

Special Issue on

Application of Machine Learning for Human Resource Management in Social Internet of Things Communications (SIoT)

CALL FOR PAPERS

Technological advancements are generally associated with change not only in life and at home, but also in Human Resource Management (HRM) and in the workplace. HRM can benefit from the Internet of Things by fostering distinctive advancements. Therefore, organizations can save money or reduce the amount of time it takes to produce goods and services. Besides being a new term in emerging technologies, the Social Internet of Things (SIoT) describes the interaction between smart things, intelligent devices, and social platforms as a communications infrastructure. As a result of its functions, it facilitates information exchange, social behavior, monitoring, and relationship scoring regardless of the currency used. HRM privacy concerns are raised by smart contracts, IoT devices, social media, and applications.

Therefore, ensuring the security, reliability, and redundancy of secure data transfers and transactions is a critical problem and challenge of the IoT. Artificial Intelligence (AI) is a relatively new technology that has been demonstrating significant promise in IoT ecosystems, cloud-edge computing, big data, and social networks. Additionally, nature-inspired algorithms are among the most powerful fields of AI, including data mining, machine learning, optimization, robotics, control systems, and human-computer interaction. In addition to providing a safe and secure architecture, nature-inspired algorithms enhance privacy and efficiency in heterogeneous SIoT settings.

This Special Issue aims to highlight advances in evolutionary and heterogeneous artificial intelligence techniques, including machine learning and deep learning, for HRM-aware IoT applications. This Special Issue seeks contributions to current state-of-the-art approaches, methodologies, systems, and novel applications of nature-inspired algorithms, machine learning, and deep learning to SIoT applications based on HRM including smart healthcare, smart industries, smart cities, smart homes, smart agriculture, smart transportation, and smart grids. This Special Issue focuses on nature-inspired algorithms for SIoT applications, which seek contributions that examine current trends and developments in the HRM field. This Special Issue also aims to identify the components of human resources in the SIoT and evaluate the challenges of HRM, based on paying attention to previous research in this area and extracting related components using an application of machine learning methods. In this Special Issue, we attempt to identify articles related to SIoT in the HRM context by focusing on discovering and combining HRM information services, HRM reliability, communication management, and HRM trust management, and several prerequisites, challenges, and scenarios. Future research directions will be identified and discussed as a reference for improving HRM service delivery, determining the optimal solution for selecting the best services within the SIoT structure, developing large-scale platforms, and developing intelligent HRM mechanisms based on machine learning methods. We welcome original research and review articles.

Potential topics include but are not limited to the following:

- ▶ Designed and operated HRM systems using machine learning and SIoT
- ▶ Collaborative learning for HRM smart contracts in SIoT
- ▶ Privacy and trust of HRM for SIoT systems
- ▶ HRM hazards risk assessments using SIoT in social media
- ▶ Systematic classification of HRM hazards risk assessments using machine learning methods
- ▶ Federated-iterative learning methods for service HRM in SIoT
- ▶ Nature-inspired algorithms for optimizing cloud-edge computing in SIoT
- ▶ Analyzing QoS factors on HRM in Social Internet of Medical Things
- ▶ Federated learning for HRM in SIoT
- ▶ ML-enabled real-time SIoT data analytics for HRM, ML for managing safety in SIoT data processing for HRM and ML for SIoT attack detection and prevention
- ▶ Nature-inspired algorithms for smart transportation applications with SIoT devices, and vehicular communications in SIoT
- ▶ Privacy efficient nature-inspired algorithms in SIoT environments
- ▶ Blockchain technology using nature-inspired algorithms in SIoT
- ▶ Robust nature-inspired algorithms for image processing and social intelligent recognition in SIoT
- ▶ Machine learning for secured-educational information systems with social networks

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.hindawi.com/submit?specialIssue=489475>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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Submission Deadline

Friday, 10 February 2023

Publication Date

June 2023