

# AI-Driven Healthcare: Predictive Analytics for Disease Diagnosis

Akshata Anilkumar Sakat<sup>1</sup> and Janvi Namdev Raskar<sup>2</sup>

Department of Computer Applications<sup>1,2</sup>

S. M. Joshi College, Hadapsar, Pune, Maharashtra, India

**Abstract:** *Artificial Intelligence (AI) has introduced groundbreaking improvements in healthcare, especially in facilitating early-stage disease recognition and better patient care strategies. With the integration of machine learning techniques, predictive analytics now plays a crucial role in discovering trends within health-related data. This study investigates the applications of AI in medical prediction, focusing on its benefits, barriers, and ethical challenges, while also discussing its future potential in supporting clinicians and minimizing diagnostic mistakes [1].*

**Keywords:** Python, Model Accuracy, Early Disease Detection, Scikit-learn

