

# Novel Mobility Prediction-Based Autonomous Energy-Aware Framework using ML and RL Techniques

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**Abstract:** *The approach delivers two separate results through an innovated energy-conscious framework which conducts RL-based Q-learning analysis for energy conservation with CO2 measurements followed by ML-based KNN algorithm application with distance metrics for classification accuracy. A three-fold benchmark evaluates the first part of the results using NS and ES and Greedy approach and the second part verifies its performance through KNN alongside SVM, DA, NB, DT, and ANN.*

**Keywords:** KNN, SVM, ANN