

SmartStudy-Learning Path Recommender system using DS and ML

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Abstract: *Learning Path Recommender Systems (LPRS) utilize machine learning and data-driven approaches to personalize educational experiences, adapting content sequences based on individual learners' needs and progress. With the rising demand for tailored learning, LPRS have emerged as vital tools to guide students through educational content, enhancing engagement and achievement. This review covers state-of-the-art algorithms, including collaborative filtering and reinforcement learning, used in LPRS to optimize learning paths. We discuss model accuracy, user interaction data, and adaptive feedback mechanisms, providing insights into the potential of LPRS to improve learning outcomes.*

Keywords: Learning path recommender, personalized learning, adaptive learning systems, collaborative filtering, reinforcement learning, educational AI, student engagement