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(57) Abstract :

The present invention discloses a cloud-supported system for intelligent traffic data visualization comprising an IoT sensor network (101), GPS data collector (102), cloud data processing unit (103), machine learning analytics engine (104), visualization interface module (105), and user access terminals (106). The system integrates heterogeneous traffic data, performs real-time analytics, and generates adaptive visualizations such as heatmaps and predictive dashboards. It enhances urban mobility, congestion management, and emergency responsiveness through scalable cloud infrastructure and intelligent visualization, providing improved decision-making for traffic authorities, commuters, and urban planners.

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