

Introduction

Climate change and variability, as the defining predicament of the present moment has come to disrupt traditional practices across disciplines - with concerted efforts and radical approaches, now being prescribed to limit the potentially endless damage. Agriculture is one domain, facing such disruption on a planetary scale - crop culture owing to its inherent inter-linkage with weather patterns, is increasingly susceptible to the adverse impacts of climate change. This project is set to use machine learning to predict the crop yield with other climatic parameters. We find the location of the data and map it to the rainfall, humidity and daily temperature of the location.

This project aims to use several prominent machine learning algorithms such as Support Vector Machines, Support Vector Regression, Multi Layer Perceptron, and K-Nearest Neighbours to quantify and evaluate the variation expressed in several climatic variables, and further assess the yield-response to this variation, of an economically noteworthy cash crop - Tea. The application of Machine Learning has enabled hitherto unprecedented breakthroughs in exposing underlying relationships between factors in numerous data-intensive fields such as image recognition and computer vision, natural language processing and control automation.