Special Topics in Physics: Introduction to Machine Learning

Spring 2021

Tuesdays & Thursdays
11:30 AM — 12:45 PM
Synchronous Online

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Prerequisites:
MATH 142 or permission of instructor. Experience with python recommended.

An introduction to the fundamental concepts and applied tools of machine learning targeted to scientists.

In this class, we will focus on deep neural networks that can be trained to perform a wide variety of tasks including image recognition, pattern identification, and natural language processing, and discuss how these basic techniques can be applied to problems in physics, ranging from the prediction of material properties, the analysis of high-dimensional data sets, and to the discovery of phase transitions.

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