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Personality Prediction in Personalized E-Learning

Dr. K. Akila[1], N. Swetha[2], T. V. Deepthi[3]
Assistant Professor, Department of Computer Science and Engineering[1]
Students, Department of Computer Science and Engineering[2,3]
Dhanalakshmi Srinivasan University, Trichy, Samayapuram, Tamilnadu, India

Abstract: *The rise of e-learning platforms has transformed the way education is accessed, delivered, and personalized. Despite this growth, learners often face challenges in finding courses that suit their learning styles and personalities. Addressing this requires intelligent systems that not only predict learner preferences but also recommend personalized content. This project presents a hybrid deep learning framework that combines BERT-based text analysis of student feedback with a Multi-Layer Perceptron (MLP) trained on structured behavioral data to predict learning styles. Further, SMOTE is used to resolve data imbalance, and a SWRL-based ontology system enhances content recommendations based on inferred knowledge rules.*

Keywords: e-learning platforms

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