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Patent Search

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Abstract:

[029] This invention presents a Novel Parking Space Detection System for Electric Vehicles using Deep Learning. The present invention comprising of acquiring live im parking area hosting EVC stations in real-time, employing a deep learning model, specialized in object detection and classification, to analyze the acquired images, th recognizing parking spaces and EVC stations and assessing the results generated by the deep learning model to ascertain the presence of accessible parking spots fe stations. Further, providing electric vehicle owners with instant updates concerning the accessibility of EVC stations. Accompanied Drawing [FIG. 1-2]

Complete Specification

Description:[001] The invention, in general, relates to field of machine learning systems and methods. More specifically, the present invention relates to a Novel Par Space Detection System for Electric Vehicles using Deep Learning.
BACKGROUND OF THE INVENTION
[002] The following description provides the information that may be useful in understanding the present invention. It is not an admission that any of the informatic provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.
[003] The increasing adoption of electric vehicles (EVs) represents a significant step towards a more sustainable and environmentally friendly mode of transportatic EVs become more commonplace, so does the need for efficient and convenient charging infrastructure. A critical aspect of this infrastructure is the availability of pa spaces equipped with charging stations, commonly referred to as Electric Vehicle Charging (EVC) stations or EV parking spaces. Effective utilization of EVC stations is to meet the growing demand for electric vehicle charging. However, issues such as limited parking spaces and the non-uniform distribution of EVC stations can lead inefficiencies, including instances where charging spaces remain unused while EVs require charging.
[004] One of the primary challenges hindering the widespread adoption of electric vehicles is the availability and accessibility of charging infrastructure. EV owners the presence of EVC stations, which are often located in public parking areas, residential complexes, workplaces, and shopping centres. To address the growing den EV parking spaces and optimize their utilization, a novel parking space detection system leveraging deep learning technology has emerged. The present invention p the rationale and significance of a novel parking space detection system for electric vehicles using deep learning.
[005] Accordingly, on the basis of aforesaid facts, there remains a need in the prior art to provide a Novel Parking Space Detection System for Electric Vehicles using

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