Result Prediction Using K-Nearest Neighbor Algorithm For Student Performance Improvement

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***Abstract*—The examination results have become an integral part of every student's life. The educational institution's ranking is greatly influenced by the university results. This paper mainly focuses on the prediction of a student's university result by making use of different attributes. These attributes might be of quantitative and qualitative type. The quantitative attributes used are Internal Assessments, Attendance percentage, Number of On-Duties taken and Overall Assignments completed. The qualitative attributes include Subject feedback, Faculty feedback, and whether the student is a Day Scholar/Hosteller. Here, we make use of k-Nearest Neighbor algorithm (or k-NN for short) against the historical data of students for more accurate prediction of results. In this method all the attributes considered are converted to the same scale. This algorithm makes use of the Euclidean distance formula which is used to find the nearest record. This algorithm predicts better results which help students maximize their academic output.**

Keywords: **University Results, Prediction, Attributes, k-Nearest Neighbor, Euclidean distance formula.**

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