wheretopark.app: Multi-Dimensional Parking Lot Availability Resolution Using AI, CCTV Cameras and Sensor Data

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Urban areas face significant parking challenges, causing traffic congestion and pollution as drivers search for spaces. The wheretopark.app project introduces a novel solution that uses artificial intelligence (AI), closed-circuit television (CCTV), and integrated data from gates and sensors to identify available parking spaces in real time. This comprehensive approach enhances our ability to cover more cities by incorporating additional data sources, thereby expanding the applicability and accuracy of the solution. At the heart of the initiative is the development of an AI algorithm that achieves over 90% accuracy in detecting available parking spaces from CCTV footage, supplemented by data from gates and sensors. This integration ensures robust performance under varying conditions and extends the reach of the system. The research involved building and refining the AI model using a variety of data inputs, with an emphasis on adaptability to different environmental factors. Through rigorous testing and optimization, the solution demonstrated its effectiveness, significantly reducing search times and emissions by guiding drivers to the nearest available space. Early deployments have shown promising results in reducing traffic congestion and improving urban mobility. The integration of AI, CCTV and sensor data in wheretopark.app represents a scalable, multi-dimensional approach to solving urban parking problems. It offers a groundbreaking contribution to smart city infrastructure, with potential benefits for traffic flow, environmental health, and urban livability. This project paves the way for transformative changes in urban parking management, benefiting city planners and drivers with a more efficient, sustainable system.

Awards Won: