





# SAKSHIN

MONTHLY NEWSLETTER OF DEPARTMENT OF CSE/CSE(AI)

## **VISION**

Nurturing globally competent Computer Science and Engineering graduates capable of taking challenges in the Industry and Research& Development activities

### **MISSION**

Imparting quality education to meet the needs of industry, and to achieve excellence in teaching and learning

Inculcating valuebased, socially committed professionalism for development of society

Providing support to promote quality research

## ABOUT ASIET

Adi Shankara Institute of Engineering & Technology(ASIET) was established in Kalady with the goal of providing technical education that instills in students both professional excellence and strong ethical values. The institute is run by the Adi Shankara Trust, a well-respected educational organization that has been active for over 50 years.

Founded in 2001 and maintained by the Sringeri Mutt with the benign blessings of His Holiness Sri Sri Bharathi Tirtha Mahaswamiji, the college is dedicated to promoting the overall growth and development of its students.

ASIET is situated in a beautiful and inspiring location, reminiscent of the peaceful presence of Jagadguru Adi Shankaracharya. The college is affiliated with the A P J Abdul Kalam Technological University in Kerala, and is approved by the AICTE. It offers undergraduate, graduate, and PhD level courses, with four of its programs being NBA accredited (CSE, ECE, EEE & MECH) demonstrating its commitment to high-quality education.





#### **NEWS CORNER**

## Faculty orientation program conducted by Faculty Professional Enrichment cell-ASIET (FPEC)

The Faculty Professional Enrichment Cell (FPEC) and the Internal Quality Assurance Cell (IQAC) at our esteemed college orchestrated a triumphant Faculty Orientation Program (FOP'23) on the 20th and 21st of July, 2023. This enlightening two-day event was brimming with enriching sessions and hands-on workshops, meticulously designed to elevate the professional prowess of our esteemed faculty members. The inaugural day commenced with an address by our Principal, Dr. Sreepriya S. This was succeeded by an insightful introductory session orchestrated by the proficient members of FPEC. Dr. Bobby Mathews C, the illustrious head of IQAC, then steered an engaging discourse on curricular planning and quality enhancement. As the day progressed, Mr. Abishek Kumar A A captivated participants with a captivating handson session focused on Linways, while Dr. Eldose K facilitated a comprehensive session on accreditation.

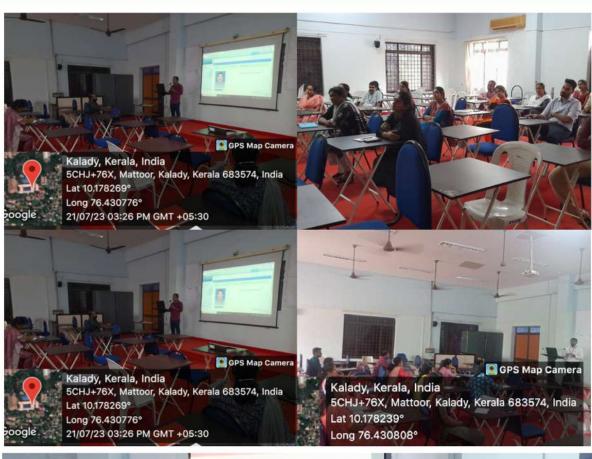






#### **NEWS CORNER**

The second day of the program was devoted to the profound realm of Outcome Based Education (OBE). Leading this exploration, Mr. Eldhose K Joy spearheaded two illuminating sessions on this pivotal subject. Post-lunch, Mr. Manesh T and Mr. P V Rajaraman guided a stimulating session on innovative pedagogical approaches. Following this, Mr. Sreehari S adeptly led a session elucidating the nuances of KTU Login. The program culminated with an invaluable feedback session, helmed by FPEC members and our esteemed Principal.





Coordinators and Participants of Faculty Orientation Program



## **NEWS CORNER**

#### KTU AUDIT

On July 14, 2023, a comprehensive audit was carried out at ASIET for the departments of Computer Science and Engineering (CSE) and Computer Science and Engineering Artificial Intelligence (CSE-AI). This audit was conducted by officials from Kerala Technological University (KTU) and aimed to evaluate the adherence of these departments to academic and administrative processes, the quality of education imparted, research endeavors, and overall alignment with university standards. The audit encompassed a thorough assessment of diverse elements such as curriculum structure, faculty qualifications, teaching methodologies, infrastructure provisions, research undertakings, student engagement strategies, and industry affiliations.



Blood donation camp at ASIET organised by NSS cell ASIET











## **STAFF CORNER**



### **Patent Filling and Drafting**

On 19th July, Department of (EEE along with the Research Cell at ASIET organized a seminar focused on the topic of Patent Filing and Drafting. The seminar featured a keynote address by Mr. Nagarajan N, a prominent figure in the field who serves as the Technical Director and a distinguished patent analyst at NSKD Techno R&I Solutions in Dharmapuri. Notably, the event garnered participation from staff members representing various departments, including CSE and CSE-AI.

Prof. Rajaraman PV, the Head of the Department of Computer Science and Engineering Artificial Intelligence (CSE-AI), has achieved a significant milestone by having his paper successfully published in a prestigious Q1 journal, namely "Applied Soft Computing." The paper, titled "Graph Sample and Aggregate Attention Network optimized with Barnacles Mating Algorithm based Sentiment Analysis for Online Product Recommendation," contributes to the field of sentiment analysis for online product recommendation. Notably, the journal holds an impressive Impact Factor of 8.7, adding to the scholarly impact of the research.



Prof. PV Rajaraman, Dr. Ajay Kumar, and Dr. Sreepriya S along with students of Robotics & Automation were privileged attendees at Gyanotsavam, an illuminating event held on July 7th in Kasargod. This anticipated gathering was a celebration of knowledge and innovation, highlighted by a captivating project exhibition meticulously curated by Central University. The event was graced by the presence of esteemed dignitaries from AICTE and the central government ministry, who delivered insightful talks, enhancing the overall experience.





## **STAFF CORNER**

Prof. Ajay Basil Varghese (TBI Nodal Officer) was invited as a resource person at Bhavans Vidya Mandir, Eroor, Ernakulam, on 14 July, 2023. He has delivered a session on Basics of Entrepreneurship to 9th and 11th grade students. 200 students from these classes attended

the s



#### **CETAA DAY 2023**

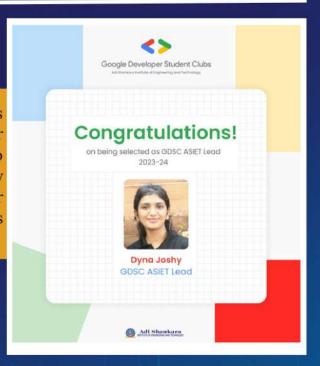
On July 25, 2023, Prof. R. Rajaram, Dean-Projects, participated in an Alumni meeting of the 1973 batch, CETAA 2023, held at the College of Engineering, Trivandrum





### STUDENTS CORNER

Dyna Joshy of S5 CSE A has been selected as the new GDSC ASIET Team Lead. Her commitment to excellence and her ability to inspire others have been evident since day one. Her unwavering enthusiasm for technology and her drive to empower others have made a significant impact on the GDSC.





On 1st July 2023 at 7:00 PM, GDG Ludhiana conducted a virtual workshop on "Python for Data Science," featuring Aaron P Laju as the speaker. The event focused on introducing participants to Python's potential in data analysis, visualization, and machine learning. Attendees, including beginners and experienced programmers, gained insights into Python fundamentals, data manipulation with pandas, data visualization using Matplotlib and Seaborn, and basics of machine learning with scikit-learn. By the end of the workshop, participants were equipped with the skills to harness Python's power for effective data-driven decision-making and predictive modeling. GDG Ludhiana's efforts in organizing this event contributed significantly to empowering the data science community.



## STUDENTS CORNER

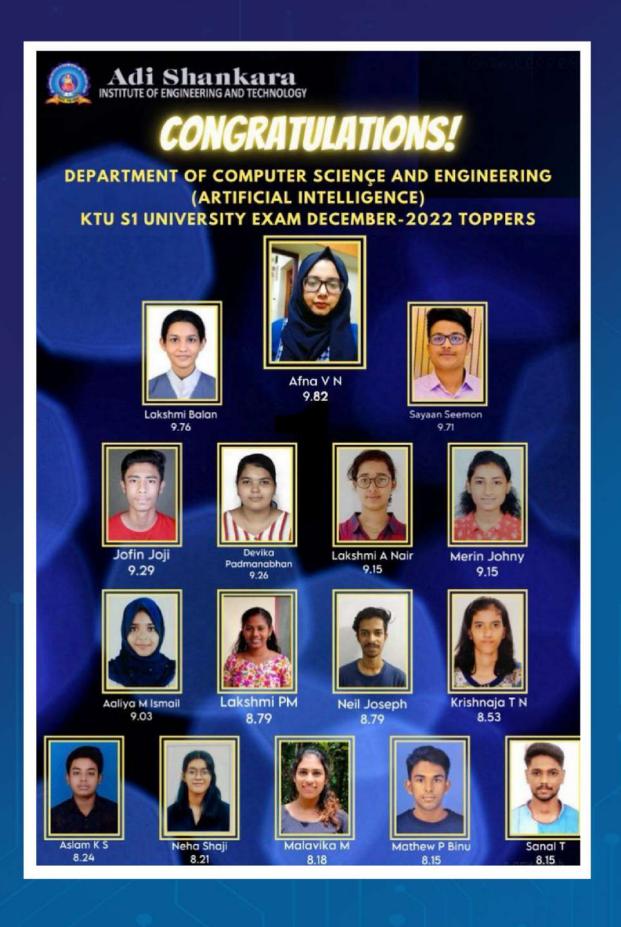
A 3-week comprehensive placement training has been organized for seventh-semester students, including those from the CSE and CSE-AI departments. This training program extensively covers various subjects such as practical-oriented programming, aptitude, reasoning, personality development modules, and mock interviews.

















## Adi Shankara INSTITUTE OF ENGINEERING AND TECHNOLOGY

## Congratulations!

#### DEPARTMENT OF COMPUTER SCIENECE AND ENGINEERING **KTU S1 UNIVERSITY EXAM DECEMBER-2022** S1 CSE-B TOPPERS



Lakshmi Nandana R 9.47



Devika V R 9.35



Malavika J 9.09



**Fathima Nasrin** 9.06



Jincy Varghese 8.82



Lakshmi P R 8.82



Malavika E A 8.79



Karthik E M 8.74



Ben George 8.68



8.68



Gouri Krishna T L Fathima Muhammed 8.62



Elswin Eldho 8.59



Gauri S Nair



Krishnaveni



**Gouri Anil** 8.47



Malavika S 8.41



Gloriya Titto 8.32



**Deleeshya Davis** 



Mariya Abraham 8.09









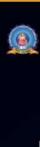












## Adi Shankara INSTITUTE OF ENGINEERING AND TECHNOLOGY

## engratulations....



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING BTECH CSE A BATCH 2019-2023 FIRST CLASS WITH DISTINCTION



ALFIYA M J CGPA - 9.34



AADHITHYANARAYANAN V A CGPA - 9.15



**ASHNA SAJU** CGPA - 9.15



AJAY ANTU-CGPA - 9.1



AKHILA R NAIR CGPA - 8.93



JANNATH PARVIN CGPA - 8.73



C S POOJA CGPA - 8.69



DEVIKA N CGPA - 8.68



ABHIJITH E S GGPA - 8.65



HARITHA M CGPA - 8.57



ABHIJITH JAIDEEP CGPA - 8.55



DONA ANTONY CGPA - 8.52



\*CGPA - 8:47



ANUSHA PS



ALWIN GEORGE CGPA - 8.44



HARITHA RAJAN CGPA - 8.42



DEVIKA KRISHNAKUMAR CGPA - 8.42



AISHWARYA BAIJU CGPA - 8.33



AKSHAYA S P CGPA - 8.31



AKSHARA S KUMAR CGPA - 8.26



ABIN P FRANCIS CGPA - 8.25



ASHIQ CHERIAN CGPA - 8.24



BHAGYA LAKSHMI M S . CGPA - 8.23



HONEY M CGPA - 8.25



**AFSANA SHAHUL** CGPA - 8.22



DHIYA THOMAS CGPA - 8.18



AAKASH A NAIR CGPA - 8.12



ARJUN RAMESH CHANDRAN NAIR CGPA - 8.08



.

ANAKHA K M CGPA, 8.03



**ELECTTA VARGHESE** CGPA - 8





Adi Shankara
INSTITUTE OF ENGINEERING AND TECHNOLOGY





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

BTECH CSE B BATCH 2019-2023
FIRST CLASS WITH DISTINCTION



MERIN JAMES CGPA - 9.1



SRUTHILAYA JYOTHIDAS CGPA - 9



LEKSHMI SHARMA
CGPA-8.9



JOSEPH GEORGE PADAYATTY CGPA - 8.8



SNEHA M CGPA - 8.7



REVATHY JESS CGPA - 8.7



JESWIN JAMES CGPA - 8.7



MRIDUL KRISHNA P.M CGPA - 8.5



SHAMA THOMAS CGPA - 8.4



SRAVANA A J CGPA - 8.4



\*JISHMA MURALI CGPA - 8.3



MEGHA RAJU CGPA - 8.3



SEETHA LAKSHMI T S CGPA - 8.13



JYOTHI KRISHNA P CGPA - 8.1



SARUTI ASWAL CGPA - 8.06



S SHANKARAKRISHNAN CGPA - 8.06









## Congratulations...



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
BTECH CSE B BATCH 2019-2023
S8 KTU RESULTS - TOPPERS



LEKSHMI SHARMA SGPA - 9.15



SRUTHILAYA JYOTHIDAS • SGPA - 9.15



SHAMA THOMAS •



MERIN JAMES SGPA - 8.97



SRAVANA A J SGPA - 8.94



NEETHU M SGPA 8.82



S SHANKARAKRISHNAN



SNEHA M SGPA - 8.62



REVATHY JESS SGPA - 8.5



JOSEPH GEORGE PADAYATTY
SGPA - 8.44



SGPA - 8.32



SGPA - 8.29



SEETHA LAKSHMI T S SGPA - 8.26



SHRUTI ASWAL SGPA - 8.24



JOSEPH JOSE SGPA - 8.15



JESWIN JAMES SGPA - 8.09



MRIDUL KRISHNA P.M SGPA - 8



10

## **CELEBRATING STUDENTS ACHIEVEMENTS**



Our Managing Trustee Shri K Anand presents a token of appreciation to Aswath Salim of S2 CSE A for Achieving Highest CGPA in S1 KTU Exams



Prof. P V Rajaraman, HOD AI, presents a token of appreciation to SONA DEYO of S2 CSE C for her outstanding achievement of securing a perfect 10 CGPA in S1 KTU Exams."



## **CELEBRATING STUDENTS ACHIEVEMENTS**



Prof. Manesh T, HOD CSE, Commends Afna V N of S2 CSE AI for attaining highest CGPA in S1 KTU Exams.



Prof. P V Rajaraman, HOD AI, presents a token of appreciation to Lakshmi Nandhana R of S2 CSE B for securing highest CGPA in S1 KTU Exams."

Congratulations to all. Your relentless dedication and unwavering commitment to excellence have led you to this remarkable feat of securing the highest CGPA in the university exams. Your hard work is an inspiration to all, and we have no doubt that with this determination, you will continue to achieve great things in the future. Keep up the fantastic work!"



## STUDENTS ACHIEVEMENTS-PAID INTERNSHIP @SUYATI





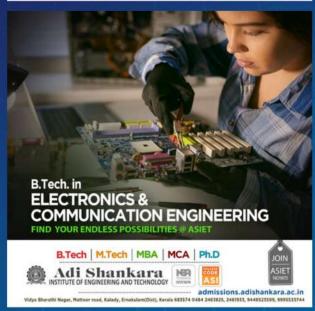
#### ADMISSIONS OPEN 2023- FEW LAPSED SEATS ARE AVAILABLE













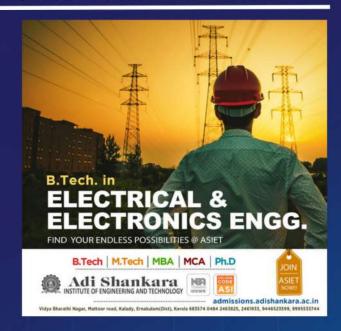




JULY 23

#### ADMISSIONS OPEN 2023- FEW LAPSED SEATS ARE AVAILABLE





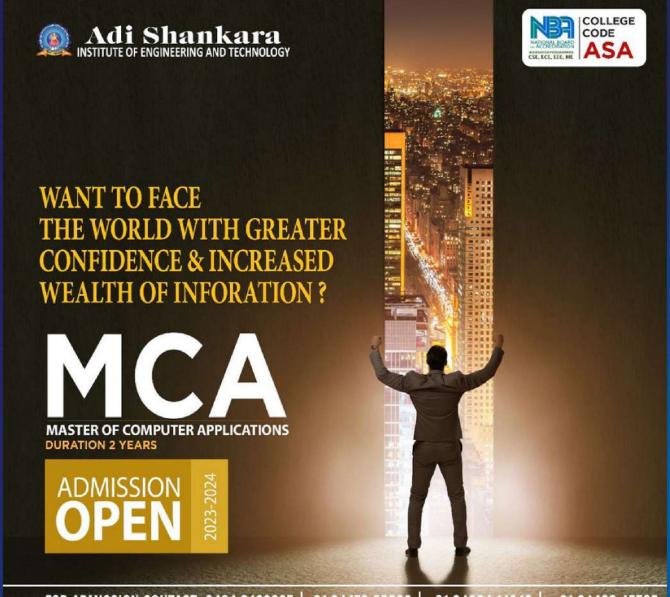






JULY 23

#### ADMISSIONS OPEN 2023- FEW LAPSED SEATS ARE AVAILABLE



FOR ADMISSION CONTACT: 0484 2463825 | +91 94479 85508 | +91 94004 14349 | + 91 94460 45785 Vidya Bharathi Nagar, Mattoor road, Kalady, Ernakulam(Dist), Kerala admissions.adishankara.ac.in APPLY NOW







### **TECH NEWS**



ChatGPT Gets A New Feature to Remember and Apply "Custom Instructions" To All Future Conversations

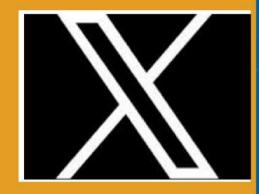
SpaceX on Friday launched 22 Starlink internet satellites, marking the company's 50th mission of this year.





A Parliamentary panel has recommended that the government should make it mandatory for Apple and Google to share "exhaustive" metadata, developer identities, and ownership and origin of apps.

Billionaire Elon Musk said X (formerly known as Twitter) will do away with its dim mode as the dark mode is "better in every way".





WhatsApp has introduced a new feature called instant video messages, wherein users will be able to record and share short personal videos directly in the chat



#### **WELCOME ABOARD**



Dr. Srikrishnan Sundararajan has joined ASIET, as Dean Computer Science. He is also in charge of HOD, Department of Computer Applications.

Dr. Srikrishnan Sundararajan holds the degree of Ph.D. from the CUSAT, MTech. from IIT, Kharagpur; and BSc.Engg. from CET, Thiruvananthapuram. He has over 11 years of experience as Professor and 25 years as an IT Consultant and has expertise in the field of Artificial Intelligence and Machine Learning. He has previously held various tenured and visiting professorships in computer science and business analytics institutions such as Kerala University of Digital Sciences, Innovation, and Technology, Loyola Institute of business administration, Chennai; LM Thapar School of Management; Agni College of Technology; and SCMS-Cochin. As an IT consultant, he has led multicultural teams engaged in software application development and the center of excellence for technology. He has worked with Tata Consultancy Services, Covansys Inc. USA, UST Global, HCL Technologies Ltd., etc. He has published seven articles in international journals. Recently, his book titled 'Multivariate Analysis and Machine Learning Techniques: Feature Analysis in Data Science Using Python' is scheduled to be published by **Springer Nature in October 2023.** 



## ADI SHANKARA SKILL KENDRA CORNER INTERNSHIPS AND SCHOLARSHIPS









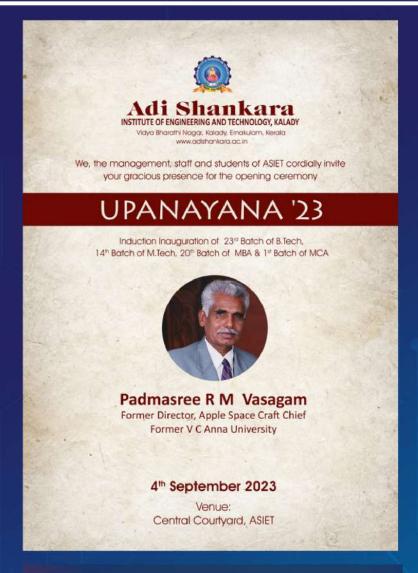
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CODE TO GET MORE
UPDATES THROUGH
ADI SHANKARA SKILL
KENDRA







#### **UPCOMING EVENTS**





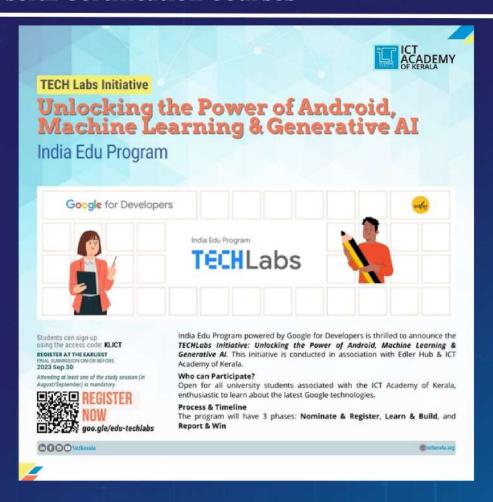


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- Google Display Campaign: for all entrepreneurs to showcase their business
- <a href="https:/www.mygreatlearning.com/academy/learn-for-free/courses/google-display-campaign">https:/www.mygreatlearning.com/academy/learn-for-free/courses/google-display-campaign</a>



#### Other Useful Certification Courses

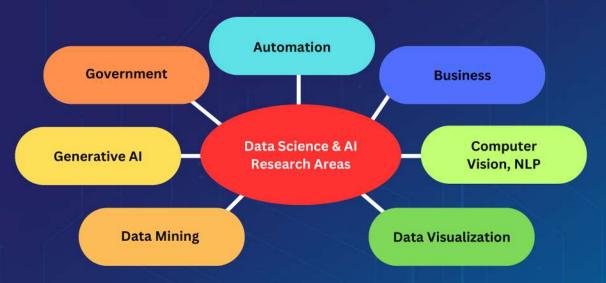








Data science has emerged as an independent domain in the decadestarting in 2010 with the explosive growth in big data analytics, cloud, and IoT technology capabilities. A data scientist requires fundamental knowledge of computer science, statistics, and machine learning, which he may use to solve problems in various domains. We may define data science as a study of scientific principles that describe data and their inter-relationship. Some of the current areas of research in Data Science and Engineering are categorized and enumerated below: -



#### Automation:

Research areas in automation include public ride-share services (e.g.,uber platform), self driving vehicles, and automation of the manufacturing industry. AI/ML techniques are widely used in industries for the identification of unusual patterns in sensor readings from machinery and equipment for the detection or prevention of malfunction.

#### Business:

Data science finds numerous applications in finance like stock market analysis; targeted marketing; and detection of unusual transaction patterns, fraudulent credit card transactions, and money laundering. Financial markets are complex and chaotic. However, AI technologies make it possible to process massive amounts of real-time data, that may lead to accurate forecasts and trade.

#### Computer Vision and NLP:

AI/ML models are extensively used in digital image processing, computer vision, speech recognition, and natural language processing (NLP).

#### Data Mining:

Building models for classification and clustering in high dimensional, streaming, and/or big data space is an area that receives much attention from researchers - for example, network-graph-based algorithms for analyzing social media interactions.



#### Data visualization:

Visualizing complex, big, and/or streaming data demands advanced techniques. The real physical world may be further enhanced using sensory stimuli delivered by technology (augmented reality). Virtual reality provides a computer-generated virtual environment giving an immersive experience to the users.

#### Generative AI:

Generative AI models are based on techniques such as generative adversarial networks (GANs) or generative pre-trained transformers (GPTs). These models are trained on large datasets and learn to generate new content such as text generation, images, music, and video. ChatGPT is an example.

#### Government:

Governments need smart and effective platforms for interacting with citizens, data collection, validation, and analysis. Data-driven tools and AI/ML techniques are used for fighting terrorism, intervening in street crimes, and tackling cyber-attack. Data science also provides support in rendering public services, national and social security, and emergency responses.

#### Healthcare:

The most important contribution of data science in the pharmaceutical industry is to provide computational support for cost-effective drug discovery. AI/ML supports medical diagnosis, preventive care, and prediction of failures based on historical data. The path-breaking study of genetic data helps in the identification of anomalies, prediction of possible failures, and personalized drug suggestions, e.g., in cancer treatment. Medical image processing uses data science techniques to visualize, interrogate, identify, and treat deformities in internal organs and systems.

#### Responsible AI:

Al systems support complex decision-making in various domains such as autonomous vehicles, healthcare, public safety, HR practices, etc. To trust Al systems, their decisions must be reliable, explainable, accountable, and ethical. There is ongoing research on how these facets can be built into Al algorithms.



Dr. Srikrishnan Sundararajan Dean, CSE



# Bitcain -The Revolutionary Digital Currency

In today's digital age, financial systems are rapidly evolving, and one technology that has caused a significant disruption is Bitcoin. Bitcoin, often referred to as a cryptocurrency, has gained widespread attention and popularity since its introduction in 2009. In this blog, we will explore the fundamentals of Bitcoin, its impact on the financial landscape, and the potential it holds for the future.

#### What is Bitcoin?

Bitcoin is a decentralized digital currency that operates on a peer-to-peer network known as blockchain. Unlike traditional fiat currencies issued by governments, Bitcoin is not controlled by any central authority. Instead, it relies on cryptographic principles to secure transactions and regulate the creation of new units. This innovative technology behind Bitcoin has the potential to transform various industries and challenge the traditional financial system.

#### **Key Features and Advantages:**

Bitcoin offers several unique features that set it apart from traditional forms of money. Here are a few key aspects:

#### 1. Decentralization:

Bitcoin operates on a decentralized network, meaning there is no central authority controlling transactions or issuing new coins. This decentralization provides increased transparency and reduces the risk of manipulation.

#### 2. Security:

The blockchain technology used by Bitcoin ensures secure and tamper-proof transactions. Each transaction is recorded on a public ledger, making it nearly impossible to alter or counterfeit.

#### 3. Anonymity:

Bitcoin allows users to maintain a certain level of privacy during transactions. While transactions are recorded on the blockchain, the identities of the involved parties remain pseudonymous.

#### 4. Global Accessibility:

Bitcoin transcends geographical boundaries and can be accessed by anyone with an internet connection. This feature makes it particularly appealing for individuals in countries with limited access to traditional banking systems.



#### Impact on the Financial Landscape:

Bitcoin has made a significant impact on the financial landscape.

#### 1. Financial Inclusion:

Bitcoin provides an opportunity for individuals without access to traditional banking services to participate in the global economy. It empowers the unbanked population by offering an alternative form of currency and a means to store and transfer wealth securely.

#### 2. Remittances:

Bitcoin has the potential to revolutionize the remittance industry. By enabling peer-to- peer transactions across borders with minimal fees and faster settlement times, it offers a more efficient and cost-effective solution compared to traditional remittance methods.

#### 3. Investment and Speculation:

Bitcoin has attracted attention as a speculative investment asset. Its decentralized nature and limited supply have led to price volatility, making it an attractive option for investors seeking high-risk, high-reward opportunities.

#### **Future Prospects:**

As Bitcoin continues to gain acceptance and adoption, its future prospects look promising. Here are a few areas where Bitcoin could have a significant impact:

#### Mainstream Adoption:

With increasing acceptance from institutions, businesses, and governments, Bitcoin may eventually become a widely accepted form of payment in various industries.

#### Financial Infrastructure:

Bitcoin's underlying technology, blockchain, has the potential to transform the financial infrastructure by streamlining processes, reducing costs, and enhancing security in areas such as banking, supply chain management, and smart contracts

Stablecoins and Central Bank Digital Currencies (CBDCs):

The success of Bitcoin has paved the way for the development of stablecoins and CBDCs. These digital currencies issued by central banks aim to combine the benefits of cryptocurrencies with the stability of traditional fiat currencies.



#### Conclusion:

Bitcoin has emerged as a revolutionary digital currency, challenging the traditional financial system and offering a decentralized, secure, and inclusive alternative. While it faces regulatory challenges and volatility, its impact on financial inclusion, remittances, and investment opportunities cannot be ignored. As we move forward, Bitcoin and its underlying technology, blockchain, are likely to shape the future of finance, paving the way for a more connected and efficient global economy.

#### Sanjay Gireesan S8 CSB

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