

ASPIRE

E - MAGAZINE

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EVENTS

ARTICLES

ACTIVITIES

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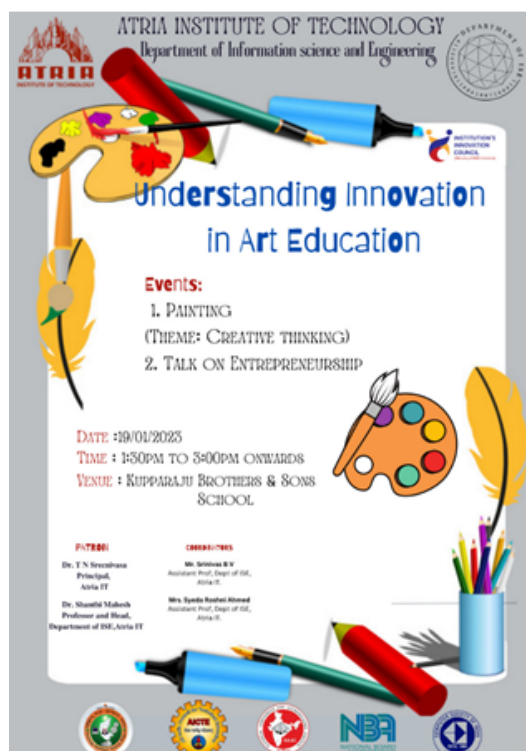


WEBINARS/ WORKSHOPS/EVENTS/ACTIVITIES



Dept of ISE organized Awareness program on “Certificate course on Cloud” Conducted by D Vishnu Prasad, State Head-Karnataka at ICT Academy on 11th January 2023. The programme was coordinated by Dr. Jyothi Metan, Associate professor, Dept, of ISE

Dept of ISE organized Session on “Smart Ideas to Build Your Start Up” Conducted by Dhanush Gowda, Co-Founder, Gordian on 16th January 2023. The programme was coordinated by Ms. Kavitha Vasanth Assistant Prof, Dept of ISE.



Dept of ISE organized IPR Activity on “Understanding Innovation in Art Education” in Kupparaju brothers & sons school on 19th January 2023. The programme was coordinated by Ms. Syeda Roshni & Mr. Srinivas B V , Assistant Profs, Dept of ISE.

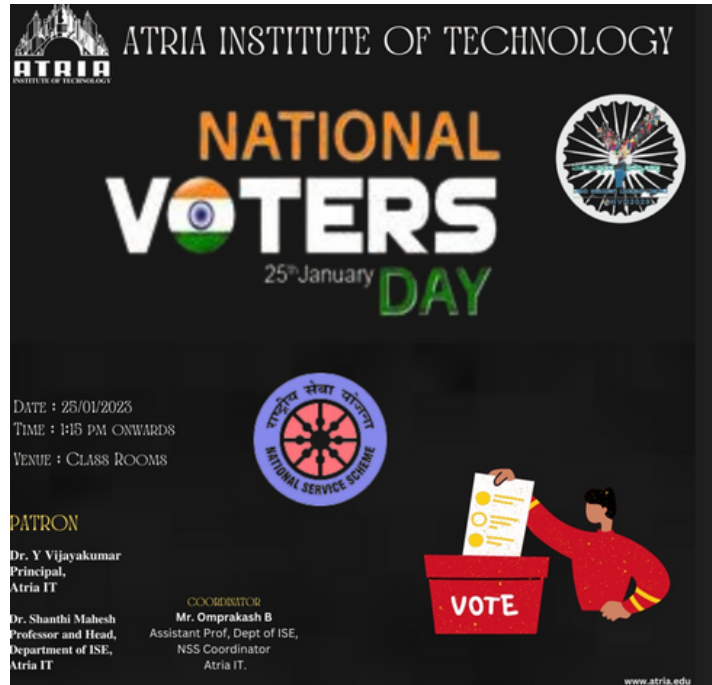


WEBINARS/ WORKSHOPS/EVENTS/ACTIVITIES



Dept.of ISE organized a Project Exhibition on 27th January 2023 judged by Dr. Gomathi Prathima, Dept. of MCA & Dr. Ananda Kumar of Dept. of ISE. The programme was coordinated by Ms. Malini R & Mrs. Asma Begum , Assistant Profs, Dept of ISE.

Mr. Omprakash B, Asst. Prof, Dept.of ISE, NSS Coordinator, organized a programme on National Voters day on 25th January 2023. The objective was to to encourage the youth to participate in the vote in the electoral process. It not only encourages the youth to participate in the electoral process but also focuses on the fact that the right to vote is a basic right.



ARTICLES

BITCOIN



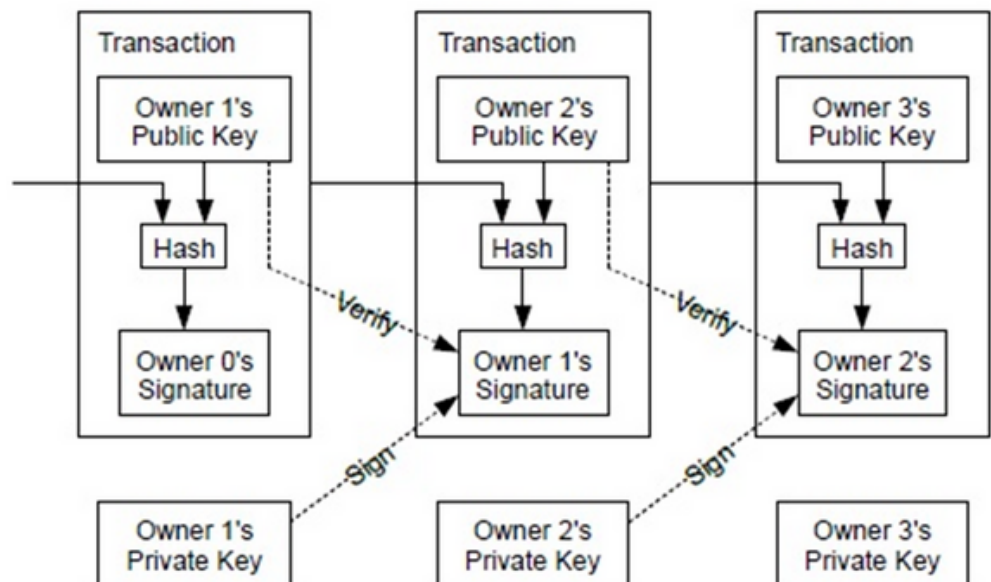
MRS. KAVITHA VASANTH

Bitcoin became a fixture in world financial news in late 2013 and early 2014. The “virtual currency” had been launched five years earlier by computer hobbyists, and in late 2013 the U.S. dollar exchange rate for one bitcoin rose more than fivefold in the space of a few weeks. The market value of one bitcoin, which had begun trading at less than five cents in 2010, briefly exceeded \$1,200.00.

Transactions

We define an electronic coin as a chain of digital signatures. Each owner transfers the coin to the next by digitally signing a hash of the previous transaction and the public key of the next owner and adding these to the end of the coin. A payee can verify the signatures to verify the chain of ownership.

The problem of course is the payee can't verify that one of the owners did not double-spend the coin. A common solution is to introduce a trusted central authority, or mint, that checks every transaction for double spending. After each transaction, the coin must be returned to the mint to issue a new coin, and only coins issued directly from the mint are trusted not to be double-spent. The problem with this solution is that the fate of the entire money system depends on the company running the mint, with every transaction having to go through them, just like a bank.

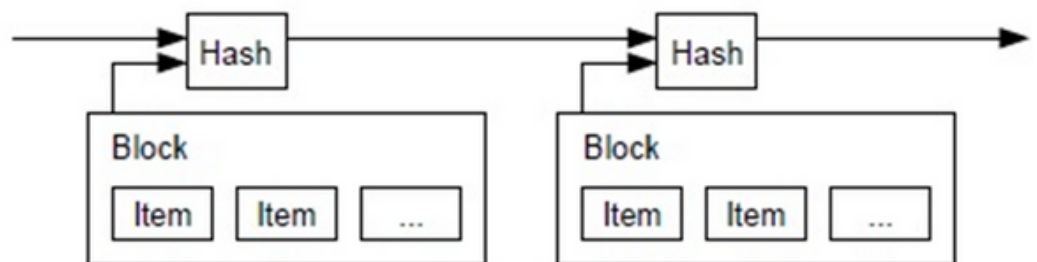


ARTICLES

BITCOIN

We need a way for the payee to know that the previous owners did not sign any earlier transactions. For our purposes, the earliest transaction is the one that counts, so we don't care about later attempts to double-spend. The only way to confirm the absence of a transaction is to be aware of all transactions. In the mint based model, the mint was aware of all transactions and decided which arrived first. To accomplish this without a trusted party, transactions must be publicly announced and we need a system for participants to agree on a single history of the order in which they were received. The payee needs proof that at the time of each transaction, the majority of nodes agreed it was the first received.

The solution we propose begins with a timestamp server. A timestamp server works by taking a hash of a block of items to be time stamped and widely publishing the hash, such as in a newspaper or Usenet post [2-5]. The timestamp proves that the data must have existed at the time, obviously, in order to get into the hash. Each timestamp includes the previous timestamp in its hash, forming a chain, with each additional timestamp reinforcing the ones before it.



To implement a distributed timestamp server on a peer-to-peer basis, we will need to use some proof-of-work system

The proof-of-work involves scanning for a value that when hashed, such as with SHA-256, the hash begins with a number of zero bits. The average work required is exponential in the number of zero bits required and can be verified by executing a single hash. For our timestamp network, we implement the proof-of-work by incrementing a nonce in the block until a value is found that gives the block's hash the required zero bits. Once the CPU effort has been expended to make it satisfy the proof-of-work, the block cannot be changed without redoing the work. As later blocks are chained after it, the work to change the block would include redoing all the blocks after it.



VISION

TO DEVELOP COMPETENT PROFESSIONALS WITH STRONG FUNDAMENTALS IN INFORMATION SCIENCE AND ENGINEERING, INTERDISCIPLINARY RESEARCH AND ETHICAL VALUES FOR THE BETTERMENT OF THE SOCIETY.

MISSION

M1 - TO ESTABLISH A TRANSFORMATIONAL LEARNING AMBIENCE WITH GOOD INFRASTRUCTURE FACILITIES TO IMPART KNOWLEDGE AND THE NECESSARY SKILL SET TO PRODUCE COMPETENT PROFESSIONALS.

M2 - TO CREATE A NEW GENERATION OF ENGINEERS WHO EXCEL IN THEIR CAREER WITH LEADERSHIP/ENTREPRENEUR QUALITIES.

M3 - TO PROMOTE SUSTAINED RESEARCH AND INNOVATION WITH AN EMPHASIS ON ETHICAL VALUES.

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EDUCATIONAL OBJECTIVES OF THE PROGRAM(PEO)

PEO1: TO EXPERTISE IN PROBLEM ANALYSIS, SOLVING, DESIGN, DEVELOPMENT AND NECESSARY INFORMATION TO MEET TECHNICAL AND MANAGERIAL CHALLENGES.

PEO2: TO PURSUE INTERDISCIPLINARY RESEARCH AND HIGHER STUDIES WITH PROFOUND KNOWLEDGE ENRICHED WITH ACADEMICS AND INFORMATION TECHNOLOGY SKILLS.

PEO 3: TO EXCEL IN COMPETITIVE ENVIRONMENT TOWARDS LEADERSHIP AND LIFE-LONG LEARNING FOR A SUCCESSFUL PROFESSIONAL CAREER.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO1: ABLE TO FIND THE SOLUTIONS TO PROBLEMS USING PROGRAMMING LANGUAGES BY APPLYING THE SUITABLE DATA AND FILE STRUCTURES CONCEPT AND OBTAIN OPTIMAL PERFORMANCE THROUGH DESIGN AND ANALYSIS OF ALGORITHMS.

PSO2: ABLE TO WORK ON THE RECENT TECHNOLOGIES BY MANAGING AND ORGANIZING THE PROCESSED DATA FOR NEW GROWTH OF OPPORTUNITIES IN THE INDUSTRIES EXPLORING WEB DESIGNING AND SIMULATING THE REAL WORLD PROBLEMS.

PSO3: ABLE TO APPLY THE PRINCIPLES OF SOFTWARE ENGINEERING TO DEVELOP COMPUTATIONAL MODELS UNDER REALISTIC CONSTRAINTS AND ABILITY TO PROVIDE SOLUTIONS BASED ON THE EXPERTISE IN NETWORKING, DATABASE MANAGEMENT AND ENTREPRENEURSHIP TO THE VARIOUS NEEDS.

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