen,** Yongsheng Yang, Huafeng Wu, et al. "*Detecting Ships from Coastal Surveillance Videos with a Canny-Gaussian Morphology Framework*" The 99th Annual Meeting of Transportation Research Board, 2020, **(Poster Presentation).**
6. **Xinqiang Chen**, Zhibin Li, Yongsheng Yang, et al. "*Extracting and Denoising Vehicle Trajectory Automatically from Aerial Roadway Surveillance Videos*" The 98th Annual Meeting of Transportation Research Board, No. 19-03147, 2019, **(Poster Presentation).**
7. Zhibin Li, **Xinqiang Chen*,** Lei Ling, et al. "*Accurate Traffic Parameter Extraction from Aerial Videos with Multi-Dimensional Camera Movements*" The 98th Annual Meeting of Transportation Research Board, No. 19-02817, 2019, **(Poster Presentation).**

8. **Xinqiang Chen**, Chaojian Shi, Shengzheng Wang, et al. "*Recognizing typical merchant ship categories based on a deep network*" The 97th Annual Meeting of Transportation Research Board, No. 18-02544. 2018, **(Poster Presentation).**
9. **Xinqiang Chen**, Chaojian Shi, Shengzheng Wang, et al. "*Automatic tracking of ships based on maritime surveillance videos*" The 97th Annual Meeting of Transportation Research Board, No. 18-02553. 2018, **(Poster Presentation).**

已投稿论文

1. **Xinqiang Chen,** Jinbiao Zheng, Daolun Feng, Bing Wu, Jakub Montewka, Salvatore Antonio Biancardo. "*Maritime traffic situation awareness analysis via high-fidelity ship imaging trajectory*" Journal of Navigation, **(SCI, under review).**
2. Haifeng Ding, Jinxian Weng, **Xinqiang Chen**, Guorong Li, "*A novel deep learning framework for detecting seafarer's unsafe behavior*" Ocean Engineering, **(SCI, under review).**

部分申请及授权发明专利、软著：

1. **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).**
2. **Xinqiang Chen,** Chenxin Wei, Yongsheng Yang, et al. "Method for intelligently extracting and identifying people's tracks in different visibility environments" 授权号：LU502830 **(国际发明专利，授权).**
3. **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).**
4. **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).**
5. **Xinqiang Chen**, Qiuying Wang, Yongsheng Yang, et al., A method for vessel traffic pattern identification via data quality control and data compression, 申请号：17976816 **(美国发明专利).**
6. **Xinqiang Chen**, Zichuang Wang, Yongsheng Yang, et al., Ensemble Deep Learning Method for Identifying Unsafe Behaviors of Operators in Maritime Working Environment, 申请号：17747946 **(美国发明专利).**

7. **Xinqiang Chen**, Hao Wu, Yongsheng Yang, et al., Ship image trajectory tracking and prediction method based on ship heading recognition, 申请号：17886901 **(美国发明专利).**
8. **Xinqiang Chen**, Chenxin Wei, Yongsheng Yang, et al., Method for intelligently extracting and identifying people's tracks in different environments, 申请号：LU502830 **(卢森堡发明专利).**
9. **Xinqiang Chen,** Yonghsheng Yang, Huafeng Wu, et al. Vessel Type Identification Method Using Coarse-To-Fine Cascaded Convolutional Neural Network, 申请号：PCT/CN2019/092016 **(加拿大发明专利).**
10. **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).**
11. **陈信强**，陈伟平，杨勇生等，一种面向视觉特征非连续性干扰的船舶图像航迹提取方法，申请号：20221000946.9 **(发明专利).**
12. **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).**
13. **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).**
14. **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).**
15. **陈信强**，王秋英，杨勇生等，融合数据质量控制和数据压缩的船舶交通模式识别方法，发明专利，申请号：202210026085.5
16. 吴华锋，**陈信强**等，基于 WSN 构建的船舶驾驶台火灾监控系统，专利号：CN201110276308.5 **(授权，发明专利)**
17. **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)**
18. **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**)
19. **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，通航环境混合干扰的船舶图像航迹跟踪研究，2022/01-2024/12，30 万，**主持.**
2. 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，2022-2023，8 万，**主持.**

3. 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, 9.5 万，**主持.**

4. 国家水运安全工程技术研究中心开放基金，2 万，**主持.**

5. 江苏省交通运输与安全保障重点建设实验室开放基金，2022/01-2023/12，3 万，**主持.**

6. 内河航运技术湖北省重点实验室开放基金，2022/01-2023/12，2 万，**主持.**

7. 上海海事大学，控制科学与工程研究生重点课程任务，2020-2021，9 万，**主持.**

8. 上海市教委，上海高校青年教师培养资助计划，2019，4 万，**主持.**

9. 上海海事大学，国际专利（PCT）培育基金，6 万，2019，**主持.**

10. 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**.

11. 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**.

12. 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**.

13. 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**.

14. 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**.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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.

20. 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.

21. 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.

22. 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.

部分学术荣誉及兼职：

- Journal of Marine Science and Engineering (SCI)客座编辑 （2022）
- Journal of Advanced Transportation (SCI)客座编辑 （2021）
- Sensors (SCI) 客座编辑 （2021）
- Applied Sciences (SCI)客座编辑（2021）
- Sustainability (SCI) 客座编辑 （2020）
- Frontier Frontiers in Future Transportation 客座编辑（2021）
- 《交通信息与安全》第九届编委会青年编委
- 入选 **2022 年爱思唯尔全球前 2%顶尖科学家榜单**
- 入选 Sustainable Horizon 期刊青年编委
- 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）
- 第十三届全国交通运输领域青年学术会议优秀论文（10%, 2019）
- 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.
- 美国交通运输研究委员会（TRB）AW010(3) 分委会成员（AW010(3) Subcommittee on Port Performance）
- The 8th International Conference on Computer and Communication Systems, Computer vision and Image Analysis **技术委员会委员，分论坛主持人** (2023)
- 2018、2019、2020 年世界运输大会（WTC 2018, 2019, 2020）学术委员会成员
- 2018 年 International Conference on Data Science and Business Analytics（ICDSBA 2018）国际会议技术委员会委员.
- 2018 年 International Conference on Sensing and Instrumentation in IoT Era (ISSI 2018, ISSI 2019, ISSI 2022) 国际会议技术委员会委员.
- 2018 年第三届 International Conference on Electrical, Control and Automation Engineering (ECAE2018) 国际会议技术委员会委员.

- 2018 年交通运输与民用建筑国际研讨会（ISTTCA 2018）委员会成员
- 2022 年 International Conference on Computational Infrastructure and Urban Planning (CIUP 2022)国际会议技术委员会委员.
- 国际工程师协会成员
- 国际期刊 SCIREA Journal of Computer 编委
- 国际期刊□ SCIREA Journal of Information Science and Systems Science 编委
- 国际期刊 SCIREA Journal of Traffic and Transportation 编委.
- 国际期刊 Journal of Shipping and Ocean Engineering 编委.
- 国际期刊 International Journal of Transportation Engineering and Technology 编委.
- 2018 年度上海海事大学研究生优秀成果二等奖
- 国际期刊 IEEE Transactions on Intelligent Transportation Systems (SCI) 审稿人.
- 国际期刊 IEEE Transactions on Neural Networks and Learning Systems (SCI) 审稿人.
- 国际期刊 IEEE Transactions on Multimedia (SCI) 审稿人.
- 国际期刊 ACM Transactions on Intelligent Systems and Technology (SCI) 审稿人.
- 国际期刊 Advanced engineering informatics (SCI) 审稿人.
- 国际期刊 Transportation Research Part C-Emerging Technologies (SCI) 审稿人.
- 国际期刊 Transportation Research Part E: Logistics and Transportation Review (SCI) 审稿人.
- 国际期刊 Ocean Engineering (SCI) 审稿人.
- 国际期刊 Maritime Policy & Management (SCI) 审稿人.
- 国际期刊 Ocean & Coastal Management (SCI) 审稿人.
- 国际期刊 IET Intelligent Transportation Systems (SCI) 审稿人.
- 国际期刊 Transportation Research Record (SCI) 审稿人.
- 国际期刊 IEEE Sensors Journal (SCI) 审稿人.
- 国际期刊 Journal of Transportation Engineering, Part A: Systems (SCI) 审稿人.
- 国际期刊 Expert Systems with Applications (SCI) 审稿人.
- 国际期刊 Geo-spatial Information Science (SCI) 审稿人.
- 国际期刊 Journal of Navigation (SCI) 审稿人.
- 国际期刊 Computer Journal (SCI) 审稿人
- 国际期刊 Engineering applications of artificial intelligence (SCI) 审稿人.

- 国际期刊 Connection Science (SCI) 审稿人..
- 国际期刊 Circuit World (SCI) 审稿人.
- 国际期刊 Journal of Intelligent Transportation Systems Technology, Planning, and Operations (SCI) 审稿人.
- 国际期刊 Transport Policy (SCI) 审稿人.
- 国际期刊 International Journal of Logistics Research and Applications (SCI) 审稿人.
- 国际期刊 Journal of Computational Design and Engineering (SCI) 审稿人.
- 国际期刊 International Journal of Remote Sensing (SCI) 审稿人.
- 国际期刊 Physica A: Statistical Mechanics and Its Applications (SCI) 审稿人.
- 国际期刊 Journal of Transport and Land Use (SCI) 审稿人.
- 国际期刊 International Journal of Naval Architecture and Ocean Engineering (SCI) 审稿人.
- 国际期刊 Mathematics (SCI) 审稿人.
- 国际期刊 Alexandria Engineering Journal (SCI) 审稿人.
- 国际期刊 International Journal of Environmental Research and Public Health (SCI) 审稿人.
- 国际期刊 Journal of Advanced Transportation (SCI) 审稿人.
- 国际期刊 International Journal of Intelligent Robotics and Applications (SCI) 审稿人.
- 国际期刊 Scientific Programming (SCI) 审稿人.
- 国际期刊 Transportmetrica A: Transport Science (SCI) 审稿人.
- 国际期刊 Transportmetrica B: Transport Dynamics (SCI) 审稿人.
- 国际期刊 Journal of Marine Science and Engineering (SCI) 审稿人.
- 国际期刊 Remote Sensing (SCI) 审稿人.
- 国际期刊 Advances in Civil Engineering (SCI) 审稿人.
- 国际期刊 IEEE ACCESS (SCI) 审稿人.
- 国际期刊 PLoS ONE (SCI) 审稿人.
- 国际期刊 Sustainability (SCI) 审稿人.
- 国际期刊 Sensors (SCI) 审稿人.
- 国际期刊 Processes (SCI) 审稿人.
- 国际期刊 Energies (SCI) 审稿人.
- 国际期刊 Entropy (SCI) 审稿人.
- 国际期刊 Physics (SCI) 审稿人.
- 国际期刊 Mathematical Problems in Engineering (SCI) 审稿人.
- 国际期刊 Cybernetics and Systems (SCI) 审稿人.
- 国际期刊 Journal of Mathematics (SCI) 审稿人.

- 国际期刊 Journal of King Saud University - Computer and Information Science (SCI)审稿人.
- 国际期刊 International Journal of Information Technology and Web Engineering (EI) 审稿人.
- 国际期刊吉林大学学报（工学版）(EI) 审稿人.
- 国际期刊 Journal of Traffic and Transportation Engineering (English Edition) (EI) 审稿人 **（2022 年最佳审稿人）**.
- 中国科学引文数据库期刊《计算机学报》(EI)审稿人.
- 中国科学引文数据库来源期刊《交通信息与安全》审稿人.
- 中国科学引文数据库来源期刊《计算机科学》审稿人.
- 北大中文核心期刊《上海海事大学学报》审稿人.
- 北大中文核心期刊《江苏大学学报(自然科学版) 》审稿人.
- 北大中文核心期刊《森林工程》审稿人.
- 国际期刊 Transportation Engineering 审稿人.
- 国际期刊 The Journal of Engineering 审稿人.
- 国际期刊 International Journal of Transportation Science and Technology Reviewer of Smart Cities 审稿人.
- 国际期刊 International Journal of Transportation Science and Technology 审稿人.
- 国际会议 TRB (ABJ50 committee) 审稿人.
- 国际会议 TRB (ADB20 committee)审稿人.
- 国际会议 TRB (ABJ70 committee)审稿人.
- 国际会议□IEEE 25th International Conference on Intelligent Transportation Systems (ITSC) 审稿人.
- 国际会议 COTA International Conference of Transportation Professionals (CICTP 2017, CICTP 2018, CICTP 2019, CICTP 2020) 审稿人.
- 国际会议 2022 International Symposium on Sensing and Instrumentation in 5G and IoT Era (ISSI)审稿人.
- 国际会议 International Conference on Physics, Mathematics and Statistics（ICPMS 2018）审稿人.
- 国际会议世界交通运输大会WTC (WTC 2018, WTC 2019, WTC 2020, WTC 2021) 审稿人.
- 国际会议 International Conference on Data Science and Business Analytics (ICDSBA 2018) 审稿人.
- 国际会议 International Conference on Sensing and Instrumentation in IoT Era (ISSI 2018, ISSI 2019, ISSI 2022) 审稿人.

- 国际会议 ASCE International Conference on Transportation & Development (ICTD 2020)审稿人.
- 国际会议 International Conference on Fuzzy Systems and Data Mining (FSDM 2020)审稿人.

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