Abstract

Research in the field of Academic Analytics has led to the development of various models which aim at analyzing the performance of students. The different objectives of these models include prediction of student’s performance, providing feedback for supporting Instructors, student modelling, designing course curriculum and timetable scheduling. This research paper proposes an intervention model based on the existing NBA outcome based education system. The existing model includes the usage of parameters like the Program Educational Objectives (PEO’s), Program Outcomes (PO’s) and Course Outcomes (CO’s). The paper also includes a case study which shows the application of the intervention model on educational data for 40 students of the B.Tech in Computer Science program. The intervention model uses the direct assessment performance of students as input and predicts the students who fail to attain the CO’s. The intervention model results help in identifying the students who are in need of extra coaching and help the institution in focusing on these students in order to enhance the overall performance of the class. The automation of this model using artificial intelligent agents based model (iAERWS) further helps in improving the performance of the system significantly.
References

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Index Terms

Computer Science Information Sciences

Keywords

Outcome based Education (OBE); performance prediction model; workflow management; academic analytics; dynamic change; education.