MACHINE LEARNING BASED SUBJECTS AND PATHS PREDICTION FOR STUDENTS

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ABSTRACT

Educational Data Mining (EDM) is an emerging discipline, concerned with developing methods for exploring the unique types of data that come from educational settings and using those methods to better understand students and the settings in which they learn. New computer-supported interactive learning methods and tools, intelligent tutoring systems, simulations, games have opened opportunities to collect and analyses student data, to discover patterns and trends in those data, and to make discoveries and test hypotheses about how students learn. Data collected from online learning systems can be aggregated over large numbers of students and can contain many variables that data mining algorithms can explore for model building. The focus is upon developing new tools and algorithms for discovering data patterns by applying methods and techniques from statistics, machine learning, and data mining to analyses data collected during teaching and learning. Similarly in this project, the analysis has been done based on the employee and alumni data collected from various sources and advanced algorithms have been used to draw patterns and predict a suited career to a computer science undergraduate based on his abilities, interests and opportunities. As students are going through their academics and pursuing their interested courses, they need to assess their capabilities and identify their interests so that they will get to know in which career area their interests and capabilities are going to put them. This will help them in improving their performance and motivating their interests so that they will be directed towards their targeted career and get settled in that. Also, recruiters while recruiting the candidates after assessing them in all different aspects, these kinds of career recommender systems help them in deciding in which job role the candidate should be kept in based on his/her performance and other evaluations. This paper mainly concentrates on the career area prediction of computer science domain candidates.

Key Words: Educational Data Mining, Artificial Intelligent