International Journal of Information System & Innovation Technology 2(2) (2023) 8-12

GEVIVA-ETT
THE BEST SOLUTION

IJISIT

http://ejournal.enlightenlearner.com

IJISIT
INTERNATIONAL JOURNAL

Mining for Success: Personalized Learning Paths through Educational Data Analysis

Delima Sitanggang, Universitas Prima, Indonesia
Rijois Iboy Erwin Saragih, Geviva Edukasi Trans Teknologi, Indonesia
Correspondence: E-mail: rijoisssaragih@gmail.com

Article Info

Article history:

Received October 10, 2023
Revised November 10, 2023
Accepted December 15, 2023

Keywords:

Student,
Academic performance
Data mining,
Learning

ABSTRACT

This research addresses the research problem of leveraging educational data mining techniques to create personalized learning paths for individual students based on their unique learning styles, preferences, and strengths. The study aims to investigate whether tailoring educational experiences using mined data leads to enhanced academic performance, increased engagement, and a more positive learning experience compared to traditional, non-personalized approaches. Methodologically, the research employs data-driven analyses of diverse student datasets, integrating variables such as academic performance, learning preferences, and individual strengths. The study explores the effectiveness of personalized learning paths facilitated by educational data mining in various educational settings. Ethical considerations related to data privacy and responsible use of mined information are also systematically addressed throughout the research. Results from this research contribute valuable insights into the efficacy of personalized learning strategies driven by data mining, offering implications for educational practices and curriculum design. The study provides a comprehensive examination of the benefits and challenges associated with implementing personalized learning paths, and the results have the potential to inform educational institutions, policymakers, and educators on optimizing learning environments.