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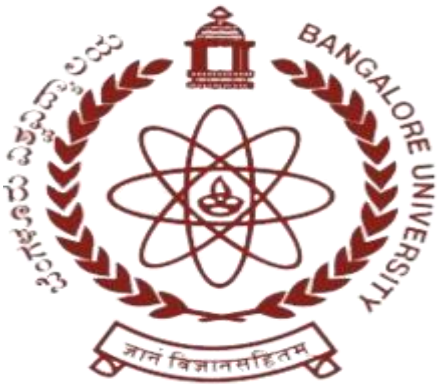

DEPARTMENT OF COMPUTER SCIENCE AND APPLICATONS

A project report title

Mental Health Prediction Using Machine Learning

Submitted By

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Under the Guidance of

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DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

TOWARDS

MAIN PROJECT

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BANGALORE UNIVERSITY

JNANA BHARATHI CAMPUS, BENGALURU – 560056

DEPARTMENT OF COMPUTER SCIENCE AND APPLICATONS

CERTIFICATE

This is to certify that **Praveen M R (P03NK22S126023),** have satisfactorily completed the project work titled "**Mental Health Prediction Using Machine Learning**" for partial fulfilment of the requirement for the award of the degree Master of Computer Application (MCA) awarded by Bangalore University for the year 2023-24.

Dr. Hanumanthappa M
GUIDE

Dr. Hanumanthappa M
HOD

Examiners:

1)

2)

DECLARATION

Praveen M R (P03NK22S126023), student of III semester MCA of **Department of Computer Science and Application, Bangalore University,** hereby declare that the dissertation entitled "**Mental Health Prediction Using Machine Learning**" has been independently carried out by me at Department of Computer Applications, Bangalore University and submitted during the academic year 2023-2024. Further the content presented in the report is a genuine and authentic work, created solely by me.

To my knowledge this dissertation has not been submitted to any other college or university or published at any prior to this.

Place: Bangalore **Praveen M R**

Date:

ACKNOWLEDGEMENT

I am extremely grateful for the immense help and support we received from my project guide, **Dr. Hanumanthappa M,** during the development of my project titled "**Mental Health Prediction Using Machine Learning"** Their guidance, expertise, and encouragement have played a major role in shaping the direction and success of our project. Their valuable insights and advice have been instrumental in helping us navigate through the challenges and complexities of analysing data.

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I am truly grateful for the opportunity to work on this project, and I want to express my deep appreciation to everyone who has been involved. Their guidance, support, and collaboration have made this project an enriching and rewarding experience.

Praveen M R

ABSTRACT

This project focuses on understanding and predicting mental health outcomes using data analysis and machine learning techniques. Our goal is to consider the factors or symptoms that influence mental health condition and create a model that can help assess an individual's mental well-being based on their symptoms.

We start by gathering detailed information on various symptoms, including age, feelings of nervousness, and panic, along with other symptoms linked to different mental health disorders. After collecting this data, we clean and organize it to ensure its accurate and reliable.

We use machine learning algorithms, such as logistic regression, decision trees, random forests, and gradient boosting algorithms to build our predictive models. By training these models with collected health data, we can assess their accuracy and refine them to predict mental health conditions based on the symptoms identified. This approach aims to provide valuable insights into the mental health status of individuals.

Overall, this project aims to predict the mental health status of individuals by focusing on the specific symptoms of each disorder. By doing so, we hope to improve understanding of mental health challenges and enhance the ability to provide meaningful support to those in need

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