Asi@connect Project

Capacity Building Programme 4 : Blockchain Technology and Application

Thursday, June 15, 2023 - Saturday, June 24, 2023 (Online Mode)

Date	Day	10:00-10:30AM	10:30- 12:00 PM	12:30-14:00 PM	14:00 - 14:30 PM
June 15, 2023	Thursday	**Inaugural session**	Introduction: Blockchain and distributed ledger technology, Bitcoin blockchain **(Dr. S Venkatesan, IIIT Allahabad)**	Transactions, Digital signature, and consensus mechanism- Proof of Work **(Dr. S Venkatesan, IIIT Allahabad)**	
June 16, 2023	Friday	Ethereum blockchain, Smart contracts, Blockchain as a platform **(Mr Dipesh Sukhani, Co-Founder BuildBear Labs, Singapore)**		Building a smart contract and its deployment on the blockchain network - Using Solidity language, Metamask and Remix Programming Environment (Lab 1) **(Mr. Samir Jain, IIITDM Jabalpur)**	
June 17, 2023	Saturday	Blockchain use cases and Decentralized applications (DApps) **(Mr. Prasanth Sahoo, Project Manager, TransUnion Company)**		Using Truffle, Ganache for deployment of smart contract on a test network (Lab 2) **(Mr. Prasanth Sahoo, Project Manager, TransUnion Company)**	
June 18, 2023	Sunday	**Holiday**			
June 19, 2023	Monday	Alternatives to Proof of Work, Proof of stake, and other consensus, Byzantine fault tolerance **(Dr. Amrendra Singh Yadav, IIITM Gwalior)**		Public and private ledgers, Permissionless and permissioned blockchain, Enterprise level blockchains and distributed ledgers. **(Dr. Amrendra Singh Yadav, IIITM Gwalior)**	
June 20, 2023	Tuesday	Blockchain security: Public-Key Cryptography, Hashing, Hashchain to Blockchain, Transaction Integrity, Securing Blockchain **(Dr. Ashok Kumar Das, IIIT Hyderabad)**		Hyperledger fabric (HF) network., Chaincode, consensus in HF ~~(Dr. Mani Madhukar, IBM, Noida)~~ **(Prof. Aparajita Ojha, PDPM IIITDM Jabalpur) Updated**	
June 21, 2023	Wednesday	Building an HF test network (Lab 3) **(Mr. Samir Jain, IIITDM Jabalpur)**		Further Details of Hyperledger Fabric Network - Private Data ~~(Dr. Mani Madhukar, IBM, Noida)~~ **(Prof. Aparajita Ojha, PDPM IIITDM Jabalpur) Updated**	
June 22, 2023	Thursday	Emerging applications of blockchain in Healthcare /Security **(Dr. Suyel Namasudra, NIT Agartala, India)**		Private Data and Secure Asset Transfer in an HF network (Lab 4) **(Mr. Samir Jain, IIITDM Jabalpur)**	
June 23, 2023	Friday	Cryptocurrencies, NFTs, DeFi, Policy issues related with blockchain. **(Mr Ankur Sinha, AirChains, Gurugram)**		Blockchain scalability issues and emerging solutions. **(Mr. Ankur Sinha, AirChains, Gurugram)**	
June 24, 2023	Saturday	Blockchain Applications in Internet of Things **(Dr. Ashok Kumar Das, IIIT Hyderabad)**		Trends in Blockchain Technology **(Mr. Ankur Sinha, AirChains, Gurugram)**	**Valedictory function and Participants' feedback**