

## The 46th Annual Conference of the IEEE Industrial Electronics Society



October 18-21, 2020, Marina Bay Sands Expo and Convention Centre Singapore

#### **Special Session on**

# "Emerging Trends of Big Data and Artificial Intelligence in Communication, Security and Healthcare Applications" Organized by

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### **Call for Papers**

This special session offers an excellent international forum for sharing technical information, emerging approaches and models and results for the communication, security and healthcare applications. The main goal of this session is to bring together researchers, academicians, medical professionals and industrialists from diverse areas related to Big Data and Artificial Intelligence to share ideas as well as future use of this technology in communication, security and healthcare sectors because to handle the problems in these areas, many machine learning and artificial intelligence have been explored and widely acknowledged as an expert system. Recently many researchers have started and solved some problems using deep learning in the area of communication and healthcare, but still there are so many open problems in these selected areas. The objectives of this special session are as follows:

1. Discussion on a research platform to improve the quality and intelligibility of expert system design, and their applications in the security, communication and healthcare.



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- 2. To explore the conceptual understandings of Big Data and Artificial intelligence in different applications.
- 3. Focus on state-of-the-art algorithms
- 4. Machine learning and its applications
- 5. Knock around the design and development of Al/ML based algorithm for healthcare applications.
- 6. To discuss various issues involved with challenges and perspectives in system design.

#### **Topics of the Session:**

Topics of interest include, but are not limited to:

- Big Data analysis in Communication
- Expert systems
- Computational Intelligence
- Machine learning methodologies
- Big data visualization and modelling
- Clinical Diagnosis
- Ethics and security of healthcare data used by AI
- Artificial Intelligence in Healthcare
- Deep Learning
- Big Data to Artificial Intelligence
- Role of Artificial Intelligence in industry
- Artificial Intelligence in Multimedia and security
- Al for image processing
- All applications for networking and IoT
- Al applications for mobile communications