**Traffic Modeling using Neural Networks: Convolution Neural Network - Long Short Term Memory**

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**Abstract**

This study opens new directions on Traffic Modeling using Neural Networks, their limitations and exploring existing research on the use of FNN, RNN and CNN architectures in this domain. Our proposed hybrid model leverages the strengths of both CNNs for recognizing spatial patterns and RNNs for capturing temporal dependencies in traffic data. The paper details our methodology, including data collection, network architecture design, training process, hyperparameter tuning, and performance evaluation. We compare our results with traditional methods and discuss their implications for intelligent transportation systems (ITS) and urban planning.

**Keywords:** Safety Distance, Braking Performance, Microcontroller, Sensors.

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