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(57) Abstract :

The invention discloses a real-time threat intelligence sharing platform (100) using federated learning (101), where multiple nodes (102) train models on local threat data (103) and share encrypted parameters (104) with an aggregator (105). The aggregator synthesizes these inputs into a global model (106), enhancing detection across all nodes without exposing sensitive data. Secured via encrypted communication (107), the system ensures privacy, regulatory compliance, and improved accuracy, enabling collaborative cybersecurity defense across decentralized environments.

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