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EduPredict: Smart College Prediction System

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Abstract: In today's competitive academic environment, students preparing for multiple entrance examinations such as the MHT-CET and often struggle to identify the most suitable college and stream. This is a challenge that arises from the complexity of factors like seat availability, regional quotas, and intricate reservation systems, which make manual prediction unreliable. Conventional approaches that depend on static, past-year cutoff data fail to capture current admission trends and variations.

To overcome these limitations, this study introduces an intelligent College Prediction System based on Machine Learning. The proposed model utilizes Linear Regression to estimate future admission cutoffs and generate personalized college recommendations for candidates. The model is trained on several years of MHT-CET admission datasets, considering essential parameters such as exam score, academic stream, category, seat type, region, CAP round, and historical seat fluctuation.

By examining year-wise admission patterns, the system dynamically predicts cutoff marks for various colleges and courses. Experimental testing indicates that the model achieves an accuracy exceeding 94%, validating its reliability and consistency across diverse disciplines. Furthermore, the system has been implemented as an interactive web-based application, allowing students to enter their information and instantly receive a curated list of colleges that best align with their profiles.

This data-driven tool minimizes uncertainty, enhances decision-making, and empowers students to make informed academic choices based on evidence rather than speculation—ultimately streamlining the admission process and improving transparency.

Keywords: Machine Learning, Linear Regression, College Prediction System, MHT-CET, Cutoff Prediction, Personalized Recommendation, Admission Data, Seat Matrix

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