

A SECURE IOT-BLOCKCHAIN INFRASTRUCTURE FOR ENHANCED TRACEABILITY AND DATA INTEGRITY IN MODERN SUPPLY CHAINS

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Agriculture and husbandry are both crucial for financial robustness, while assuring that food is safe and also that supply chain transparency is extremely important. The vast data generated by IoT and blockchain can be analyzed in a very efficient way with the help of sophisticated deep learning technique. This article makes use of the secure IoT-blockchain data from Industry 4.0 and presents a recurrent hybrid neural network model that consists of a combination of LSTM and GRU, which is optimized through a genetic algorithm. The system predicts the trends, makes the provenance more transparent, and provides support for better decisions in the supply chain. The performance was assessed for various user groups in order to help further steps of the adoption by the industry and the development of the policy.
