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2024 IEEE Pune Section International Conference (IEEE PuneCon 2024) : Submission (1411) has been created.

1 message

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Fri, Apr 11, 2025 at 11:06 PM

Hello,

The following submission has been created.

Track Name: AI, ML and Big Data Analytics

Paper ID: 1411

Paper Title: Predicting state of charge (SoC) for electric vehicle (EV) based on trip data

Abstract:

State of Charge (SoC) prediction is vital for electric vehicle (EV) battery management to enhance efficiency and drive range estimation. While conventional approaches are dependent on battery-related parameters, this work adopts a new paradigm by considering trip data logs rather than battery-specific parameters. Through an understanding of the most influential trip-related SoC factors, data cleaning, and processing, coupled with machine learning models, the present work improves the accuracy of SoC predictions. The performance, as measured by RMSE, MAE, and R^2 , significantly improved. These results are useful to apply on real-world scenarios for maximizing EV performance.

Created on: Fri, 11 Apr 2025 17:36:50 GMT

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Secondary Subject Areas: Not Entered

Submission Files:

Predicting State of Charge (SoC) for EV Batteries Based on Trip Data.docx (393 Kb, Fri, 11 Apr 2025 17:36:39 GMT)

Submission Questions Response: Not Entered

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