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	研究方向:	计算机三维视觉, 激光雷达数据处理, 增强现实与虚拟现实, 空间大数据分析, 智慧城市

【详细信息】

在国内外期刊和杂志发表了 200 余篇论文, 包括 ISPRS-JPRS, IEEE TGRS IEEE TITS, PR, CVPR, IJCAI, AAAI 等期刊和会议。他还是 ISPRS 的多传感器集成与融合工作组的主席, 中国计算机学会 YOCSEF 厦门分论坛 (创始)主席, 中国图像图形学会常务理事, 加拿大卡尔加里大学的客座教授, IEEE GRSL 副主编, ISPRS JRPS 等期刊的客座编辑。作为组委会主席组织过 CVRS2012,MMT-SS 2015, ChinaLiDAR2019 等多个学术会议和学术交流活动。曾经获得国际摄影测量与遥感学会 (ISPRS) Giuseppe Inghilleri Award (中国首位获奖者)。国际移动测量技术大会最佳创新奖, 获得省部级科技进步一等奖等奖励 5 项。

【教育经历】

国防科学技术大学电子系信息工程学士 (1993-1997),
国防科学技术大学电子科学与技术学院信息与通信工程博士 (1997-2002)
国防科学技术大学电子科学与技术学院 讲师, 副教授 (2002-2011)
厦门大学信息学院 教授 (2011-今)

【学术任职】

- 国际摄影测量与遥感学会 ISPRS, WG I/6 多传感器集成与融合工作组主席, 2016-2020
- 国际摄影测量与遥感学会 ISPRS, WG I/3 多传感器系统标定工作组副主席, 2008-2012, 2012-2016
- 中国图像图形学会, 常务理事
- 中国计算机学会 YOCSEF 厦门, 创始主席, 2014-2015
- 副主编、客座编辑
 - IEEE Geoscience and Remote Sensing Letters
 - ISPRS Journal of Photogrammetry & Remote Sensing,
 - IEEE Trans. Geoscience and Remote Sensing,
 - IEEE Trans. Intelligent Transportation Systems,
 - Remote Sensing
- 学术会议组织(主席、副主席)
 - 组委会主席, 2011.12 IEEE/ISPRS International Workshop on Multi-sensor Multi-platform Remote Sensing and Mapping, Xiamen
 - 组委会主席, 2012.12 IEEE/ISPRS International Conference on Computer Vision in Remote Sensing, Xiamen, China

- 组委会主席, 2014, 5 International Symposium on Remote Sensing in Transportation, Xiamen, China
- 组委会主席, 2015.4, The 3rd International Summer School on Mobile Mapping Technology (SS-MMT 2015) Xiamen, China,
- 组委会主席, 2015.5 IEEE 2dn International Conference on Computer Vision in Remote Sensing, Xiamen, China
- 大会副主席, 2017, ISPRS workshop on Indoor 3D, Wuhan, China
- 大会主席, 2019, 第五届中国激光大会 (China LiDAR2019)
- 大会主席, 2021, 首届中国三维视觉大会 (China 3DV2021)

【获奖情况】

- 2020 年国际摄影测量学会 Giuseppe Inghilleri 奖 (首位中国获奖者)
- 2019 年 MMT 创新奖, 第十一届国际移动测量大会
- 2018 年福建省科技进步一等奖 (第 1 完成人)
- 2018 年最佳论文奖, Symposium on Solid and Physical Modeling
- 2017 年最佳论文奖, 第十届国际移动测量大会
- 2013 年部级科技进步二等奖 (第 6 完成人)
- 2007 年部级科技进步二等奖 (第 9 完成人)
- 2000 年部级科技进步一等奖 (第 9 完成人)

【部分科研项目】

- 2019-2020 年 ISPRS 科学启动计划项目, ISPRS BENCHMARK ON MULTISENSORY INDOOR MAPPING AND POSITIONING, 主持
- 2018-2020 年, 面向仿真的大型三维场景快速采集构建技术 (250 万), 国家部委预研项目, 主持
- 2017-2021 年, 三维点云视觉感知驱动的大范围户外增强现实 (258 万), 国家基金重点 (海峡合作基金), 主持
- 2016-2018 年, 中国-东盟海洋大数据综合信息服务平台 (606 万+700 万), 国家海洋局, 主持
- 2014-2017 年, 融合全波形激光扫描点云与可见光图像的地面近景对象感知, 国家自然科学基金面上项目, 主持
- 2010-2012 年, 基于对象层匹配的多时相移动测量变化检测理论与方法, 国家自然科学基金面上项目, 主持

【代表性论文 (近三年)】

- [IJCAI 2021] Wu, H., Li Q., Wen, C., Li, X., Fan, X., Wang, C., Wang, C., Tracklet Proposal Network for Multi-Object Tracking on Point Clouds, (2021) IJCAI
- [IJCAI 2021] Wang, Z., Fan, X., Wang, C., Weng, C., Yu, R., Qi, J., Federated Learning with Fair Averaging, (2021) IJCAI
- [IS 2021] Yang, Z., Chen, Z., Wang, C., Accelerating mini-batch SARAH by step size rules, (2021) Information Sciences, 558, pp. 157-173.
- [IEEE TMC 2021] Chen, L., Nguyen, T.-M.-T., Yang, D., Nogueira, M., Wang, C., Zhang, D., Data-Driven C-RAN Optimization Exploiting Traffic and Mobility Dynamics of Mobile Users, (2021) IEEE Transactions on Mobile Computing, 20 (5), pp. 1773-1788.
- [ISPRS JPRS 2021] Xia, Y., Xu, Y., Wang, C., Stilla, U., VPC-Net: Completion of 3D vehicles from MLS point clouds, (2021) ISPRS Journal of Photogrammetry and Remote Sensing, 174, pp. 166-181.

- **[IEEE TITS 2021]**Wen, C., Habib, A.F., Li, J., Toth, C.K., Wang, C., Fan, H.,Special Issue on 3D Sensing in Intelligent Transportation,(2021) IEEE Transactions on Intelligent Transportation Systems, 22 (4), pp. 1947-1949.
- **[PR 2021]** Li, Q., Wang, C., Li, X., Wen, C.,FeatFlow: Learning geometric features for 3D motion estimation,(2021) Pattern Recognition, 111,
- **[ISPRS JPRS 2021]** Sun, X., Wang, P., Wang, C., Liu, Y., Fu, K.,PBNet: Part-based convolutional neural network for complex composite object detection in remote sensing imagery,(2021) ISPRS Journal of Photogrammetry and Remote Sensing, 173, pp. 50-65.
- **[IEEE TITS 2021]**Gong, Z., Li, J., Luo, Z., Wen, C., Wang, C., Zelek, J.,Mapping and Semantic Modeling of Underground Parking Lots Using a Backpack LiDAR System,(2021) IEEE Transactions on Intelligent Transportation Systems, 22 (2), pp. 734-746.
- **[ISPRS JPRS 2021]**Yu, S., Wang, C., Yu, Z., Li, X., Cheng, M., Zang, Y.,Deep regression for LiDAR-based localization in dense urban areas,(2021) ISPRS Journal of Photogrammetry and Remote Sensing, 172, pp. 240-252.
- **[IEEE TITS 2021]**Wu, H., Han, W., Wen, C., Li, X., Wang, C.,3D Multi-Object Tracking in Point Clouds Based on Prediction Confidence-Guided Data Association,(2021) IEEE Transactions on Intelligent Transportation Systems, .
- **[CMPB 2020]** Bian, X., Luo, X., Wang, C., Liu, W., Lin, X.,Optic disc and optic cup segmentation based on anatomy guided cascade network,(2020) Computer Methods and Programs in Biomedicine, 197.
- **[IEEE TGRS 2020]**Chen, F., Fan, Q., Lou, S., Yang, L., Wang, C., Claverie, M., Wang, C., Junior, J.M., Goncalves, W.N., Li, J.,Characterization of MSS Channel Reflectance and Derived Spectral Indices for Building Consistent Landsat 1-5 Data Record,(2020) IEEE Transactions on Geoscience and Remote Sensing, 58 (12), pp. 8967-8984.
- **[IEEE TITS 2020]**Zhang, Z., Li, J., Guo, Y., Yang, C., Wang, C.,3D Highway Curve Reconstruction from Mobile Laser Scanning Point Clouds,(2020) IEEE Transactions on Intelligent Transportation Systems, 21 (11), pp. 4762-4772.
- **[IEEE TITS 2020]**Chen, Z., Fan, W., Zhong, B., Li, J., Du, J., Wang, C.,Coarse-to-Fine Road Extraction Based on Local Dirichlet Mixture Models and Multiscale-High-Order Deep Learning,(2020) IEEE Transactions on Intelligent Transportation Systems, 21 (10), pp. 4283-4293.
- **[FCS 2020]**Jiang, Z., Liu, Y., Fan, X., Wang, C., Li, J., Chen, L.,Understanding urban structures and crowd dynamics leveraging large-scale vehicle mobility data,(2020) Frontiers of Computer Science, 14 (5), .
- **[IEEE TITS 2020]**Zheng, C., Fan, X., Wen, C., Chen, L., Wang, C., Li, J.,DeepSTD: Mining Spatio-Temporal Disturbances of Multiple Context Factors for Citywide Traffic Flow Prediction,(2020) IEEE Transactions on Intelligent Transportation Systems, 21 (9), pp. 3744-3755.
- **[KBS 2020]**Yang, Z., Chen, Z., Wang, C.,An accelerated stochastic variance-reduced method for machine learning problems,(2020) Knowledge-Based Systems, 198, .
- **[ISPRS JPRS 2020]**Li, W., Wang, C., Lin, C., Xiao, G., Wen, C., Li, J.,Inlier extraction for point cloud registration via supervoxel guidance and game theory optimization,(2020) ISPRS Journal of Photogrammetry and Remote Sensing, 163, pp. 284-299.
- **[KBS 2020]**Zhang, Y., Huo, K., Liu, Z., Zang, Y., Liu, Y., Li, X., Zhang, Q., Wang, C.,PGNet: A Part-based Generative Network for 3D object reconstruction,(2020) Knowledge-Based Systems, 194, .
- **[ISPRS JPRS 2020]**Lin, Y., Li, J., Wang, C., Chen, Z., Wang, Z., Li, J.,Fast regularity-constrained plane fitting,(2020) ISPRS Journal of Photogrammetry and Remote Sensing, 161, pp. 208-217.

- **[ISPRS JPRS 2020]**Luo, Z., Liu, D., Li, J., Chen, Y., Xiao, Z., Marcato Junior, J., Nunes Gonçalves, W., Wang, C., Learning sequential slice representation with an attention-embedding network for 3D shape recognition and retrieval in MLS point clouds,(2020) ISPRS Journal of Photogrammetry and Remote Sensing, 161, pp. 147-163.
- **[IEEE VR 2020]** Liu, W., Lai, B., Wang, C., Bian, X., Yang, W., Xia, Y., Lin, X., Lai, S.-H., Weng, D., Li, J., Learning to Match 2D Images and 3D LiDAR Point Clouds for Outdoor Augmented Reality,(2020) Proceedings - 2020 IEEE Conference on Virtual Reality and 3D User Interfaces, VRW 2020, pp. 655-656.
- **[ISPRS JPRS 2020]**Zhang, S., Wang, C., He, Z., Li, Q., Lin, X., Li, X., Zhang, J., Yang, C., Li, J., Vehicle global 6-DoF pose estimation under traffic surveillance camera,(2020) ISPRS Journal of Photogrammetry and Remote Sensing, 159, pp. 114-128.
- **[ISPRS JPRS 2020]**Gong, Z., Lin, H., Zhang, D., Luo, Z., Zelek, J., Chen, Y., Nurunnabi, A., Wang, C., Li, J., A Frustum-based probabilistic framework for 3D object detection by fusion of LiDAR and camera data,(2020) ISPRS Journal of Photogrammetry and Remote Sensing, 159, pp. 90-100.
- **[ISPRS JPRS 2019]**Wen, C., You, C., Wu, H., Wang, C., Fan, X., Li, J., Recovery of urban 3D road boundary via multi-source data,(2019) ISPRS Journal of Photogrammetry and Remote Sensing, 156, pp. 184-201.
- **[UbiComp 2019]**Chen, L., Xie, T., Wang, X., Wang, C., Identifying urban villages from city-wide satellite imagery leveraging mask r-Cnn,(2019) UbiComp/ISWC 2019- - Adjunct Proceedings of the 2019 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2019 ACM International Symposium on Wearable Computers, pp. 29-32.
- **[IEEE TITS 2019]**You, C., Wen, C., Wang, C., Li, J., Habib, A., Joint 2-D-3-D Traffic Sign Landmark Data Set for Geo-Localization Using Mobile Laser Scanning Data,(2019) IEEE Transactions on Intelligent Transportation Systems, 20 (7), pp. 2550-2565.
- **[SP 2019]** Yang, Z., Wang, C., Zhang, Z., Li, J., Accelerated stochastic gradient descent with step size selection rules,(2019) Signal Processing, 159, pp. 171-186.
- **[CVPR 2019]** Li, Q., Chen, S., Wang, C., Li, X., Wen, C., Cheng, M., Li, J., Lo-net: Deep real-time lidar odometry,(2019) Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition, 2019-June, pp. 8465-8474.
- **[CVPR 2019]** Shen, X., Wang, C., Li, X., Yu, Z., Li, J., Wen, C., Cheng, M., He, Z., RF-net: An end-to-end image matching network based on receptive field,(2019) Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition, 2019-June, pp. 8124-8132.
- **[ISPRS JPRS 2019]**Luo, Z., Li, J., Xiao, Z., Mou, Z.G., Cai, X., Wang, C., Learning high-level features by fusing multi-view representation of MLS point clouds for 3D object recognition in road environments,(2019) ISPRS Journal of Photogrammetry and Remote Sensing, 150, pp. 44-58.
- **[IEEE VR 2019]**Liu, W., Wang, C., Zang, Y., Lai, S.-H., Weng, D., Sian, X., Lin, X., Shen, X., Li, J., Ground camera images and UAV 3D model registration for outdoor augmented reality,(2019) 26th IEEE Conference on Virtual Reality and 3D User Interfaces, VR 2019 - Proceedings, pp. 1050-1051.
- **[KBS 2019]**Yang, Z., Wang, C., Zhang, Z., Li, J., Mini-batch algorithms with online step size,(2019) Knowledge-Based Systems, 165, pp. 228-240.
- **[AAAI 2019]**Zhang, Z., Zeng, H., Li, J., Chen, Y., Yang, C., Wang, C., Geometric multi-model fitting by deep reinforcement learning,(2019) 33rd AAAI Conference on Artificial Intelligence, AAAI 2019, 31st Innovative Applications of Artificial Intelligence Conference, IAAI 2019 and the 9th AAAI Symposium on Educational Advances in Artificial Intelligence, EAAI 2019, pp. 10081-10082.

- **[ISPRS JPRS 2019]**Wen, C., Sun, X., Li, J., Wang, C., Guo, Y., Habib, A.,A deep learning framework for road marking extraction, classification and completion from mobile laser scanning point clouds,(2019) ISPRS Journal of Photogrammetry and Remote Sensing, 147, pp. 178-192.
- **[PR 2019]** Zhang, Z., Li, J., Guo, Y., Li, X., Lin, Y., Xiao, G., Wang, C.,Robust procedural model fitting with a new geometric similarity estimator,(2019) Pattern Recognition, 85, pp. 120-131.
- **[IJCAI 2019]** Chen, H., Luo, Y., Cao, L., Zhang, B., Guo, G., Wang, C., Li, J., Ji, R.,Generalized zero-shot vehicle detection in remote sensing imagery via coarse-to-fine framework,(2019) IJCAI International Joint Conference on Artificial Intelligence, 2019-August, pp. 687-693.
- **[UbiComp 2018]** Longbiao Chen, Xiaoliang Fan, Leye Wang, Zhiyong Yu, Johnthan Li, Daqing Zhang, Thi-Mai-Trang Nguyen, Gang Pan, Cheng Wang*. RADAR: Road Obstacle Identification for Disaster Response Leveraging Multi-Source Urban Data. Singapore, 2018.
- **[IEEE TITS 2018]** You C., Wen C., Wang C, Li J., Habib A., “Joint 2-D-3-D Traffic Sign Landmark Data Set for Geo-Localization Using Mobile Laser Scanning Data”, IEEE Transactions on Intelligent Transportation Systems, DOI: 10.1109/TITS.2018.2868168.
- **[CAD 2018]** Chen Z., Zhang T., Cao J, Zhang Y., Wang C, “Point cloud resampling using centroidal Voronoi tessellation methods,” Computer-Aided Design, 102:12-21, 2018.
- **[CAD 2018]** Xiao Y., Chen Z., Cao J., Zhang Y., Wang C, “Optimal power diagrams via function approximation,” Computer-Aided Design, 102:52-60, 2018.
- **[IJCAI 2018]** Liu W., Shen X., Wang C, Zhang Z., Wen C., Li J., “H-Net: Neural Network for Cross-domain Image Patch Matching,” International Joint Conference on Artificial Intelligence (IJCAI), 856-863,2018.
- **[IEEE TGRS 2018]** Luo H., Wang C, Wen C., Chen Z., Zai D., Yu Y., Li J., “Semantic Labeling of Mobile LiDAR Point Clouds via Active Learning and Higher Order MRF,” IEEE Transactions on Geoscience and Remote Sensing, 56(7): 3631-3644, 2018.
- **[ISPRS JPRS 2018]** Wang C, Hou S., Wen C. Gong Z., Li Q., Sun X., Li J., “Semantic line framework-based indoor building modeling using backpacked laser scanning point cloud,” ISPRS Journal of Photogrammetry and Remote Sensing, Volume 143, Pages 150-166, September 2018.
- **[PR 2018]** Cao L., Luo F., Chen L., Sheng Y., Wang H., Wang C; Ji R., “Weakly supervised vehicle detection in satellite images via multi-instance discriminative learning,” Pattern Recognition, 417-424, Volume 64, April 2017.
- **[ISPRS JPRS 2018]** Lin Y., Wang C, Zai D., Li W. , Li J., "Toward Better Boundary Preserved Supervoxel Segmentation for 3d Point Clouds," ISPRS Journal of Photogrammetry & Remote Sensing, 143, 39-47, 2018.
- **[CVPR 2018]** Chen Y., Wang J., Li J., Luo Z., Xue H., Wang C, “LiDAR-Video Driving Dataset: Learning Driving Policies Effectively,” accepted, The 13th IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR2018), Salt Lake City, June 2018.
- **[EAAI 2018]** Yang Z., Wang C, Zhang Z. Li J., "Random Barzilai–Borwein Step Size for Mini-Batch Algorithms," Engineering Applications of Artificial Intelligence, 72(6):124-135, 2018.
- **[IEEE TIM 2018]** Gong Z., Wen C., Wang C, Li J., "A Target-Free Automatic Self-Calibration Approach for Multibeam Laser Scanners," IEEE Transactions on Instrumentation and Measurement, 67(1): 238-240, 2018.
- **[ISPRS JPRS 2018]** Zai D., Li J., Guo Y., Cheng M., Huang P., Cao X., Wang C, "Pairwise Registration of TLS Point Clouds using Covariance Descriptors and a Non-cooperative Game," ISPRS Journal of Photogrammetry & Remote Sensing, 2017, doi: 10.1016/j.isprsjprs.2017.10.001.

【课程教学】

机器学习（研究生课程）

模式识别（本科生课程）

图像处理（本科生课程）