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(57) Abstract :
The invention discloses an intelligent video analytics system (100) for real-time crowd density prediction. The system comprises a video acquisition unit (101), preprocessing module (102), feature extraction engine (103), density estimation module (104), predictive analytics module (105), and centralized monitoring interface (106). It utilizes deep learning algorithms for density estimation and recurrent networks for predictive modeling, ensuring accurate, real-time monitoring. The system (100) enables proactive crowd management, reducing risks of congestion and accidents, and can be seamlessly integrated into existing surveillance infrastructures for enhanced safety and urban management.

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