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Depression prediction using Machine Learning

Final Thesis

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ABSTRACT

Millions of individuals throughout the world suffer from depression, which is a common mental condition. It is a serious public health issue, and it can have a variety of effects, from social and personal problems to serious health problems, like suicide. Depression has grown to be a major issue in recent years, affecting people of all ages, genders, and socioeconomic backgrounds. Effective treatment and management of depression depend on early detection and intervention. Technology-assisted depression detection can help with early detection and offer a chance for prompt intervention.

The goal of this project is to create a machine learning-based depression prediction system utilizing a Kaggle dataset. Based on a variety of factors, such as the number of children, income, expenses, and alcohol consumption levels, the system uses the random forest algorithm to forecast depression. Decision tree and linear classifiers are used to test the system's performance, with random forest surpassing the other two approaches. The study's findings show how machine learning may be used to predict depression reliably and emphasize the value of early diagnosis for efficient disorder management.