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Invention Title		NEURAL NETWORK-ASSISTED DIAGNOSIS OF ELECTRICAL JUNCTION ANOMALIES IN EVS				
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Abstract:

Our proposed invention presents a neural network-assisted diagnostic system for detecting electrical junction anomalies in electric vehicles (EVs). The system harnesses the power of artificial intelligence and machine learning to autonomously analyze vast amounts of data collected from EV systems, enabling real-time identification of potential faults or abnormalities within electrical junctions. By leveraging advanced signal processing techniques and neural network algorithms, the system offers a proactive approach to maintenance interventions, minimizing downtime and enhancing the reliability and safety of EVs. Moreover, the system's adaptability to diverse EV architectures and applications ensures its utility across various segments of the electric vehicle market, contributing to the broader goal of accelerating the transition to sustainable transportation solutions.

Complete Specification

Description:FIELD OF THE INVENTION

The proposed system falls within the realm of electrical engineering and automotive technology. It operates at the intersection of neural networks and electric vehicle (EV) diagnostics, addressing the critical need for efficient detection of electrical junction anomalies in EVs. By leveraging the power of neural networks, this system aims to revolutionize the diagnosis process, offering enhanced accuracy and speed in identifying faults within electrical junctions of EV systems. This innovative approach represents a significant advancement in the field of automotive maintenance and safety, paving the way for proactive maintenance strategies and reducing downtime for EV owners. Furthermore, it underscores the growing importance of artificial intelligence in optimizing the performance and reliability of modern electric vehicles, thus contributing to the advancement of sustainable transportation technologies.

Background of the proposed invention:

Electric vehicles (EVs) have emerged as a promising solution to address environmental concerns and reduce dependence on fossil fuels in the transportation sector. With advancements in battery technology, motor efficiency, and charging infrastructure, EVs have gained significant traction in recent years, offering a cleaner and more sustainable alternative to traditional internal combustion engine vehicles. However, as the adoption of EVs continues to rise, so does the importance of ensuring their reliability, safety, and performance.

One critical aspect of EV maintenance and safety is the detection and diagnosis of electrical junction anomalies within the vehicle's electrical systems. Electrical junctions serve as pivotal points where multiple electrical connections converge, facilitating the flow of current between various components such as batteries, motors, controllers, and sensors. Any anomalies or faults in these junctions can lead to performance degradation, safety bazards, and potentially catastrophic failures.

View Application Status



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