************** CALL FOR SPECIAL SESSION **************

SPECIAL SESSION ON: Future of Technology with Blockchain and Machine Learning

SESSION ORGANIZERS:

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RECOMMENDED TOPICS:
Some topics relevant to this session include, but are not limited to :
1. Blockchain-Enabled Machine Learning Frameworks
2. Blockchain and Machine Learning in Healthcare
3. Blockchain and Machine Learning in IoT
4. Predictive Analytics on the Blockchain
5. Smart Contracts and AI
6. Future applications with Blockchain
7. Future application with Machine learning

SESSION DESCRIPTION:

As technology continues to advance at a rapid pace, the convergence of blockchain and machine learning (ML) stands out as a particularly transformative development. Both technologies individually offer groundbreaking capabilities, but their integration promises to unlock new potentials and address existing challenges in innovative ways.

Blockchain, a decentralized ledger technology, provides an immutable and transparent record of transactions. Its inherent security features and trustless environment make it ideal for applications where data integrity and decentralization are crucial. **Machine learning**, on the other hand, enables systems to learn from data and make predictions or decisions without explicit programming. Its ability to analyze vast amounts of data and uncover patterns drives advances in numerous fields, from finance to healthcare.

The future of technology with blockchain and machine learning explores how the synergy between these two powerful technologies can shape the future landscape across various domains. Here are key areas where their convergence is likely to have significant impact:

1. **Enhanced Data Security and Privacy**: Blockchain's decentralized nature combined with machine learning's analytical power can enhance data security and privacy. For example, blockchain can securely store and verify data, while machine learning can detect anomalies or fraudulent activities, providing a robust defense against data breaches and misuse.
2. **Decentralized Intelligence**: Integrating machine learning with blockchain can lead to the creation of decentralized AI networks. This means that ML models can be trained and shared across a distributed network, improving access to advanced analytics while preserving data privacy and ownership.
3. **Smart Contracts and Automation**: Machine learning can improve the efficiency and functionality of smart contracts by enabling them to adapt based on data-driven insights. This could lead to more intelligent and autonomous systems for automating agreements and business processes.
4. **Predictive Analytics and Decision-Making**: Blockchain can serve as a secure and transparent data source for machine learning models, enhancing their predictive capabilities. This integration can drive better decision-making in sectors like finance, healthcare, and supply chain management.
5. **IoT and Smart Devices**: The combination of blockchain and machine learning can transform the Internet of Things (IoT) by improving the security, interoperability, and functionality of smart devices. Blockchain can manage device identities and data integrity, while machine learning can optimize device performance and predict maintenance needs.
6. **Ethical and Transparent AI**: Blockchain can provide a transparent and immutable record of AI decision-making processes, addressing concerns about algorithmic bias and accountability. This transparency can help ensure that AI systems operate ethically and fairly.
7. **Financial Systems and Risk Management**: In the financial sector, blockchain and machine learning can revolutionize trading algorithms, risk management, and fraud detection. The integration allows for real-time data analysis and more secure, transparent financial transactions.
8. **Collaborative Model Training**: Blockchain can facilitate secure and decentralized sharing of machine learning models and data, enabling collaborative development across organizations while maintaining control over intellectual property and data privacy.

The fusion of blockchain and machine learning holds immense potential for innovation, efficiency, and security. As these technologies continue to evolve, their combined capabilities will likely lead to new

applications and solutions, driving advancements in numerous fields and reshaping the future of technology.

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for the special session on **[Future of Technology with Blockchain and Machine Learning] on or before [15 Oct 2024]**.

All submissions must be original and may not be under review by any another publication. INTERESTED AUTHORS SHOULD FOLLOW THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS.

 All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting a paper in the special session, please specify [**Future of Technology with Blockchain and Machine Learning**] at the top (above paper title) of the first page of your paper.