● 基本信息

姓名： 周熙然

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研究方向： 遥感影像智能解译、泛地图模式识别、高精度地形地貌表征、地理空间人工智能、地理空间语义

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● 教育与学历

2014.08-2019.05	博士	亚利桑那州立大学，美国
2011.08-2013.06	硕士	武汉大学测绘遥感信息工程国家重点实验室，中国
2006.09-2010.06	学士	宁波大学，中国

● 工作经历

➤ 2019.09-至今　　中国矿业大学环境与测绘学院讲师

➤ 2013.06-2014.05　武汉大学测绘遥感信息工程国家重点实验室研究助理

● 期刊论文（"*" 表示通讯作者）

2023

[4] **Xiran Zhou,** Wei Luo, Fan Zhang, et al. (Accepted) Geo-location inference through deep learning-based optical character recognition. *International Journal of Digital Earth*. (SCI, JCR 一区)

[3] **Xiran Zhou,** Soe Myint, Xiaoyi Zhang. (Accepted). A semantic-enhanced transfer learning for coastal landscape recognition with very-high-resolution optical satellite image. *IEEE Geoscience and Remote Sensing Letters*. (SCI, JCR 一区)

[2] Honghao Li, **Xiran Zhou*,** Zhigang Yan. (Accepted) mapSR: A Deep Neural Network for Single Map Super Resolution of Low-Resolution Map. *ISPRS International Journal of Geo-Information*. (SCI/SSCI, JCR 二区)

[1] Yanrui Zhai, **Xiran Zhou*,** Honghao Li. (2023) Model and Data Integrated Transfer Learning for Unstructured Map Text Detection. *ISPRS International Journal of Geo-Information*. 12(3), 106. (SCI/SSCI, JCR 二区, 本科生第一作者)

2022

[3] **Xiran Zhou,** Soe Myint. (2022). Building Height Extraction in a Large City Using Very-High-Resolution Open Images. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*. 16, 180-190. (SCI, JCR 一区)

[2] **周熙然,** 李德仁*, 汪云甲, 等. (2022). 地图图像智能识别与理解：特征、方法与展望*武汉大学学报·信息科学版* , 47(5): 641-651. (中国科技期刊卓越行动计划梯队期刊, 院士综述)

[1] Sheng Zhang, Yong Xue, **Xiran Zhou,** et al. (2022). The State of the Art of High-Performance and High-Throughput Computing for Remote Sensing Big Data. *IEEE Geoscience and Remote Sensing Magazine*. 10(4): 125-149. (SCI, JCR 一区, TOP 期刊)

2021

[4] Xiao Xie, **Xiran Zhou***, Bing Xue, et al. (2021). Aspect in topography for enhanced terrain feature mapping on high-resolution DEM. *Chinese Geographical Science.* 31(5): 915-930. (中国科技期刊卓越行动计划梯队期刊, SCI, JCR 二区)

[3] Costas Varotsos, Vladimir Krapivin, Ferdenant Mkrtchyan, **Xiran Zhou**. (2021). On the effects of aviation on carbon-methane cycles and climate change during the period 2015-2100. *Atmospheric Pollution Research*, *12*(1), 184-194. (SCI, JCR 二区)

[2] **Xiran Zhou**, Xiao Xie, Yong Xue, et al. (2021). An Exploratory Evaluation of Multi-scale Data Analysis for Landform Element Detection on High-resolution DEM. *IEEE Geoscience and Remote Sensing Letters,* 19: 1-5. (SCI, JCR 一区)

[1] **Xiran Zhou**, Xiao Xie, Yong Xue, et al. (2021). Ontology-based probabilistic estimation for assessing semantic similarity of land use/land cover classification systems. *Land*, 10(9), 920*.* (SCI, JCR 一区)

2020

[4] Jiawei Chen, Pingbo Tang, Todd Rakstad, Michael Patrick, **Xiran Zhou**. (2020). Augmenting a deep-learning algorithm with canal inspection knowledge for reliable water leak detection from multispectral satellite images. *Advanced Engineering Informatics*, *46*, 101161. (SCI, JCR 一区, TOP 期刊)

[3] **Xiran Zhou**, Xiao Xie, Yong Xue, et al. (2020) Bag of geomorphological words: a

framework for landform object recognition with terrain features and semantics from high-resolution DEMs. *ISPRS International Journal of Geo-Information*, 9(11), 620 (SCI, JCR 二区)

[2] Xiao Xie, **Xiran Zhou*,** Jingzhong Li, et al. (2020). An Ontology-Based Framework for Complex Urban Object Recognition through Integrating Visual Features and Interpretable Semantics. *Complexity, 2020,* 5125891. (SCI, JCR 二区)

[1] **Xiran Zhou,** Jiawei Chen, Todd E. Rakstad, Pingbo Tang. (2020). Water chlorophyll estimation in an urban canal system with high-resolution remote sensing data. *IEEE Geoscience and Remote Sensing Letters,* 18(11): 1876-1880. (SCI, JCR 一区)

2019 之前

[15] **Xiran Zhou.** (2019). SRC: Transferring scale-independent features to support multi-scale object recognition with deep convolutional neural network. *SIGSPATIAL Special*, *10*(3), 10-11. (EI)

[14] **Xiran Zhou,** Wenwen Li, Samantha T. Arundel. (2019). A spatio-contextual probabilistic model for extracting linear features in hilly terrains from high-resolution DEM data. *International Journal of Geographical Information Science*, *33*(4), 666-686. (SCI/SSCI, JCR 一区)

[13] Huali Li, Jun Liu, **Xiran Zhou*.** (2018). Intelligent Map Reader: A Framework for Topographic Map Understanding with Deep Learning and Gazetteer. *IEEE Access*, *6*, 25363-25376. (SCI, JCR 二区)

[12] **Xiran Zhou,** Wenwen Li. (2017). A Geographic Object-Based Approach for Land Classification Using LiDAR Elevation and Intensity. *IEEE Geoscience and Remote Sensing Letters*, *14*(5), 669-673. (SCI, JCR 一区)

[11] Jun Liu, **Xiran Zhou*,** Jiangli Huang, et al. (2017). Semantic classification for hyperspectral image by integrating distance measurement and relevance vector machine. *Multimedia Systems*, *23*(1), 95-104. (SCI, JCR 二区)

[10] Wenwen Li, **Xiran Zhou,** Sheng Wu. (2016). An Integrated Software Framework to Support Semantic Modeling and Reasoning of Spatiotemporal Change of Geographical Objects: A Use Case of Land Use and Land Cover Change Study. *ISPRS International Journal of Geo-Information*, 5(10), 179. (SCI, JCR 二区)

[6] 邵振峰，白云，**周熙然**. (2015) 改进多尺度 Retinex 理论的低照度遥感影像增强方法. *武汉大学学报·信息科学版*, 40 (1), 32-39. (中国科技期刊卓越行动计划梯队期刊)

[5] 张磊，邵振峰，**周熙然**，等. 聚类特征和 SVM 组合的高光谱影像半监督协同分类. *测绘学报*, 43(8), 855. (中国科技期刊卓越行动计划梯队期刊)

[7] Jun Liu, Xin Wang, Min Chen, Shuguang Liu, Zhenfeng Shao, **Xiran Zhou**, et al. (2014). Illumination and contrast balancing for remote sensing images. *Remote Sensing*, *6*(2),

1102-1123. (SCI, JCR 一区)

[6] Jun Liu, Xin Wang, Min Chen, Shuguang Liu, **Xiran Zhou**, et al. (2014). Thin cloud removal from single satellite images. *Optics express*, *22*(1), 618-632. (SCI, JCR 一区, TOP 期刊)

[5] Zhenfeng Shao, Lei Zhang, **Xiran Zhou**, et al. (2014). A novel hierarchical semisupervised SVM for classification of hyperspectral images. *IEEE Geoscience and Remote Sensing Letters*, *11*(9), 1609-1613. (SCI, JCR 一区)

[4] **Xiran Zhou**, Jun Liu, Shuguang Liu, et al. (2014). A GIHS-based spectral preservation fusion method for remote sensing images using edge restored spectral modulation. *ISPRS Journal of Photogrammetry and Remote Sensing*, *88*, 16-27. (SCI/SSCI, JCR 一区, TOP 期刊)

[3] **Xiran Zhou**, Zhenfeng Shao, Wei Zeng, et al. (2014). Semantic graph construction for 3D geospatial data of multi-versions. *Optik-International Journal for Light and Electron Optics*, *125*(6), 1730-1734. (SCI, JCR 二区)

[2] Deren Li, Jie Shan, Zhenfeng Shao, **Xiran Zhou** and Yuan Yao. (2013). Geomatics for smart cities-concept, key techniques, and applications. *Geo-spatial Information Science*, *16*(1), 13-24. (SCI, JCR 二区, 院士综述)

[1] 邵振峰, **周熙然***, 刘军. (2013) 一种 QaR 树的图像粒优化分解方法. *武汉大学学报·信息科学版*, 38(2), 204-207. (中国科技期刊卓越行动计划梯队期刊)

● 专著

[2] Yong Xue, **<u>Xiran Zhou</u>**, Sheng Zhang. (2023). Telegeoprocessing. *World Scientific Press*.

[1] 邵振峰, **<u>周熙然</u>**. (2023). 智慧城市. *科学出版社*.

● 项目

6 宁夏文化与旅游数字融合关键技术研发与应用，宁夏自治区重点研发计划，2023-205，子课题主持

5 基于小样本知识迁移的泛源地图图像字符检测与识别，国家自然基金青年基金，2023-2025，主持

4 基于高分辨率 DEM 的矿山地表塌陷区域精细地形特征提取，自然资源部国土环境与灾害监测重点实验室开放基金，2021-2022，主持

3　泛在地图图像分类标签数据加工处理，信息工程大学委托横向课题，2021-2022，主持

2　融合多源大数据的深度学习视觉驱动定位，中央高校基本科研业务费专项资金，2020-2022，主持

1　基于多源遥感影像的矿区地表水域质量评估，中国矿业大学人才引进资助项目，2019-2021，主持

● 获奖

2021　第十七届中国地理信息科学理论与方法学术年会青年教师论文竞赛第二名

2020　测绘科学技术进步奖二等奖（排名第 7）

2020　双创博士（世界名校类）

2018　Student Research Contest at the ACM SIGSPATIAL 2018 二等奖

2017　ISPRS Journal of Photogrammetry and Remote Sensing 杰出审稿人 (Outstanding Reviewer)

2015　AAG GIS Specialty Group Honors Student Paper Competition 2015 第二名

2012　研究生国家奖学金

2012　王之卓创新人才奖学金 (武汉大学最高奖学金)

● 学术兼职

学术机构任职

01/2017-至今　　Frontiers of Remote Sensing 期刊编委

12/2019-至今　　Remote Sensing 期刊审稿编委

09/2022-至今　　中国地理信息产业协会智慧国土工委会委员

03/2023-至今　　国际地球学会中国委员会数字能源专委会委员

国际学术会议

2023   2023 International Geoscience and Remote Sensing Symposium 会议审稿编委

2022   2022 International Geoscience and Remote Sensing Symposium 会议审稿编委

2021   2021 International Geoscience and Remote Sensing Symposium 分会场主席

2021   6th Int'l Conference on Remote Sensing Technologies and Applications 分会场主席

期刊审稿人

ISPRS Journal of Photogrammetry and Remote Sensing、International Journal of Geographical Information Science、IEEE Geoscience and Remote Sensing Letters、IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing、Remote Sensing、Remote Sensing Letter、Geo-spatial Information Science、IEEE Signal Processing Letters、ISPRS International Journal of Geo-Information、Multimedia Tools and Applications、IEEE Access、Sensor、Journal of Electronic Imaging、Journal of Applied Remote Sensing、PeerJ、Symmetry、Applied Sciences、武汉大学学报（信息科学版）、等