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(57) Abstract :

The invention discloses a data mining model (100) for intelligent student performance prediction, comprising a data collection module (101), preprocessing unit (102), feature extraction (103), prediction engine (104), and visualization interface (105). The system integrates academic, behavioral, and demographic datasets to forecast student outcomes with high accuracy. By employing hybrid machine learning algorithms, the model ensures adaptability, interpretability, and scalability. Educators gain actionable insights into at-risk students, enabling timely interventions. The invention provides a holistic, intelligent, and transparent approach to educational performance prediction.

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