07:12 86%

Hello,

The following submission has been created.

Track Name: NICETEASEUROPE2025

Paper ID: 614

Paper Title: Machine Learning Networks System (MLNS) A multi-objective machine learning framework for network structured data

Abstract:
The data that moves across social relations, biology, and recommendation engines has given and continues to provide the standard models in machine learning a serious challenge, as it is highly structured (in terms of topology), heterogeneous, and mostly scale-constrained. The present study proposes an advanced multi-objective framework, named a machine learning network system (MLNS), that overcomes these limitations by simultaneously incorporating transformer-based features, Pareto optimal optimization, and federated learning. The generalization of the learned model under variable conditions is also enhanced. At the same time, the computational complexity is reduced, as evidenced by the MLNS architecture, which enables effective learning with graph-structured inputs. Furthermore, this approach underwent empirical assessment utilizing extensive benchmark datasets, including ImageNet and MS COCO.
The results substantiated its superiority over contemporary methodologies in terms of metrics such as accuracy, precision, recall, and F1-score, achieving up to a 16% enhancement in performance, even under

Reply Forward