IMPACT OF MACHINE LEARNING ALGORITHMS ON DISEASE PREDICTION USING MICROBIOME DATA

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Abstract

Microbiome acts pervasive roles in different environments. Microbiome have huge impact on human health and wealth. Human microbiome resides on and inside human body. It carries out beneficial advantages in human body such as metabolism, digestion of foods and regulates immune systems etc. Likewise, imbalance of measure count of microbiome causes symptoms of diseases. Earlier prediction and identification of diseases and taking precautions may helpful to reduce the loss of living beings and prevent the high risk of contagious diseases. Study of microbiome genetics leads to help in disease prediction. Microbiome data provides different features to predict diseases. Machine learning algorithms are used to predict diseases based on microbiome data. Machine learning algorithms are user friendly method to predict diseases. They provide fast outputs with cheaper cost and help to predict future opportunities as well. To get a best algorithm for the prediction, we need to extensively search and experimentally select it. This work evaluates the impact of a set machine learning algorithms for the prediction of disease using microbiome data.

Keywords: *microbiome, machine learning algorithms, disease prediction*