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Development of the Academic Model to Predict Student Success at VUT-FSASEC Using Decision Trees

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Abstract : The success or failure of students is a concern for every academic institution, college, university, governments and students themselves. Several approaches have been researched to address this concern. In this paper, a view is held that when a student enters a university or college or an academic institution, he or she enters an academic environment. The academic environment is unique concept used to develop the solution for making predictions effectively. This paper presents a model to determine the propensity of a student to succeed or fail in the French South African Schneider Electric Education Center (FSASEC) at the Vaal University of Technology (VUT). The Decision Tree algorithm is used to implement the model at FSASEC.

Keywords : FSASEC, academic environment model, decision trees, k-nearest neighbor, machine learning, popularity index, support vector machine
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