

PROGNOSTIC MODELING FOR HEART DISEASE PREDICTION: LEVERAGING MACHINE LEARNING ALGORITHMS

Yalamati Mahima Mani

Department of Computer science and Engineering,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, Andhra Pradesh, India

D. Suresh Kumar

Assistant Professor, Department of Computer science and Engineering,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, Andhra Pradesh, India

Tammina Chandini

Department of Computer science and Engineering,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, Andhra Pradesh, India

Guttikonda Kavya Sri Department of Computer science and Engineering,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, Andhra Pradesh, India

Alapati Satmika

Department of Computer science and Engineering,
Koneru Lakshmaiah Education Foundation, Vaddeswaram, Andhra Pradesh, India

In our fast-paced world, the pursuit of success often leads people to neglect their health. Unhealthy lifestyles, stress, and poor dietary choices have increased the risk of heart disease at a young age. Accurate prediction of heart disease is crucial, but traditional methods may lack precision. HDPS utilizes medical profiles to provide timely and accurate predictions, ultimately aiming to enhance healthcare decisions and reduce costs. A pivotal aspect of HDPS is its potential to revolutionize healthcare decision-making. By furnishing individuals and healthcare providers with personalized risk assessments, the system empowers them to make informed choices regarding lifestyle modifications, interventions, and treatment plans. Beyond the individual level, the proactive identification of high-risk groups holds promise for significant cost reduction within the healthcare system, redirecting resources toward targeted preventive strategies. Privacy and security considerations are paramount in the design and implementation of HDPS, recognizing the sensitivity of health data. Adherence to stringent data protection regulations ensures the confidentiality and integrity of user information, fostering trust in the system.