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(57) Abstract :

The invention discloses an AI-enabled system for smart library resource management comprising a Central Processing Unit (101), Cataloging Module (102), IoT Monitoring Module (103), Predictive Analytics Engine (104), Recommendation Engine (105), and User Interface Module (106). The system integrates RFID Tags (107), QR Codes (108), and a Resource Security Subsystem (109) for real-time monitoring, predictive allocation, and personalized recommendations. Experimental validation demonstrates enhanced efficiency, accuracy, and user satisfaction, establishing the invention as a scalable and intelligent solution for modern libraries.

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