IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 3, November 2024

Heart Attack Prediction System

Dr G Paavai Anand, Akshith Srikanth, J. C. Arjun, K. M. Gowtham
BTech CSE Artificial Intelligence and Machine Learning, CSE
SRM Institute of Science and Technology, Vadapalani, Chennai, TN, India

Abstract: *Heart disease remains one of the leading causes of mortality worldwide, with heart attacks accounting for a significant proportion of these deaths. Early prediction of heart attack risk can enable timely medical interventions and lifestyle changes, potentially saving lives. This project presents a Heart Attack Prediction System using machine learning techniques to predict an individual's likelihood of experiencing a heart attack based on clinical and demographic data.*

Our system uses various machine learning algorithms, including logistic regression, decision trees, and ensemble methods, trained on a dataset of cardiovascular risk factors such as age, blood pressure, cholesterol levels, and other health indicators. Through feature engineering and model tuning, we identify the most predictive factors, enhancing the accuracy and robustness of our model. The system provides a probability score for heart attack risk, empowering healthcare providers and patients to make informed decisions. With an emphasis on interpretability and user-friendly interfaces, this project aims to make complex medical insights accessible and actionable for both clinicians and patients, potentially reducing the incidence of heart attacks through proactive care..

Keywords: Heart disease