Distributed Deep Learning-Based Model for Financial Fraud Detection in Supply Chain Networks

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Résumé

Fraudulent activities in enterprises' supply chain networks can have significant financial impacts on their business. There has been a growing interest in developing automated fraud detection systems and models that can effectively detect fraudulent transactions to address this challenge. In this study, a distributed deep learning-based model for financial fraud detection in enterprises' supply chain networks is developed. This model is built using the Horovod distributed deep learning framework running on Cloud Databricks using Apache Spark. The model consists of a deep artificial neural network model which is trained on a distributed dataset. Finally, the model's effectiveness is evaluated using a real-world dataset called "DataCO smart supply chain for Big Data analysis" and the results achieve high accuracy in detecting fraudulent transactions.

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