ABSTRACT

APPLICATION OF DATA MINING TO PREDICT PROGRAM PREFERENCES USING K-NEAREST NEIGHBOR METHODE (Case Study : XYZ University)

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This research discusses the transformation of higher education in Indonesia influenced by digitalization and technology. The main focus is the new student enrollment process, where factors such as school origin, education level, and school major are the primary considerations. The method used is K-Nearest Neighbor (K-NN) with Python Colab for analyzing admission data at XYZ University. The K-NN method was chosen for its flexibility and classification accuracy. Results show a prediction accuracy score of 88%. This study also presents data visualizations of enrollment patterns based on the number of applicants and applicant growth. These findings are expected to help the university in marketing strategies, program development, and curriculum adjustments to create a more effective learning environment.

Keywords : New Student Enrollment, K-Nearest Neighbor (KNN), Accuracy