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(57) Abstract :

The invention "An IoT-Based Framework for Smart City Street Traffic Management" comprises IoT sensor nodes (101), smart traffic signal controller (102), vehicle detection unit (103), cloud analytics platform (104), central monitoring server (105), and user dashboard interface (106). The system utilizes real-time sensor data, cloud analytics, and predictive modeling to manage urban traffic flow efficiently. It ensures dynamic signal control, reduces congestion, and enhances safety through intelligent coordination among distributed IoT components.

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