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(57) Abstract :
Self-Adaptative Reinforcement Learning Framework for Dynamic Machine Learning Model Enhancement ABSTRACT The present invention provides a self-adaptive reinforcement learning framework (100) for dynamic enhancement of machine learning models. The framework includes a reinforcement learning agent (110) that interacts with an environment and gathers feedback based on performance metrics. This feedback is utilized by a dynamic model enhancement module (112) to adjust the machine learning model's parameters and configurations. An adaptive learning scheduler (114) determines the timing and scope of model updates based on feedback and performance trends. The data integration module (116) ensures the input data is compatible and preprocessed for use in the model, while the performance evaluation unit (118) assesses the effectiveness of model enhancements and updates the reinforcement learning agent (110) with new feedback. This framework enables continuous, adaptive improvements to machine learning models, enhancing their performance dynamically.

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