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(57) Abstract :
The present invention provides an AI-driven smart antenna switching system comprising a Reception Module (102), Transmission Module (104), AI-Powered Antenna Switching Algorithm (106), and Antenna Control Unit (108). This system dynamically selects optimal antennas for 5G connectivity by utilizing real-time signal strength analysis, user movement prediction through AI models, and congestion forecasting. The invention enhances data throughput, reduces latency, and ensures reliable communication with minimal power consumption, supporting seamless operation under mobility and interference conditions without service disruption.

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