Student Academic Monitoring System

Prof. Vanashri.N. Sawant[1], Aniruddh Salunkhe[2], Maitreyee Patil[3], Vedant Yadav[4], NishitVetal[5]

Professor, Department of Computer Engineering[1]

Students, Department of Computer Engineering[2-5]

NBN Sinhgad Technical Institute Campus, Pune, India

Abstract: *The increasing complexity of educational data demands advanced analytical methods beyond traditional evaluation metrics. This study investigates the application of Educational Data Mining (EDM) to analyze and predict students' academic performance effectively. It combines clustering methods, particularly an enhanced K-means algorithm, and deep learning techniques like Convolutional Neural Networks (CNN) to provide a comprehensive evaluation framework. The proposed approach focuses on improving the accuracy of performance prediction by determining optimal clustering numbers and using labeled data for deep learning. Results demonstrate significant improvements in identifying at-risk students and enhancing educational decision-making.*

Keywords: Academic records, Attendance tracking, HTML (Hyper Text Markup Language) ,PHP CSS, JQuery, Bootstrap, Node.js, Course registration. component, formatting, style, styling, CNN, EDM