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Editorial

In the current scenario, information technology is taking maximum benefits from the "Intelligent Systems and Internet of Things (IoT)". In order to get quality articles, we have circulated the call for papers to the researchers and academician and received numbers of quality papers. However, due to scope of special issue and review reports, we were able to add papers in this issue. The guest editors are thankful to the authors for supporting a long wait and finally it is before you. The aim of the special issue was to explore ample knowledge and submit some good pieces of papers for *Big Data Mining and Analytics*. We have received many papers for this special issue and based on the comments of the reviewers and quality of the research papers, we have identified 7 articles for this special issue. This special issue is addressing the original research on the theory, "Intelligent Systems and Internet of Things", with the aim to contribute better work to the researcher and academic fraternity. We are very much thankful to the authors for their support and for keeping their faith in our guest editorial process. It takes more than a year to complete this issue, we are sure that their work will be well recognized by the researchers and readers who are working in engineering and informatics domain.

The Internet of Things is one of the most prominent technologies emerging in recent years. It has a broad spectrum of applications in diverse disciplines. The IoT is evolving as a significant area of future technology and gaining much attention from various walks of life. IoT has revolutionized various application domains, such as home automation, industrial automation, medical aids, mobile healthcare, elderly assistance, intelligent energy management and smart grids, automotive, traffic management, and many others. These applications will make use of the potentially enormous amount and variety of data generated by such objects to provide new services to citizens, companies, and public administrations.

Thus, Internet technologies provide a way of integrating and sharing a common communication medium and a complete system consisting of various types of sensor deployment, including smart home sensors, vehicular networking, weather and water sensors, smart parking sensors, and surveillance objects.

This SI aims to bring together researchers and practitioners to discuss various aspects of the Internet of Things and Big Data for Artificial Intelligence Powered Internet of Healthcare Things (IoHT): Data Science, Emerging Trends and Applications, explore key technologies, and develop new applications in this research field. Original research and review articles are welcome.

The healthcare 4.0 is a combination between the Internet of Things and modern Information and Communication Technologies (ICT). The integration of IoT in the healthcare sector is giving rise to a new paradigm called the Internet of Healthcare Things. The Internet of Healthcare Things enables collection, transmission, and storage of patients' physiological information. The remote patient monitoring can be performed via wearable sensors. These collected information can be stored, processed, and make it available to doctors to give a consultation at any time and from any devices that connected to the Internet (e.g., Smartphone or Tablet) . Further, the doctor is alerted in real time of any sudden change concerning the condition of his patient, as well as takes actions like advising patients, and interrogates the sensors to have the current values.

In IoT-Based Healthcare, the structure of data is equally important for accurate predictive analytics due to heterogeneity of data such as ECG data, X-ray data, and image data. So, the Internet of Healthcare Things requires

new methods and technologies to evaluate information objectively. Artificial Intelligence (AI) , which is being propelled forward by exponential advances in computer processing and the digitalization of things, has the potential to provide unimaginable benefits to the healthcare industry. Artificial Intelligence has risen to the top of many national agendas as a strategic area of importance and a vital engine of economic progress, with countries investing billions in the technology.

Thus, the integration of Artificial Intelligence into IoT Healthcare Systems creates tremendous opportunities for new research and necessitates interdisciplinary efforts to address these challenges. By reviewing the patient's medical history and recognizing health flaws, AI combined with Internet of Healthcare Things could be able to anticipate diseases, monitor heartbeat rate, prescribe preventive maintenance, measure temperature and body mass, and promote prescription administration. Further, Artificial Intelligence can assist doctors in almost every area of their proficiencies such as clinical decisionmaking using the data generated by the health worker/professionals and the patient feedbacks. Whence, Artificial Intelligence integrated with the Internet of Things network could be used in the healthcare sector to improve patient care. AI is already surpassing radiologists in terms of detecting dangerous tumors and advising researchers on how to build cohorts for expensive clinical trials.

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