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(57) Abstract :
The invention discloses an AI-powered model for automated software bug classification comprising a bug input module (101), preprocessing and feature extraction unit (102), natural language processing engine (103), classification model (104), adaptive learning module (105), and integration interface (106). The system leverages machine learning and natural language processing to classify software bugs with high accuracy, reducing manual intervention and improving debugging efficiency. Adaptive feedback ensures continuous improvement, while seamless integration with bug-tracking systems enables real-time, explainable, and reliable bug classification for modern software engineering environments.

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