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(57) Abstract

The present invention relates to the field of a hotel management. More specifically, to the artificial intelligence-based data authentication for cyber security of hotel's property management system using deep learning. The artificial intelligence-based data authentication for cyber security of hotel's property management system using deep learning includes a communication interface for sending data over a network, a secure exchange server hosted by an intermediate business entity, a storage unit configured for storing, by the secure exchange server, data relating to a user login authentication for the user of a second business entity, a plurality of communication devices, each comprising a wireless transceiver and forming the source or destination, a non-transitory computer readable storage media, stored therein, computer program code, one or more microcontroller operatively coupled to the memory and configured to execute instructions in the computer program code, an artificial intelligence-based intrusion detection unit for real-time network traffic data analysis for determining whether an external source has altered the operation of the network, and an artificial neural network based computational module for user authentication for hotel property by using neural network.

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