

Machine Learning for Astrophysics: An (Incomplete) Overview

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Abstract

Machine Learning has become a common tool in astrophysical research, and is now being used in numerous ways for a myriad of different scientific purposes, from distinguishing real versus bogus transients in images to the inference of stellar parameters. In this talk, I will make an attempt to give a broad overview of the state-of-the-art of machine learning in astronomy and highlight some of the opportunities and challenges of using it in astrophysical research. I will also point towards the some of the exciting developments of recent years in machine learning that are now starting to open up new opportunities for incorporating machine learning in astrophysics in unexpected ways.