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(57) Abstract :

The invention relates to an AI-powered platform for smart traffic route optimization integrating IoT sensors (101), GPS devices (102), cloud servers (103), an AI engine (104), and user interface (105). The AI engine (104) employs machine learning, reinforcement learning, and anomaly detection for real-time route optimization. The platform reduces congestion, minimizes fuel consumption, improves emergency vehicle routing, and provides predictive traffic management. The invention ensures sustainable urban mobility while delivering adaptive and scalable solutions suitable for diverse metropolitan contexts.

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