



CALL FOR PAPERS

Special Session on “Blockchain 4.0: Artificial Intelligence and Industrial Internet of Things Paradigm”

Session Chair(s):

Dr. Sandeep Kumar Panda, IcfaiTech (Faculty of Science and Technology), ICFAI Foundation for Higher Education, Hyderabad, Telangana, INDIA. E-Mail: sandeepkumar@icfai.org, Mobile No:8895081701

Dr. Ajay Kumar Jena, School of Computer Engineering, KIIT deemed to be University, Bhubaneswar, Odisha, India, E-Mail: ajay.bbs.in@gmail.com, Mobile No: 8249826721
Mobile: 9337724582

Dr. D. Chandrasekhar Rao, Department of Information Technology, Veer Surendra Sai University of Technology, Burla, India, E-Mail: dcrao_it@vssut.ac.in, Mobile: 9337724582

Theme of Session:

The main aim of this special session is to focus on Blockchain 4.0 and its wide range of applications in the field of Artificial Intelligence and Industrial Internet of Things Paradigm in New Advanced Society.

Now a day, the world changes rapidly, a transition flow also seen in New Advanced Society (NAS). The traditional Society holds good establishment last one to two decades, but, the internal workflow confined in a single organization. They do not manage the workflow process and information across organizations. If they do so, again fall in same trap as the control transfers to third party that is centralized server and it leads to tampering the data, and single point of failure. To address these issues, integrated Artificial Intelligence (AI), and Industrial Internet of Things (IIoT) with Blockchain Technology in NAS evolved.

Blockchain is a trusted, distributed, peer to peer, open, public, techno-cryptographic ledger to manage and transfer the value of digital assets, to provide immutability, anonymity and security. Blockchain- the term means different things to different people. For developers, it is a set of protocols and encryption techniques for secure data storage in a distributed network. For business and finance, it is a distributed ledger technology giving rise to new digital currency. For others, it is a tool that profoundly reshapes the society and economy through the decentralized world. But in all ways, the term Blockchain fascinates and captures imagination of many as the implication of the technology is significant. For the first time in human history, people across the world can trust each other and transact over a large peer-to-peer networks without any central authority. This proves that, trust can be built not only by centralized institution but also by protocols and cryptographic mechanisms. The potential and collaboration between organizations and individuals within peer networks makes it possible to



potentially move to a global collaborative network without centralization. Blockchain is a complex social, economic and technological phenomenon. This questions what the established terminologies of the modern worlds like currency, trust, economics and exchange would mean. To make any sense, one needs to realize how much insightful and potential it is in the context and the way it is technically developed.

The main intent of this Special Session Proposal is to cover the impact of Blockchain 4.0 on several industrial sectors, the various IoT, and AI tools that are used in those industries. This proposal also provides insights in developments and applications of IoT, and AI tools and the critical issues in deploying it. A detailed discussion on New Advanced Society, Supply Chain Management, Logistics, Cyber Physical System (CPS) and Big Data Technologies are also presented in the proposal. The technologies that are playing a major role in transforming the industrial production are analyzed and described. Next, we discuss about the challenges ahead of making Blockchain 4.0 real. The security and privacy aspects of the data are also described in detail. Finally, how Blockchain 4.0 can benefit the economy, society, and environment, with the digitization of machines. Blockchain is an emerging technology and is experiencing fast growth. Within a timespan of two to three years, it is radically changing its application in different field. Rise of Blockchain 4.0 caters to new business models and services. Industrial, and Societal revolution is not something that can be experienced immediately. As with IoT, and AI installations it needs a planned, orchestrated strategy. In the end, it is the ecosystem of digitally connected machines generating and exchanging information that forms the real strength ofBlockchain 4.0.

Topics of Interest:

We invite original (un-published) research contributions based on the above-mentioned theme including following topics **but not limited to**:

Blockchain 4.0 — Where this Revolution leading to?
Blockchain 4.0: New Services and Revenue Models
The Blockchain 4.0 building blocks: New Advanced Society
Technologies Transforming Industrial Production
Blockchain 4.0 and Supply Chain Management
E-Governance and E-Learning
Blockchain in Operation
Management Blockchain on Society and Government
Optimized Logistics
Industrial Edge Computing
Artificial Intelligence and Augmented Reality
Security and Privacy of Data
Biopharmaceutical integration with Blockchain
4.0 Contact tracing by a chip implanted via vaccines
Blockchain 4.0: Cyber Physical systems



**5th International Conference on Smart Computing and Informatics
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Paper Submission Process:

Please submit your paper (in word/pdf format) at

Email: ssscihyderabad@gmail.com

with 'Name of Special Session: ' mentioned in the subject line.

Program Committee: Name(s), Affiliation(s)

1. **Prof. (Dr.) Amiya Kumar Rath, VSSUT, Burla, Adviser, NAAC**
2. **Dr. Sanjaya Kumar Panda, NIT, Warangal**
3. **Dr. Venkana U, IIIT, Naya Raipur**
4. **Dr. Ramesh Kumar Mohapatra, NIT, Rourkela**
5. **Dr. Subhrakanta Panda, BITS, Pilani (Hyderabad Campus)**

For any further queries related to this special session, please contact the session chairs at:

E-mail ID: sandeppanda@ifheindia.org

Mobile No.:8895081701

E-mail ID: ajay.bbs.in@gmail.com

Mobile No.: 8249826721

E-Mail ID: dcrao_it@vssut.ac.in

Mobile No: 9337724582