

FIVE DAY ATAL FDP ON
BLOCKCHAIN ANALYTICS AND BIG DATA - THE FUTURE
OF BUSINESS PROCESS

(06.12.2021 to 10.12.2021)

COORDINATOR

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Thiruvarur, Tamil Nadu - 610 005.

Sponsored by

AICTE Training And Learning (ATAL) Academy, New Delhi

<https://www.aicte-india.org/atal>

Organized by

Dept. of Computer Science,
School of Mathematics and Computer Sciences,
Central University of Tamil Nadu,
Thiruvarur, Tamil Nadu-610 005

<https://cutn.ac.in/csc/>

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Coordinator

Dr.A.Martin

Venue:

Dept. of Computer Science (through online mode)
Central University of Tamil Nadu
Thiruvavur, Tamil Nadu-610 005

Course content

- Blockchain for Big Data: Approaches, Opportunities, and Future Directions
- Blockchain transforms Big Data
- Big Data Analytics: Types, Tools and Techniques
- Blockchain Services for Big Data - Data Acquisition, Data Analytics and Big Data Storage
- Consensus Algorithms: The Root of the Blockchain Technology
- Data encryption-based blockchain and Blockchain for Big Data Privacy Preservation
- Hands-on Python Libraries for Big data
- Hands-on Blockchain & Cryptocurrency with Python
- Blockchain Big Data Applications: Smart City and Smart Healthcare
- Blockchain for Big Data: Opportunities and Future Directions

Resource Persons

Resource Person	Specialization	Institute / Organization
Dr. V. Prasanna Venkatesan	Software Architecture, Business Intelligence, IoT, Block Chain, Big Data Analytics	Pondicherry University, Puducherry
Dr. (Mrs.) G. Aghila	Cheminformatics, Artificial Intelligence, Big Data Analytics	National Institute of Technology, Puducherry, Karaikal
Dr.G. R. Gangadharan	Cloud Computing, Edge Computing, Service Oriented Computing, Big Data Analytics	National Institute of Technology, Tiruchirappalli, India

Dr. Rakesh Tripathi	Distributed Algorithms, Named Data Networking (NDN), Internet of Things (IoT)	National Institute of Technology Raipur
Dr. T Ramakrishnudu	Data mining, Distributed data mining, Big Data Analytics	National Institute of Technology, Warangal
Dr. Vikram Singh	Interactive Information Retrieval, Soft Data Analytics, Social Network Science	NIT Kurukshetra
Dr. Govind P. Gupta	Big Data Processing, Applied Machine and Deep Learning Techniques	National Institute of Technology Raipur
Mr. Hariharan	Edge Analytics, Cloud Computing and Internet Of Things	Senior Manager, Delivery Assurance, INTEL Account, HI-TECH Sector, Wipro, Bengaluru.
Mr. Srinivas Bhoosarapu	Smart city security, IoT, Digital India, Digital piracy, National cyber security Policy, Block Chain in Fintech, Information Technology Policy and Cyber Risk Awareness	Chief Information Security Officer (CISO), Chief Fintech Innovation Officer and Information and Cyber Security Researcher, PFRDA, India
Mr. Kamesh	Blockchain, Big Data Analytics	Oracle Blockchain Expert
Mr. Sivakumar	Blockchain, Data Analytics	Project Manager, DXC Technology, Chennai
Mr. Tamilselvan	Blockchain, Data Analytics	Project Manager, Hexaware Technologies, Chennai
Mr. Manimaran	Blockchain Analytics, IT Consulting	Citrin Technologies India Pvt Ltd, Bengaluru, Karnataka

Eligibility

1. Please register the FDP at <https://www.aicte-india.org/atal> (or) <https://atalacademy.aicte-india.org/>
2. There is no registration fee for any participants.
3. All the faculties & Research Scholars from AICTE approved institutions are eligible for the workshop.
4. No TA/DA will be paid to any participants.
5. The number of participants is limited to 200.
6. Participants will be selected on a first-come first-served basis.
7. Selected candidates will be intimated by e-mail confirmation of participation is to be made by email only.
8. Faculty members selected for the program should get the authorization certificates signed by the Principal.
9. The Coordinator's decision will be final in the selection of participants.

Please send the scanned copy of authorization certificates signed by the Principal to martin@cutn.ac.in

Targeted Participants

The program is open to the faculty members of the AICTE approved institutions, research scholars, PG scholars, Government officers /personnel, bureaucrats, technicians, researchers, practitioners, industry personnel, and staff of the Central University of Tamil Nadu.

Address for Communication

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About the Programme

AICTE TRAINING AND LEARNING (ATAL) ACADEMY AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development. Council understands that there is a need of the day to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. It was felt that Training with latest tools and technologies is vital to keeping an institute competitive and more productive. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies. It also transforms them to harmonize with society and most importantly to make them a good citizen of the country. Accordingly, it was decided to the opening of AICTE Training And Learning (ATAL) Academy. As a part of its activities, AICTE Training And Learning (ATAL) Academy conducts this programme from 06.12.2021 to 10.12.2021 at Dept. of Computer science, CUTN, Tamil Nadu.

About Central University of Tamil Nadu

Central University of Tamil Nadu (CUTN) is an institution of higher education established by an Act of Parliament in 2009. The University aims at the fashioning of an enlightened society founded on a relentless pursuit of excellence through innovation in teaching-learning process, interdisciplinary studies and research. Tucked away 8 kms off the headquarters of Thiruvavur District, which is both in the heart of the Cauvery Delta and in the centre of the Great *Chola* Empire, CUTN has, thanks to the generosity of the state government, a sprawling 520 acre campus, divided by a tributary of the Cauvery, spanning across two revenue villages. Having constructed its buildings as per the GRIHA norms, CUTN moved to the new campus in 2013-14. With a view to ensuring a green campus the university has registered for a green rating.

About Department of Computer Science

The Department of Computer Science is one among the science departments of this University that offers an M.Sc. Computer Science, a full-time four-semester program spread over two years started from the academic year 2016 – 2017. The program provides a solid theoretical foundation through high-quality teaching complemented by extensive practical learning. It is committed to impart quality education in all fields of IT, a field growing in leaps and bounds.

About Blockchain Analytics and Big Data

Big data has generated strong interest in various scientific and engineering domains over the last few years. Despite many advantages and applications, there are many challenges in big data to be tackled for a better quality of service, e.g., big data analytics, big data management, and big data privacy and security. Blockchain with its decentralization and security nature has the great potential to improve big data services and applications.

In this FDP, we provide comprehensive sessions on blockchain for big data, focusing on up-to-date approaches, opportunities, and future directions. It covers a brief overview of blockchain and big data as well as the motivation behind their integration. Next, various blockchain services for big data, including blockchain for secure big data acquisition, data storage, data analytics, and data privacy preservation are covered. Moreover, the state-of-the-art studies on the use of blockchain for big data applications in different vertical domains such as smart city, smart healthcare, smart transportation, and smart grid are covered. Finally, challenges and future directions are discussed to further drive research in this promising area.

Objectives

- An understanding of blockchain concepts and big data analytics
- To learn Blockchain for Big Data: Approaches, Opportunities, and Future Directions
- An understanding of Blockchain Services for Big Data - Data Acquisition, Data Analytics, and Big Data Storage
- A clear appreciation of Bitcoin, Cryptocurrencies, and Big data analytics
Comprehension of the risks associated and the possible impact of implementing blockchain
- Hands-on Blockchain & Cryptocurrency with Python to better understand the working methodology

Program Schedule

Date	Session 9:15am -11:15am	11:15am- 11:30am	Session 11:30am-1:30pm	1:30pm- 2:15pm	Session 2:15pm-4.15pm	4:15pm- 4:30pm	Session 4:30pm-6:30pm
06.12.2021	Registration: 9:00- 10:00am Inauguration@10:00am	Tea Break	Session – 1 Blockchain and Big Data: An Overview	Lunch Break	Session – 2 Blockchain transforms Big Data	Tea Break	-
07.12.2021	Session – 3 Big Data Analytics: Types, Tools and Techniques		Session – 4 Blockchain for Big Data: Approaches		Session – 5 Blockchain Services for Big Data: Data Acquisition and Data Analytics		-
08.12.2021	Session – 6 Blockchain for Big Data Storage		Session – 7 Consensus Algorithms: The Root of the Blockchain Technology		Session – 8 Data Encryption based Blockchain		Indian Knowledge System - spiritual social organizations
09.12.2021	Session – 9 Blockchain for Big Data Privacy Preservation		Session – 10 Python Libraries for Big data and Data Science		Session – 11 Blockchain & Cryptocurrency with Python		-
10.12.2021	Session – 12 Blockchain Big Data Applications: Smart City and Smart Healthcare		Session – 13 Blockchain for Big Data: Opportunities and Future Directions		Test		Valedictory