

ID 772

AI Powered Course Recommendation System for Private Education

HS Fernando 1# and KC Yakupitiya²

¹Department of Software Engineering, Faculty of Science, Engineering, and Computing,
Kingston University United Kingdom

²Department of Information and Communication Technology, Faculty of
Technology, University of Sri Jayewardenepura, Sri Lanka

#hirunisanjana5@gmail.com

The growing variety of courses and the broad range of student preferences in Sri Lanka's private education industry makes it difficult to assist students in choosing the right academic pathways. By creating an AI-powered course recommendation system, especially for private educational institutions, this study aimed to address these issues. The system analyses several aspects of student data, such as academic performance, courses presently taken, and individual preferences, using sophisticated machine learning algorithms. Through the integration of collaborative and contentbased filtering processes, the system seeks to improve the accuracy of its course recommendations. The basis for training the algorithms was a large dataset that includes rich student records and thorough course descriptions. The system's goal is to find patterns in this data so that it can recommend courses to students that are both relevant and unique to them. Prototype tests and input from teachers and students were used to gauge the system's efficacy. The system effectively provides customised recommendations that are in line with students' academic goals, and the results show a noticeable improvement in student satisfaction and an efficient course selection process. The system's intuitive design also promotes openness and confidence, which helps students make better decisions about their education. Overall, the results point to a substantial improvement in educational quality in Sri Lanka's private higher education sector using AI-driven recommendation systems. Through personalised suggestions that direct students towards successful academic courses, the system can significantly influence academic achievements.

Keywords: AI-powered systems, course recommendation, machine learning, private education