

**Special Session on**  
**Blockchain Technology Application (BTA)**  
**in conjunction with**  
**14th International Conference on Innovations in Bio-Inspired Computing and**  
**Applications**  
**December 14-15, 2023**

**Website:** <http://www.mirlabs.org/ibica23>

**Hybrid Mode – Online & Offline**

**Onsite Venues:** <http://mirlabs.org/ibica23/venue2.php>

### **Objectives and Scope**

Blockchain applications have gained significant importance in various industries due to their unique features and capabilities. Here are some key reasons why blockchain applications are important: 1) Decentralization: Blockchain operates on a decentralized network, eliminating the need for a central authority; 2) Immutability: Once data is recorded on the blockchain, it becomes nearly impossible to alter or delete it. This immutability enhances data integrity, making blockchain an excellent solution for applications where data tampering must be prevented; 3) Enhanced Security: Blockchain uses cryptographic techniques to secure data, ensuring that only authorized parties can access and validate transactions. The consensus mechanisms employed by blockchain networks make them highly resistant to hacking and fraud; 4) Trust and Transparency: As transactions are recorded on a shared ledger visible to all participants, blockchain promotes trust and transparency among involved parties. This is particularly valuable in industries where trust is essential, such as supply chain management, healthcare, and finance; 5) Reduced Intermediaries: Blockchain enables peer-to-peer transactions without intermediaries like banks or brokers. This reduces transaction costs, accelerates settlement times, and simplifies complex processes; 6) Traceability: In industries like food supply chains, pharmaceuticals, and luxury goods, blockchain provides a way to trace the origin and journey of products, ensuring authenticity and reducing counterfeiting; 7) Smart Contracts: Blockchain platforms support smart contracts, which are self-executing agreements with predefined conditions. These contracts automate processes, execute actions when conditions are met, and eliminate the need for intermediaries; 8) Global Accessibility: Blockchain applications are accessible to anyone with an internet connection, making them ideal for cross-border transactions and financial inclusion for the unbanked population; 9) Data Privacy; 10) Tokenization and Digital Assets: Blockchain allows for the tokenization of physical and digital assets, enabling fractional ownership, easier transfer of ownership, and enhanced liquidity in previously illiquid markets; 11) Resilience and Reliability: Blockchain networks are distributed across multiple nodes, making them resilient to outages and ensuring continuous operation even in the face of network disruptions; 12) Innovation and Disruption: Blockchain applications have the potential to disrupt traditional business models, creating new opportunities and transforming industries such as finance, healthcare, real estate, and more.

We invite you to submit your original research papers, case studies, and innovative ideas related to blockchain technology for consideration as presentation or poster at the conference.

## Subtopics

The topics include, but are not limited to:

- Blockchain consensus mechanisms
- Smart contracts and decentralized applications (DApps)
- Privacy and security in blockchain systems
- Interoperability and scalability of blockchain networks
- Blockchain for supply chain management
- Tokenization and asset digitization
- Decentralized finance (DeFi) and its applications
- Governance models for blockchain ecosystems
- Blockchain applications in healthcare, energy, and other industries
- Regulation and legal aspects of blockchain technology
- Blockchain for social impact and sustainability
- Cryptocurrencies and stablecoins
- Blockchain for Internet of Things (IoT)
- Blockchain and artificial intelligence (AI) integration

## Paper publications

- Proceedings will be published in Lecture Notes in Networks and Systems, Springer (<https://www.springer.com/series/15179>)
- Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago
- Paper maximum length is 10 pages
- Papers must be formatted according to Springer format (Latex/word) available at: <https://www.springer.com/de/authors-editors/book-authors-editors/manuscript-preparation/5636#c3324>
- Submission Link: <https://cmt3.research.microsoft.com/IBICA2023>

## Important Dates

Paper submission due: **September 30, 2023**

Notification of paper acceptance: **October 31, 2023**

Registration and Final manuscript due: **November 10, 2023**

Conference Date: **December 13-15, 2023**

## Special Session Chairs

- **João Carlos Ferreira**, ISCTE-IUL, Portugal
- **Nikhil Varma**, Ramapo College of New Jersey, USA
- **Joel Curado**, CasperLabs, Switzerland

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