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A comprehensive study on classification algorithms for remote sensing data

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Abstract

Remote sensing images are widely applied in data analytics field today, especially for classification and finding change detection in the geospatial data. With the labeled geographic information such as classification of water bodies, forest area, vegetation area, fauna, flora, built-up, etc., it is possible to solve societal based problems such as urban planning, water conservation management, crop rotation, forest monitory etc. But, Remote Sensing (RS) images are so complex and invariant to handle. Advancements in the domain of an Artificial Intelligence, these complex imagery data are handled in an easier manner and remote sensing data analysis can be done efficiently [3]. This paper mainly focuses on various Machine Learning (ML) and Deep Learning (DL) classification techniques for RS images. Before this, brief introduction to remote sensing images and its sources are explained here. Finally, we conclude our study with identifying most suitable techniques for remote sensing image classification.

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