









- information in very high resolution multispectral images, a case study: Tetuan, Morocco. *Canadian Journal on Image Processing and Computer Vision*, 4(1): 1-8.
- [11] Uzar, M. (2014). Automatic building extraction with multi-sensor data using rule-based classification. *Article, European Journal of Remote Sensing*, 47(1): 1-18. <https://doi.org/10.5721/eujrs20144701>
- [12] Awrangjeb, M., Fraser, C.S. (2014). An automatic and threshold-free performance evaluation system for building extraction techniques from airborne LIDAR Data. *Article, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 1-15. <https://doi.org/10.1109/JSTARS.2014.2318694>
- [13] Wang, J., Yang, X., Qin, X., Ye, X., Qin, Q. (2014). An efficient approach for automatic rectangular building extraction from very high resolution optical satellite imagery. *IEEE Geoscience and Remote Sensing Letters*, 12(3), 487-491. <https://doi.org/10.1109/LGRS.2014.2347332>
- [14] Turker, M., Koc-San, D. (2015). Building extraction from high-resolution optical space borne images using the integration of support vector machine SVM classification, hough transformation and perceptual grouping. *Article, International Journal of Applied Earth Observation and Geoinformation*, 34: 58-69. <https://doi.org/10.1016/j.jag.2014.06.016>
- [15] Guo, Z., Du, S. (2017). Mining parameter information for building extraction and change detection with very high-resolution imagery and GIS data. *GIScience & Remote Sensing*, 54(1): 38-63. [10.1080/15481603.2016.1250328](https://doi.org/10.1080/15481603.2016.1250328)
- [16] Huang, X., Yuan, W., Li, J., Zhang, L. (2016). A new building extraction postprocessing framework for high-spatial-resolution remote-sensing imagery. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 10(2), 654-668. <https://doi.org/10.1109/JSTARS.2016.2587324>
- [17] Yang, H.L., Yuan, J., Lunga, D., Laverdiere, M., Rose, A., Bhaduri, B. (2018). Building extraction at scale using convolutional neural network: Mapping of the united states. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 11(8): 2600-2614. <https://doi.org/10.1109/JSTARS.2018.2835377>
- [18] Yang, H., Wu, P., Yao, X., Wu, Y., Wang, B., Xu, Y. (2018). Building extraction in very high resolution imagery by dense-attention networks. *Remote Sensing*, 10(11), 1768. <https://doi.org/10.3390/rs10111768>
- [19] Zhao, K., Kang, J., Jung, J., Sohn, G. (2018). Building extraction from satellite images using mask R-CNN with building boundary regularization. *CVPR workshop paper, CVF Computer Vision Foundation*, pp. 247-251. <https://doi.org/10.1109/CVPRW.2018.00045>
- [20] Pan, X., Yang, F., Gao, L., Chen, Z., Zhang, B., Fan, H., Ren, J. (2019). Building extraction from high-resolution aerial imagery using a generative adversarial network with spatial and channel attention mechanisms. *Remote Sensing*, 11(8), 917. <https://doi.org/10.3390/rs11080917>
- [21] Nougrara, Z., Benyettou, A., Abdellaoui, A., Bachari, N. I. (2011). Development of georeferenced data base of an extracted road network and its nodes from satellite imagery over Algeria sites. *J. Adv. Model. Simul. Tech. Enterp. Sig. Process. Pattern Recogn*, 54: 1-13.
- [22] Nougrara, Z. (2015). Towards robust analysis of satellite images of algeria: Application to road network and its nodes extraction. *AMSE Journals-2015-Series: Advances B*, 58(1): 53-66.