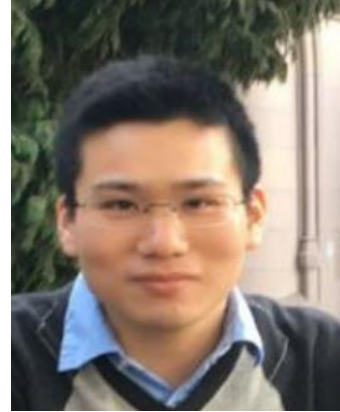


个人简介

陈信强，博士，讲师

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教育背景

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

工作经历

2018.09-至今：上海海事大学物流科学与工程研究院，讲师

研究领域

- 基于人工智能、机器学习、深度学习的智慧城市、智能港口和无人码头等方面的研究
- 智能港航一体化监控，基于视觉导航技术的 AGV 路线导航与规划
- 面向无人船的视觉感知及信息处理关键技术
- 交通大数据挖掘与人工智能，交通建模，e-交通科学
- 基于交通监控视频的交通行为分析

科研成果简介

在 Journal of Navigation, Journal of transportation engineering, part A: systems, Transportation Research Board (TRB)等交通、航海、港航物流等研究领域的知名期刊、会议发表论文 20 余篇, 其中 SCI 收录期刊论文 10 篇、EI 收录期刊论文 3 篇, 授权和申请专利共 7 项, 受邀担任 Journal of Navigation, Journal of transportation engineering, part A: systems, IET Intelligent Transportation Systems, IEEE Transactions on Intelligent Transportation Systems, CICTP (2017, 2018, 2019), TRB 等交通、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) 水运信息工程安全委员会学术委员, 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, 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。

近三年发表(录用)的论文, *为通信作者:

- **Xinqiang Chen**, Shengzheng Wang, Chaojian Shi, Huafeng Wu, Jiansen Zhao, and Junjie Fu. "*Robust ship tracking via multi-view learning and sparse representation*", Journal of Navigation, vol. 72, no. 1 (2019): 176-192. (SCI, Q2).
- **Xinqiang Chen**, Zhibin Li, Yinhai Wang, Jinjun Tang, Wenbo Zhu, Chaojian Shi, and Huafeng Wu. "*Anomaly Detection and Cleaning of Highway Elevation Data from Google Earth Using Ensemble Empirical Mode Decomposition*", Journal of Transportation Engineering, Part A: Systems, vol. 144, no. 5 (2018): 04018015. (SCI, Q3).
- **Xinqiang Chen**, Zhibin Li, Yinhai Wang, Zhiyong Cui, Chaojian Shi, and Huafeng Wu. "*Evaluating the impacts of grades on vehicular speeds on interstate highways*", PloS one, vol. 12, no. 9 (2017): e0184142. (SCI, Q1).
- **Xinqiang Chen**, Yongsheng Yang, Shengzheng Wang, Huafeng Wu, Jinjun Tang, Jiansen Zhao, and Zhihuan Wang. "*Ship Type Recognition via a Coarse-to-Fine Cascaded Convolution Neural Network*", Journal of Navigation, (SCI, Q2, In press).
- **Xinqiang Chen**, Lei Qi, Yongsheng Yang, Qiang Luo, Octavian Postolache, Jinjun Tang, Huafeng Wu. "*Video-based Detection Infrastructure Enhancement for Automated Ship Recognition and Behavior Analysis*", Journal of Advanced Transportation, (SCI, Q1, In press).
- Qiang Luo, Jie Yuan, **Xinqiang Chen***, Shubo Wu, Zhijian Qu, and Jinjun Tang*. "*Analyzing start-up time headway distribution characteristics at signalized intersections*", Physica A: Statistical Mechanics and its Applications (2019): 122348. (SCI, Q1).
- Zhijian Qu, Xubing Sun, **Xinqiang Chen***, and Shengao Yuan. "*A novel RFID multi-tag anti-collision protocol for dynamic vehicle identification*" PloS one, vol. 14, no. 7 (2019): e0219344. (SCI, Q1).
- Qiang Luo, Jie Yuan*, **Xinqiang Chen***, Junheng Yang, Wenhui Zhang and Jiansen Zhao. "*Research on mixed user equilibrium model based on mobile internet traffic information service*" IEEE ACCESS, (SCI, Q1, In press).
- Jinjun Tang, Jin Hu, Wei Hao, **Xinqiang Chen*** and **Yong Qi***. Markov Chains based route travel time estimation considering link spatio-temporal correlation. Physica A: Statistical Mechanics and its Applications (SCI, In Press).
- **Xinqiang Chen**, Zhibin Li, Yinhai Wang, Chaojian Shi, Huafeng Wu, and Shengzheng Wang. "*Highway elevation data smoothing using local enhancement mechanism and butterworth filter*" International journal of

innovative computing information and control, vo. 13, no. 6 (2017): 1887-1901. **(EI)**.

- Jinjunn Tang, **Xinqiang Chen**, Zheng Hu, Fang Zong, Chunyang Han, and Leixiao Li. "*Traffic flow prediction based on combination of support vector machine and data denoising schemes*" Physica a-statistical mechanics and its applications, **(SCI, In press, Q1)**.
- Jiansen Zhao, **Xinqiang Chen**, Shengzheng Wang, Wei Liu, Baoxian Ji, Yue Liu, Zhen Sun, and Tie Xu. "*A Study of the Characteristics of a Deformable Antenna Based on Gas Discharge*" IEEE Transactions on Antennas and Propagation, vol. 66, no. 1 (2017): 59-70. **(SCI, Q1)**.
- Jinjun Tang, Shaowei Yu, Fang Liu, **Xinqiang Chen**, Helai Huang. "A hierarchical prediction model for lane-changes based on combination of fuzzy C-means and adaptive neural network" Expert Systems With Applications, 130 (2019), 265-275.
- Jinjun Zhao, Shen Zhang, **Xinqiang Chen**, Fang Liu, and Yajie Zou. "*Taxi trips distribution modeling based on Entropy-Maximizing theory: A case study in Harbin city—China*" Physica A: Statistical Mechanics and its Applications, vol. 493 (2018): 430-443. **(SCI, Q1)**.
- Huafeng Wu, Xiaojun Mei, **Xinqiang Chen**, Junjun Li, Jun Wang, and Prasant Mohapatra. "*A novel cooperative localization algorithm using enhanced particle filter technique in maritime search and rescue wireless sensor network*" ISA transactions, vol. 78 (2018): 39-46. **(SCI, Q1)**.
- Jinjun Tang, Shaowei Yu, Fang Liu, **Xinqiang Chen**, and Helai Huang. "A hierarchical prediction model for lane-changes based on combination of fuzzy C-means and adaptive neural network" Expert Systems with Applications, vol. 130 (2019): 265-275. **(SCI, Q1)**.
- Wenhui Zhang, Yongmin Su, Ruimin Ke, and **Xinqiang Chen**. "*Evaluating the influential priority of the factors on insurance loss of public transit*" PloS one, vol. 13, no. 1 (2018): e0190103. **(SCI, Q1)**.
- Jiansen Zhao, Shengzheng Wang, Huafeng Wu, Yue Liu, Yongmeng Chang, and **Xinqiang Chen**. "*Flexible plasma linear antenna*" Applied Physics Letters, vol. 110, no. 9 (2017): 094108. **(SCI, Q1)**.
- **Xinqiang Chen**, Yongsheng Yang, Huafeng Wu, Ruimin Ke. "*Detecting Ships from Coastal Surveillance Videos with a Canny-Gaussian Morphology Framework*" Accepted by the 99th Annual Meeting of Transportation Research Board, **Oral Presentation**.

- **Xinqiang Chen**, Zhibin Li, Yongsheng Yang, Huafeng Wu, Ruimin Ke, and Wenzhu Zhou. "*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)**.
- Zhibin Li, **Xinqiang Chen***, Lei Ling, Huafeng Wu, Wenzhu Zhou, and Cong Qi. "*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)**.
- **Xinqiang Chen**, Chaojian Shi, Shengzheng Wang, Huafeng Wu, Zhibin Li, and Jibiao Zhou. "*Recognizing typical merchant ship categories based on a deep network*" The 97th Annual Meeting of Transportation Research Board, No. 18-02544. 2018, **(Poster Presentation)**.
- **Xinqiang Chen**, Chaojian Shi, Shengzheng Wang, Huafeng Wu, Jiansen Zhao, and Zhibin Li. "*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

- **Xinqiang Chen**, Zhibin Li, Yongsheng Yang, Ruimin Ke. "*Microscopic Traffic Parameter Extraction from Aerial Videos with Multi-Dimensional Camera Movements*" Transportation Research Part C: Emerging Technologies, **(SCI, under review, Q1)**.
- **Xinqiang Chen**, Zhibin Li, Lei Qi, Yongsheng Yang. "*A Novel Framework for Vehicle Trajectory Extraction and Denoising from Aerial Videos*" IEEE Transactions on Intelligent Transportation Systems, **(SCI, under review, Q1)**.
- **Xinqiang Chen**, Huixing Chen, Yongsheng Yang, Huafeng Wu, Jun Ling, Jiansen Zhao, and Zehong Cao. "*Ship Detection under inshore waters via Canny filter and Gaussian-Morphology method*" International Journal of Distributed Sensor Networks, **(SCI, under review, Q2)**.
- **Xinqiang Chen**, Xueqian Xu, Yongsheng Yang, Huafeng Wu, Jinjun Tang and Jiansen Zhao. "*Augmented Ship Tracking under Occlusion Conditions for Autonomous Shipping*" IEEE ACCESS, **(SCI, under review, Q1)**.
- Junjie Fu, **Xinqiang Chen***, Shubo Wu*, Chaojian Shi, Huafeng Wu, Jiansen Zhao, and Pengwen Xiong. "*Mining Ship Deficiency Correlations from*

Historical Port State Control (PSC) Inspection Data" PloS one, (SCI, under review, Q1).

部分申请及授权发明专利：

- 陈信强，齐雷，杨勇生等. 一种基于 YOLO 模型的船舶行为分析方法，申请号：201910881856.7 (发明专利).
- 陈信强，许学谦，杨勇生等. 一种船舶跟踪方法及系统，申请号：201910772802.7 (发明专利).
- 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).
- 陈信强，赵建森，吉文博等. 一种船舶跟踪方法，申请号：201810890137.7 (发明专利).
- 陈信强，吉文博，杨勇生等. 基于 Canny 算子和高斯形态学的船舶检测方法，申请号：201810967927.0 (发明专利).
- 陈信强，杨勇生，吴华锋等. 一种级联式由粗到静的卷积神经网络船舶类型识别方法，申请号：201811025411.0 (发明专利).
- 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 (发明专利).

参与项目与课题：

- 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，在研，参加.
- 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，在研，参加.

- 国家自然科学基金面上项目，51279099，海上搜救无线传感网的动态拓扑及时空随机覆盖机理研究，2013/01-2016/12,80 万，已结题，参加.
- 交通部应用基础研究项目，2013329810300，无线传感网在海上搜救应用中的鲁棒路由算法研究，2013/04-2015/05，已结题，参加.
- 上海市“曙光学者”人才计划项目，12SG40，基于无线传感网的海上搜救目标定位关键技术研究，2013/01-2015/01,15 万，已结题，参加.
- 上海市自然科学基金重点项目，12ZR141250，无线传感网在海上搜救中的应用及其拓扑研究，2012/07-2015/06,10 万，已结题，参加.
- 上海市教委科研创新项目，09YZ247，构建移动水下传感网络关键技术研究，2008/12-2011/12，15 万，已结题，参加.
- 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：

- 第十三届全国交通运输领域青年学术会议优秀论文（10%）
- ESCI 国际期刊 Journal of King Saud University-Computer and Information Sciences 杰出审稿人.

- 2018 年第二届世界交通运输大会水运学部技术委员会委员.
- 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) 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.
- 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.
- 国际期刊 SCIREA Journal of Traffic and Transportation 编委.
- 国际期刊 IEEE Transactions on Intelligent Transportation Systems (SCI) 审稿人.
- 国际期刊 Maritime Policy & Management (SCI) 审稿人.
- 国际期刊 IET Intelligent Transportation Systems (SCI) 审稿人.
- 国际期刊 Journal of Transportation Engineering, Part A: Systems (SCI) 审稿人.
- 国际期刊 Journal of Navigation (SCI) 审稿人.
- 国际期刊 Physica A: Statistical Mechanics and Its Applications (SCI) 审稿人.
- 国际期刊 PLoS ONE (SCI) 审稿人.

- 国际期刊 IEEE ACCESS (SCI) 审稿人.
- 国际期刊 Journal of Advanced Transportation (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 IEEE Sensors Journal (SCI) 审稿人.
- 国际期刊 Entropy (SCI) 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 COTA International Conference of Transportation Professionals (CICTP 2017, CICTP 2018, CICTP 2019, CICTP 2020) 审稿人.
- 国际会议 International Conference on Sensing and Instrumentation in IoT Era (ISSI 2018, ISSI 2019) 审稿人.