Literature Review

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Abstract

Astronomical imaging has made stupendous progress through the years with more and more sophisticated techniques being introduced with every new telescope launch. The rise in computation power enabled astronomers to increase the number of observations and resulted in flooding of information that could be processed as quickly as it could be seen by the human eye. The data albeit abundant, is computationally expensive to process and remains dormant in the archives globally. One such example being the Hubble Legacy Archive where there are hundreds and thousands of snapshots taken by the Hubble Space telescope which lie unprocessed in the database but can be of astronomical significance. This document summarizes a brief study of generative adversarial networks and convolutional neural networks and different techniques belonging to the disciplines that can be applied to astronomical images to make them usable for astronomical inspection.