Call for papers

Track 6: Intelligent System and Device Security (ISDS)

Emerging from decades of automation, connectivity and instrumentation, the intelligent system has evolved into a revolutionary set of proficiencies that are already reshaping many of the leading communication companies and latest technology on the planet. To propel the world's latest technology companies to help accelerate the Industrial Internet-of-Things (IIoT) revolution towards next-generation operational efficiency and computing connectivity, the intelligent systems expand the frontier for faster, less expensive, and more secure operations from robotics systems to virtual reality to Internet-of-Things (IoT). There have been various exciting developments in the latest technology that may contribute to improving the robustness of IIoT services like automated manufacturing, industrial monitoring, shipping, Artificial Intelligence (AI) and data analytics. The development and adoption of intelligent computing methodologies to support fast response time, low latency and efficient use of visibility and bandwidth is however a challenge. The reason is that an intelligent system is a cloud-to-edge architecture where some components which run on centralized clouds cause severe security and storage issues. In addition, the way computations operate on various parts of the data journey may further affect the speed of services on various distributed architectures based on their needs. Further, there are certain best practices and standard issues with security and interoperability that remain yet to be focused on. Therefore, sophisticated intelligent system schemes are required that can provide integration of data across multiple sectors with coordination and effective implementation capabilities. The major challenge to an intelligent system approach is in predicting accuracy and expressiveness while computing simultaneously. Neural networks along with the AI methods have shown noticeably better performance in comparison to their conventional counterparts in terms of accuracy of outcomes. However, it also brings more interoperability and complexity issues and hence, serious challenges arise regarding the validity and verifiability of these approaches.

We are looking for original contributions in this SI of edge intelligence of IIoT known as "**Intelligent System and Device Security (ISDS)"**. This special emphasis will also be devoted to emerging and new trends. The expected topics of interest include, but not limited to:

- AIoT privacy and security
- WSN security
- WBAN privacy and security
- Cloud-based AIoT security
- Machine learning for AIoT security
- AIoT hardware security
- Blockchain for AIoT security
- Industrial AIoT security
- Medial AIoT privacy and security
- Cryptography in AIoT Layered security principles and ways to enhance perimeter defense in the AIoT
- AIoT gateway vulnerabilities and best practices of defense
- The malicious impact on AIoT, Thingbots, Hivenets Forensics in AIoT
- Law, Policy, and Privacy in AIoT

<u>Paper submission guidelines</u>

Paper submission should confirm the information for authors available at:

Important dates:

First submission deadlines:
Notification of first decision:
First revision submission deadline:
Notification of final decision:
Final manuscript (camera ready) submission deadlines:
Issue of publication:

Submission and review of papers:

The submitted manuscripts must be original and not be under consideration elsewhere for publication. The authors may follow the journal guidelines regarding the format and manuscript content while processing the manuscript. All papers will be reviewed by at least three independent reviewers for their suitability in terms of scientific rigor, scope, technical originality and significance to this SI.

Guest editors:

Prof Dr. Geetanjali Rathee is currently working as an Assistant Professor in the Department of Computer Science and Engineering of Netaji Subhas University of Technology (NSUT), Dwarka, New Delhi. She has also worked as an Assistant Professor (Senior Grade) in Jaypee University of Information Technology (JUIT), Waknaghat, Himachal Pradesh for four years. She received her B.Tech, M.Tech and Ph.D., all in Computer Science & Engineering in 2011, 2014 and 2017 respectively. She has published around 06 national/international patents, around 10 IEEE transactions research paper with highest impact factor of 9.1, 20 SCI papers, around 40 Scopus indexed papers and more than 15 publications in national/international conferences and book chapters. She has also published one book titled "Large-Scale Data Streaming, Processing, and Blockchain Security". Her research interests include handoff security, cognitive networks, blockchain technology, resilience in wireless mesh networking, routing protocols, networking, and industry 4.0. She is a regular reviewer of various reputed journals like IEEE Transactions on Vehicular Technology, Wireless Networks, Cluster Computing, Ambience Computing, Transactions on Emerging Telecommunications Engineering, and International Journal of Communication Systems.

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