KAKATIYA INSTITUTE OF TECHNOLOGY &SCIENCE, WARANGAL
(An Autonomous Institute under Kakatiya University, Warangal)
Approved by AICTE & Accredited by NBA, New Delhi.
Address: Opp. Yerragattu Hillock, Bheemaram, Hasanparthy, Warangal-506015 (T.S.)

Department of Information Technology

Presents...

A Technical Magazine

Issue 8, May 2019

Final Year passed out batch (2018-19) of B.Tech students Group Photo with Faculty

KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Warangal – 506 015, Telangana, INDIA. (An AUTONOMOUS INSTITUTE under Kakatiya University, Warangal)

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ – ౫౦౬౦౧౫.

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KITSW

Editorial Board

1. **Faculty**

S.No.	Responsibility	Name of the Faculty	Designation
1.	Chief Editor	Dr.P.Kamakshi	Professor &Head, Dept. of IT
2.	Faculty Editor	Sri T.Mahesh Kumar	Assistant Professor, Dept. of IT

2. Students

S.No.	Name of the Student	Roll Number
1.	N.Raswitha	B15IT053
2.	L.Sushmitha	B15IT055
3.	K.Mahendra	B15IT027
4.	D.Ashish	B15IT026

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(An Autonomous Institute under Kakatiya University, Warangal.)

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Dr.K.Ashoka Reddy
Principal

Message

It gives me immense pleasure to pen a few words as prologue to our in-house Technical Magazine exclusively meant for churning out the latent writing talent which bears immense potentiality of sharpening communication skills as part of overall personality development. I congratulate the editorial board of the Technical Magazine for their untiring efforts in collecting and compiling the data without which it would have not been possible to place this magazine in your hands. I, on behalf of KITSW family, wish you all the best for achieving greater success and scaling new heights in the future.

Kakatiya Institute of Technology & Science, Warangal

(An Autonomous Institute under Kakatiya University, Warangal.)

DEPARTMENT OF INFORMATION TECHNOLOGY

Dr.P.Kamakshi
Head of the Department

Message

It gives me an immense pleasure to present fourth issue of BITWISE Magazine from Dept of IT. The past year was full of various activities by the students and faculty in academic, co curricular, extra-curricular as well as research & developments. We are proud of the accomplishments of our alumni for their achievements in academic, higher studies and placements in fastest-growing IT companies. Faculty members published research papers on complex issues in various fields of computer science and Information technology. It is our aim to educate and inform anyone who has an interest in latest technologies and upcoming research directions in the field of computers. Throughout the Magazine you will see articles on the varied aspects of technical as well as non-technical topics from students and faculty members.

We welcome your feedback and would like to hear what you think of the BITWISE Magazine.

Department Profile

The Department of Information Technology was established in the year 1999. The Department offers a four year course of B.Tech. Degree in the Information Technology, with an annual intake of 60 students. The Department has got NBA accreditation from June 2016. The Hallmark of I.T. Department is to develop technologically competent IT professionals in today's IT centered scenario. The strength and facilities of the department are increasing year by year. Well qualified experience and committed faculty members is an asset to the Department. The Department has well equipped laboratories and WI-FI support to cater the needs of the students. The Department conducts National level technical symposium in every academic year and organizes several training programs for both students and faculty members to get acquainted with the cutting edge technologies emerging day by day. Students of IT Department have made remarkable achievements both in academics and sports as well.

VISION AND MISSION OF DEPARTMENT

VISION:

To become a Center of Excellence in the Information Technology discipline with effective teaching and strong research environment that makes our students globally competitive with strong ethical values and leadership abilities.

MISSION:

- To impart technical knowledge to the students to turn out proficient and well groomed engineers.
- Motivate students to improve skills by attending training programs and internships that leads to develop innovative projects in emerging technologies.
- To train our students for higher education, leadership in profession and adopt quality research.

Programme Outcomes (POs):

Engineering Graduates will be able to:

PO1	**Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	**Problem Analysis** : Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	**Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
PO4	**Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	**Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations
PO6	**The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	**Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	**Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	**Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments
PO12	**Life-Long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Kakatiya Institute of Technology & Science, Warangal

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DEPARTMENT OF INFORMATION TECHNOLOGY

Programme Educational Objectives of the Course:

- To provide students with a sound foundation in Information Technology theory and practices to analyze, formulate and solve engineering problems.
- To develop an ability to design algorithms, implement programs and deploy software.
- To develop Information Technology solutions with the changing needs of the society for the career-related activities.

Programme Specific Outcomes of the Course:

- Apply analytical and experimental problem-solving skills in the Information Technology discipline
- Use fundamental knowledge to investigate new and emerging technologies leading to innovations in the field of Information Technology.
- Begin immediate professional practice as an Information Technology Engineer.

Kakatiya Institute of Technology & Science, Warangal-15

(An Autonomous Institute under Kakatiya University, Warangal.)

DEPARTMENT OF INFORMATION TECHNOLOGY

Teaching Faculty, Non-Teaching & Support Staff

TEACHING FACULTY

S.No.	Name of the faculty	Designation
1.	Dr. P. Kamakshi	Professor & Head
2.	G.K.Shailaja	Associate Professor
3.	Dr.P.Shireesha	Associate Professor
4.	B.Kiran Kumar	Associate Professor
5.	A.Bhaskar	Associate Professor
6.	Y.Bhavani	Associate Professor
7.	P.Sudharshan Ray	Assistant Professor
8.	V.Sunitha	Assistant Professor
9.	S.B.Swathi	Assistant Professor
10.	M.V.Phanindra	Assistant Professor
11.	M.Kishore	Assistant Professor
12.	R.Gautam	Assistant Professor
13.	P.Suma	Assistant Professor
14.	T.Mahesh Kumar	Assistant Professor
15.	Dr.K.Praveen Kumar	Assistant Professor

NON-TEACHING & SUPPORT STAFF

S.No.	Name of the faculty	Designation
1.	M.Srilatha Devi	Programmer
2.	Ch.Devender	Programmer
3.	K.Shailaja	Jr. Assistant
4.	K.Mahender	Attender

Research Publications of faculty :

Dr. P. Kamakshi

Journal:

1. Dr.P.Kamakshi, "Importance of Big data in Healthcare System-A Survey", International Journal of Applied Engineering Research, ISSN 0973-9769, Vol.13, No.15, pp.12184-12187, July 2018.

Dr.P.Shireesha

Journals:

1. S.Kiran, P.Niranjan, P.Shireesha, "An Overview towards the Priority of Data Mining in IOT Systems", International Journal of Pure and Applied Mathematics (IJPM),(2018, SCOPUS), Vol 120, Issue 6, ISSN (Online) 1314-3395, pp 7393-7406, June 2018.
2. P.Shireesha, "An Overview of Software Engineering History and Three Patterns towards the development of Software Engineering", International Journal of Research and Analytical Reviews (IJRAR,UGC), Vol 6, Issue 2, ISSN 2249-5138, pp 546-552, March, 2019.
3. P.Shireesha, "Minimum-Spanning Tree Clustering Method for High Dimensional Data using Clustering-Based Subset Selection, RESEARCH REVIEW International Journal of Multidisciplinary(RRIJM,UGC), Vol 04, Issue 04, ISSN 2455-3085, pp 156-167, April, 2019.
4. P.Shireesha, P.Niranjan "A Study on development of processes for verification and validation in medical device domain" Indian Journal of Public Health Research and Development RESEARCH REVIEW International Journal of Multidisciplinary(IJPHRD, SCOPUS), Vol 10, Issue 7, April, 2019.
5. P.Shireesha, "A Study on Blockchain and the key advantages of Blockchain Technology", International Journal of Advance and Innovative Research(IJAIR,UGC),Vol 6, Issue 2, ISSN 2394-7780, pp 120-126, April, 2019.
6. P.Shireesha, "A Review on Software Engineering Process Model", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD, SCOPUS), ISSN 2249-6890, 2019.
7. Amrutha, P.Shireesha, "Categorization Of Product Aspects And Its Applications", International Journal of Research (IJR, UGC), ISSN NO:2236-6124, Vol 8, Issue 5, pp 1119-1219, May, 2019.
8. P.Shireesha, "Analysis of Big Data With Respect To Environmental Pollution", 0International Journal of Research (IJR, UGC), ISSN 2236-6124, 2019.

Conferences:

1. S.Kiran, P.Niranjan, P.Shireesha, "A Study on the Limitations of Blockchain and the usage of Consensus Models in Blockchain Technology", National Conference on Emerging Trends in Artificial Intelligence and Neural Networks, on 26th to 27 th March 2019, Dept.of CS, UCW, KU, Warangal., ISBN 978-93-86647-96-2, pp 39-50, March, 2019.
2. P.Shireesha, "A Study on Blockchain and the key advantages of Blockchain Technology", International Multidisciplinary Conference, LDSC College of Arts and Commerce, Mumbai, 20 th April, 2019.
3. P.Shireesha, "Security Tips to Help and Tackle the issue of Cloud Computing Isolation", International Conference on Research Trends in Science Technology Engineering & Management, Jayamukhi Institute of Technological Sciences, Warangal. 10th-12th May, 2019.

B. Kiran Kumar

Journal:

1. B.Kiran Kumar, Dr.Jayadev Gyani, Dr. Narasimha G, "Software Defect Prediction using Ant Colony Optimization", International Journal of Applied Engineering Research", ISSN 0973-9769, Vol.13, No.13, pp.14291-14297, July 2018.

Conference:

1. B.Kiran Kumar, "Optimization Techniques for Classification of SE Data" in 1st National Conference on Emerging Trends in Data Science and Intelligent Computing-2018 held on 25th, 26th July 2018 at JNTUH College of Engineering Sultanpur, Telangana.

A.Bhaskar

Conference:

1. A.Bhaskar, "Survey on Clustering Algorithms in Data Streams" in 1st National Conference on Emerging Trends in Data Science and Intelligent Computing-2018 held on 25th, 26th July 2018 at JNTUH College of Engineering Sultanpur, Telangana.

Y.Bhavani

Conference:

1. Y.Bhavani," IP Traceback through Modified Probabilistic Packet Marking Algorithm using Record Route" in 3rd International Conference On Computational Intelligence and Informatics (ICCII-2018) on 28-29 Dec 2018 at JNTU college of Engineering, Hyderabad.

P.Sudarshan Ray

Journal:

1. P.Sudarshan Ray, Dr.Ch.D.V. Subba Rao, Polem Vemulamma, "An Overview of Real Time Methodologies of Image Processing ", International Journal of Pure and Applied Mathematics , ISSN 1314-3395 , Vol.120, No.6, pp.7367-7391, June 2018.

M.V.Phanindra

Journal:

1. B.Surya Samantha, M.V.Phanindra, "An Overview on the Utilization of KALI LINUX Tool" International Journal of Research and Analytical Reviews (IJRAR), ISSN: 2349-5138, Vol.5, No. 2, pp. 104-113, June 2018.

M.Kishore

Journal:

1. M.Kishore, "A Study on Security Techniques and Challenges Towards Software and Hardware Aspects for Protecting Data in Cloud", in Research Review International Journal of Multidisciplinary", ISSN: 2455-3085, Vol.3, No.12, pp.1077-1081, Dec 2018.

ABSTRACTS:

1.Title: Importance of Big data in Healthcare System-A Survey
Author: Dr. P.Kamakshi
The concern towards healthcare is increasing day by day with rapid increase in population. The development of technology and **reduction** in cost enabled many healthcare systems and hospitals to procure latest equipment with advanced technology for diagnosis, report generation and various tests. The hospitals are able to collect and store huge amount of information related to patient like disease, diagnosis, medicine, doctors etc. There is continuous increase in the growth of such databases. Big data analytics is one of the progressive area which can handle such huge databases and provide the require knowledge relevant to the user. Big data analytics tools and techniques helps to store and analyze healthcare data available in various formats , This paper is systematic review of importance of big data analytics in healthcare system and also describe various benefits to the society.
Keywords: Big data, big data analytics, electronic healthcare, healthcare diagnosis.

2.Title: Importance of Big data in Healthcare System-A Survey
Authors: Dr .P. Shireesha ,Siripuri Kiran , Dr P. Niranjan
Internet of Things is currently a quickening technology in the realm of devices. It encourages us interface every one of the gadgets which we use in our everyday tasks by means of the internet. Beginning from home, office, industry computerization to social insurance and brilliant urban areas internet of things has reformed the world by interconnecting them. Accordingly it produces monstrous volumes of data. For some, this data has huge business esteem and data. This is the place data mining becomes an integral factor which makes such sort of frameworks more sufficiently brilliant for better productivity and more noteworthy openings and administrations. This paper acquaints with the Internet of Things technology and states the need of data mining in our current reality where everything is conveyed over the internet and clarifies the procedure and appropriate calculations required for Internet of things.
Keywords:Data mining, Internet of things, Knowledge Data Discovery

3.Title: An Overview of Software Engineering History and Three Patterns towards the development of Software Engineering
Authors: Dr .P. Shireesha
This paper will certainly provide a compressed study of the software engineering history in between 1956 and also currently. Each period is identified by a various collection of objectives sought, approaches as well as devices extra, lessons found out and also issues recognized. The durations might overlap and also are much less unique from each various other than the 3 ages. Naturally, there are considerable occasions before 1956. Any type of effort to define a 40-year period on a couple of web pages indicates choosing highlights as well as subduing information. It resembles attracting a tiny range map of a nation. This paper additionally offers 3 patterns in the direction of the advancement of Software Engineering.
Key Words: Software Engineering, patterns, periods

4.Title: Minimum-Spanning Tree Clustering Method for High Dimensional Data using Clustering-Based Subset Selection

Authors: Dr .P. Shireesha

Abstract: Feature subset clustering is the system to decrease the dimensionality of emphasizing vectors for material characterization and also additionally consists of in the recommendation of one of the most part useful attributes that create excellent results as the very first entire setup of attributes. A strategy called particular clustering calculation is suggested to improve the exactness as well as examine the probability of the instances. The FAST calculation operates in 2 phases. In the underlying development, attributes are identified right into collections by using representation logical clustering methods. The list below phase will certainly speak with the element that is generally related to target courses are examined each team to lay out a part of functions. A FS calculation could be examined from the competence and also efficiency point of views. Effectiveness is related to the moment needed to find a part of attributes while the competence is related to nature of part of attributes. Differential team functions are likewise certain i.e, the clustering treatment of FAST has a remarkable opportunity of developing a sub-collection of useful attributes. Right here, we used the competent the very least dispersing over tree clustering approach to update the performance and also the competence of FAST Algorithm.

Key Words: Feature subset selection, Filter method, feature clustering.

5.Title: Categorization Of Product Aspects And Its Applications

Authors: Dr .P. Shireesha,Y.Amrutha

Abstract: several client critiques of merchandise at the moment are to be had at the internet. Purchaser evaluations comprise rich and treasured knowledge for both firms and customers. But,the critiques are often disorganized, main to difficulties in information navigation and know-how acquisition. This paper proposes a product element rating framework, which robotically identifies the critical factors of products from online client reviews, aiming at enhancing the usability of the numerous evaluations. The important product factors are recognized based on the observations:1) The essential elements are normally commented on via a big variety of purchasers and 2) Patron reviews on the crucial aspects greatly impact their typical evaluations at the product. Specially, given the consumer reviews of a product, we first identify product elements by a shallow dependency parser and determine consumer critiques on these elements thru a sentiment classifier. We then expand a probabilistic thing ranking set of rules to infer the importance of components by concurrently thinking about element frequency and the affect of consumer reviews given to every component over their average reviews. The experimental outcomes on a assessment corpus of 21 popular merchandise in eight domains show the effectiveness of the proposed technique. Moreover, we follow product thing ranking to two real-global applications, i.e., record-degree sentiment category and extractive review summarization, and gain great performance upgrades, which exhibit the capacity of product element rating in facilitating real-global packages.

Keywords: Product aspects, aspect ranking, aspect identification, sentiment classification, consumer review, extractive review summarization

6.Title: Analysis of Big Data With Respect To Environmental Pollution

Authors: Dr .P. Shireesha

Abstract: As the populaces boost in a quick stage the commutation in between the job as well as the residence in active road ends up being a growing number of hard. Directly we invest a great deal of cash as well as following time is being thrown away, ecological sensible as a result of traffic a great deal of air pollution is being produced. To resolve both the problems at the same time is the major goal is, the taxi trip sharing resolves the trouble both directly as well as eco. The action to quantitatively evaluate the quantity of web traffic regulated or overall air pollution decreased is a huge increase for the federal government to strategy in the future. We obtain the range from the map in between today place as well as target area as well as determine the air pollution as well as website traffic conserved however it cannot coincide circumstance whenever, mean there is rush hour in the quickest course as opposed to taking it we shadow select the little bit much longer course preventing the web traffic hence conserving the moment and also gas. To determine the air pollution managed we obtain the details from the contamination control panel and also compute the moment the engine got on and also gas tired. We additionally apply the smart directing for picking the course based upon the existing web traffic circumstance so regarding discover the ideal course which decreases website traffic and also contamination. The major objective of the system is to enhance the general effectiveness of the web traffic control over the city with the efficient use of the cars for the taxis. The big data evaluation of the website traffic chart offers understanding to federal government for the future preparation of the roadways and also various other jobs.

Keywords: : Pollution, Big data, Traffic, Route.

7.Title: A Study On The Limitations Of Blockchain And The Usage Of On Sensus Models In Blockchain Technology

Authors:Dr .P. Shireesha

Abstract: Threats to data ethics are consequently paramount relevance, as tampering with data can maliciously affect crucial business decisions. This issue is especially true in cloud computing surroundings , where data owners can't get a handle on fundamental info elements, such as the physical storage of data as well as also the control of its own Travels. Blockchain has just emerged as a fascinating technology which, among others, provides persuasive qualities about data integrity. Using the blockchain to manage data integrity threats is apparently a natural choice, however, its existing limitations of non throughput, higher latency, and weak stability interfere with the practical feasibility of virtually any blockchain-based solutions. At their basic level they empower a network of users to record trades in a shared ledger within that community, for example under normal operation of this blockchain system no trade may be changed once released. This record provides a high level technical overview of blockchain technology. The purpose is to help readers comprehend just how blockchain technology works.

Keywords: consensus model, blockchain, cryptocurrency

8.Title: Software Defect Prediction using Ant Colony Optimization

Authors: B.Kiran Kumar

Abstract: A defect or bug in the software project may arise due the poor design or poor coding of the software modules. When a bug occurs in the project, it produces incorrect results. Occurrences of bugs in the software increase the total estimated cost of the project. This cost can be reduced by redicting the bugs in the software before delivery of the product. In this paper, we implemented Ant Colony Optimization (ACO) method on eight different open source datasets and compared with

Logistic Regression (LR), kNearest Neighbors, and SVM algorithms. The results show that ACO gives better performance on other prediction methods.

Keywords: Defect prediction, Ant Colony Optimization, Logistic Regression, k-Nearest Neighbors, Support Vector Machine.

9.Title: An Overview On The Utilization Of Kali Linux Tools

Authors: M.V.Phanindra ,B.Surya Samantha

Abstract: The goal of writing this research paper is to assess the different penetration testing tools in KALI LINUX utilized for website hacking purposes. By examining these tools, we make sense of which tools are expected to distinguish the codes which make hurt websites. Websites are utilized every day by a huge piece of the total populace to convey touchy information from a man to an element with online-based nearness. In websites containing materials that are appeared after confirmation just, shapes exchange information containing client accreditations to server-side contents. Clients store their credit card details in their online records and utilize structures to purchase things online, so it is pivotal to keep the integrity, classification and accessibility of this information intact. Website hacking is an assault on a website that progressions the visual appearance and in addition substance of the website or a webpage. These are commonly crafted by system crackers, who break into a web server and supplant the hosted website with one of his own.

Keywords: Filtered ports, Ports scanning, hosted website, Website hacking, penetration testing tools, kali linux.

10.Title: A Study on Security Techniques and Challenges towards Software and Hardware Aspects for Protecting Data in Cloud

Authors: M.Kishore

Abstract: A major obstacle for cloud adoption is real and perceived shortage of security. Within this paper, we simply take a holistic view of cloud computing security - spanning round the probable dilemmas and vulnerabilities connected with virtualization infrastructure; software platform; identity management and access control; data ethics; confidentiality and solitude; process and physical security aspects[1]; and also legal compliance in cloud. It provides people the best way to share distributed resources and services that appeal to different organization. Since cloud computing uses distributed resources in open environment, thus it is crucial to offer the security and trust to share the data for developing cloud computing software. In this paper we reveal Successful implementation of all cloud computing at an enterprise requires proper planning and understanding of both emerging risks, dangers and potential countermeasures. This paper reveal how we secure that the cloud security, reliability and privacy every time a 3rd party is processing sensitive data. Within this paper, we've discussed security risks and concerns in cloud computing and enlightened steps an enterprise can take to reduce security risks and secure their own resources. We have also explained cloud computing strengths/benefits, flaws, and related are as in information risk management. This paper also cover the benefits and pitfalls in the way of all cloud computing. Finally, we sketch a list of steps that can be used, in a top degree, to assess security preparedness for a business program to be migrated into cloud.

Keywords: Cloud Computing, Security, Utility computing, Threats

FACULTY INTERACTION WITH OUTSIDE WORLD

Dr. P. KAMAKSHI

1. 12 week NPTEL online certification course on "Problem Solving Through programming in C", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.
2. 6 week MOOC on "LifeSkills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
3. Participated in one week Faculty Development Program on "Internet of Things" organized by Electronics and ICT Academies under "Scheme of financial assistance for setting up Electronics and ICT Academies " of Ministry of Electronics and Information Technology(MeitY) from 18th to 22nd June 2018 at NIT Warangal.
4. Participated in 1day National Workshop on "Role of IPR in Innovation Management for Academia-Industry collaboration" on 17.11.8 at NITW.
5. Participated in One week FDP on "Security and Privacy" organized by Electronics and ICT Academies, from 3.12.18 to 8.12,18 at NITW.
6. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.
7. Participated in One week FDP on "Network Security" organized by NIT,Warangal during 20.05.19 to 24.05.19.

G.K.SHAILAJA

1. 12 week NPTEL online certification course on "Programming in Java", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.
2. 6 week MOOC on "LifeSkills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
3. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

Dr. P.SHIREESHA

1. Participated in one week Faculty Development Program on "Big Data Analytics using R-Tools" organized by KITS, Warangal, in association with AICTE-ISTE 02.07.18 to 07.07.18 at KITS Warangal

B. KIRAN KUMAR

1. 6 week MOOC on "LifeSkills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
2. Participated in one week Induction/Refresher Program on "Big Data Analytics using R-Tools" Sponsored by AICTE-ISTE and organized by Dept. of CSE, KITS Warangal, from 2nd July 2018 to 7th July 2018.

3. Attended a Pre-Conference National Workshop on "Emerging Trends in Data Science and Intelligent Computing-2018" held on 25th, 26th July 2018 at JNTUH College of Engineering Sultanpur, Telangana.
4. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

A.BHASKAR

1. 12 week NPTEL online certification course on "Database Mangement System", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.
2. 6 week MOOC on "LifeSkills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
3. Participated in one week Induction/Refresher Program on "Big Data Analytics using R-Tools" Sponsored by AICTE-ISTE and organized by Dept. of CSE, KITS Warangal, from 2nd July 2018 to 7th July 2018.
4. Attended a Pre-Conference National Workshop on "Emerging Trends in Data Science and Intelligent Computing-2018" held on 25th, 26th July 2018 at JNTUH College of Engineering Sultanpur, Telangana.
5. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

Y.BHAVANI

1. 12 week NPTEL online certification course on "Cryptography and Network Security", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.
2. 6 week MOOC on "LifeSkills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
3. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

V.SUNITHA

1. 6 week MOOC on "LifeSkills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
2. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

S.B.SWATHI

1. 12 week NPTEL online certification course on "Programming in Java", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.
2. 6 week MOOC on "Life Skills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
3. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

M.V.PHANINDRA

1. 6 week MOOC on "Life Skills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
2. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

M.KISHORE

1. 12 week NPTEL online certification course on "Programming in Java", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.
2. 6 week MOOC on "Life Skills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
3. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

R.GAUTAM

1. 6 week MOOC on "Life Skills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
2. Participated in One week DP on "Security and Privacy" organized by Electronics and ICT Academies, from 3.12.18 to 8.12,18 at NITW.
3. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

P.SUMA

1. 6 week MOOC on "Life Skills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
2. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

T.MAHESH KUMAR

1. 12 week NPTEL online certification course on "Problem Solving Through programming in C", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.
2. 6 week MOOC on "LifeSkills for Engineers (level II) " offered by Commonwealth Educational Media Center or Asia (CEMCA) and University of Hyderabad(UOH) from 6th November to 20 December 2018.
3. Participated in 2day FDP on "Cloud Computing" organized by Dept. of IT, KITSW and TCS Hyderabad on 21.12.18 & 22.12.18 at KITSW.

Dr.K.Praveen Kumar

1. 12 week NPTEL online certification course on "Cloud Computing", Funded by the Ministry of HRD, Govt. of India", Jan-April 2019.

BOOKS PUBLISHED BY FACULTY:

S.No	Name of the Faculty	Title of The Text Book	Name of The Publisher	Edition	Year
1.	Dr.P.Shireesha	Classification of Data Mining Systems	LuLu Publishers, USA ISBN 9780359635092	First	2019
2.	Dr.P.Shireesha	Agile Software Development and Processes in Software Engineering	LuLu Publishers, USA ISBN 9780359626830	First	2019
3.	Mahesh Kumar Thota	Concepts and Preliminaries of Software Testing	LuLu Publishers, ISBN 9780359635016	First	2019
4.	Dr.K.Praveen Kumar	An Introduction to Progressive Programming from JavaScript to AngularJS	Winkly Publishers, ISBN 9789386647962	First	2019

Events Conducted By Department:

S. No.	Title of the Event	Type of the Event	Resource Person	Date of event
1.	Principles of Programming Languages	Guest Lecture	Mr. Sudhakar Nuthi, Senior Software Engineer, Genzeon Technology Solutions Private Limited,Hyd	August 04th , 2018

Department of Information Technology has organized a Guest Lecture on "Principles of Programming Languages" on 04.08.2018 as part of association activity. Mr. Sudhakar Nuthi, Senior Software Engineer, Genzeon Technology Solutions Private Limited, Hyderabad, delivered the lecture.

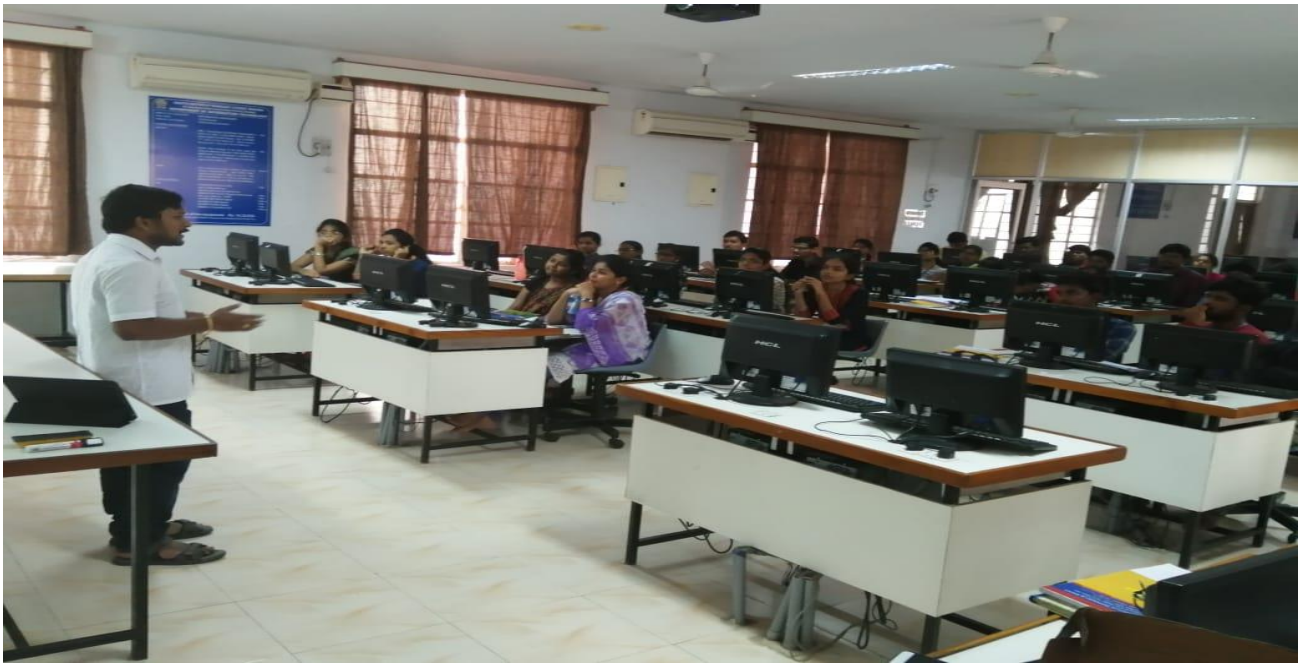
S. No.	Title of the Event	Type of the Event	Resource Person	Date of event
2.	**Exploring Data Security**	Workshop	Mrs.Moutan Sarkar, Fraud and Security Expert, TCS, Pune.	October 04th , 2018

A one day workshop on "*Exploring Data Security*" was organized by the department of Information Technology in association with ISTE on 04.10.2018 as a part of Sumshodini'18. The resource person for this workshop is Mrs.Moutan Sarkar, Fraud and Security Expert, TCS, Pune. She is an expert in Programming languages like C, C++, Java, Python etc...Topics covered on 04.10.2018 includes Cloud computing, Sensor and Device management, Networks and Information Security, Risks, Cyber security and Emerging Cyber threats, Security Tools and Resources. More than 150 students were registered for this workshop.

S. No.	Title of the Event	Type of the Event	Resource Person	Date of event
3.	Cloud Computing	FDP	Mr. Pavan Kumar Allu, Head, Cloud Services, Mr. Harish Dharmavaram, Technical Consultant and Mr. Kiran Kumar Noupada, Technical Consultant, TCS Hyderabad	December 21st & 22nd , 2018

Two day faculty development program on "Cloud Computing" was organized by the department of Information Technology in association with TCS, Hyderabad during December 21st & 22nd , 2018. The resource persons for this workshop are Mr. Pavan Kumar Allu, Head, Cloud Services, Mr. Harish Dharmavaram, Technical Consultant and Mr. Kiran Kumar Noupada, Technical Consultant, TCS Hyderabad .More than 40 faculty members were registered for this faculty development program.

S. No.	Title of the Event	Type of the Event	Resource Person	Date of event
4.	"Current Trends in Artificial Intelligence & Machine Learning"	Guest Lecture	Mr. P. Bhanu Laxman, Founder & CCO, PABBAS Software Technologies, Warangal	Feburary 11th , 2019



Department of IT, organized Guest Lecture by Mr. P. Bhanu Laxman, Founder & CCO, PABBAS Software Technologies, Warangal. This session was organized on 11.02.19 at New Seminar Hall. His talk made the students to know about the Artificial Intelligence and Machine Learning . More than 70 students were registered for this program.

S. No.	Title of the Event	Type of the Event	Resource Person	Date of event
5.	"Search Engine Optimization" (conducted for Professional Elective: Information Retrieval system)	Guest Lecture	Mr. Pabba Chandra Kamal, Data Scientist, Cigniti Technologies Ltd. Hyderabad	March 30th , 2019

Department of Information Technology has organized a Guest Lecture on “Search Engine Optimization" on 30th March, 2019 conducted for Professional Elective Course: "Information Retrieval system". Mr. Pabba Chandra Kamal, Data Scientist, Cigniti Technologies Ltd. Hyderabad .delivered the lecture. Department has made the arrangements in Block-V Information Laboratory and about 70 students were attended the guest lecture.

Industry Visits:

S.No	Industry visited	Dates of Visited	No. of Students
1.	INCOIS, Hyderabad	13.03.19	45
2.	Infosys, Hyderabad (Pocharam Campus)	03.04.19	15

B.Tech.(IT) VI Sem.Students visited Incois Pvt. Ltd., Hyderabad on 13.03.2019 as part of Industrial Visit.

B.Tech.(IT) VI Semester .Students interacting with Mr.Sharath Kumar,Senior Developer TCS, Hyderabad on 03.04.2019 during Industrial Visit.

Faculty Industrial Visit:

S.No	Industry visited	Dates of Visited
1	TS Transco 220/132/33 KV Sub Station, Mahabubabad	02.02.2019

Dr.P.Kamakshi, Head, Dept.of IT and faculty of the department visited 220/132/33 KV sub-station Mahabubabad, Warangal on 02-02-2019.

Students Placements:

S. No.	Roll No.	Name of the Student	Selected for company	CTC (LPA)
1	B15IT002	KATKAM PRIYANKA	TCS-Ninja	3.36
			Infosys	3.60
2	B15IT003	AKULA SARIKA	Cyient	3.00
3	B15IT005	THAMMISHETTY VENKATA LAXMI	Cognizant	3.38
4	B15IT006	GANDE MANITEJA	TCS-Ninja	3.36
			Cognizant	3.38
5	B15IT008	PANCHANANA APOORVA	MuSigma	7.00
6	B15IT009	DAHAGAM VISHWANATH SHARMA	Mphasis	2.52
7	B15IT010	MACHARLA VINAY KUMAR	Cognizant	3.38
8	B15IT011	GUDURI MANEESHA	Mphasis	2.52
			Cognizant	3.38
9	B15IT013	GUSKA VHYBHAVI	Red Carpet	3.50
10	B15IT016	BOMMINENI VENUMADHAV REDDY	Wipro	3.50
11	B15IT017	VELAGANDULA SINDHUJA	Mphasis	2.52
			TCS-Ninja	3.36
12	B15IT018	RAYABARAPU RANJITH	Znalytics	2.25
13	B15IT020	SRIPADA SANJAY KUMAR	Syntel	3.20
14	B15IT021	DYAGALA SAIKRISHNA	TCS-Ninja	3.36
			Cognizant	3.38
			Infosys	3.60
15	B15IT023	SUMAYYA SHAIK	TCS-Ninja	3.36
16	B15IT024	KEERTHI ANURAG	Mphasis	2.52
			TCS-Ninja	3.36
			Value Momentum	3.00
			Wipro	3.50
			Infosys	3.60
17	B15IT026	MANCHALA ASHISH	Infosys	3.60
			ATOS Syntel	3.20
18	B15IT027	KURUVA MAHENDRA BABU	TCS-Ninja	3.36
19	B15IT028	KAKKUNURU LAXMI CHARITHA	TCS-Ninja	3.36
20	B15IT030	KODATI YASHASHWINI	TCS-Ninja	3.36
			Infosys	3.60
21	B15IT033	GALINGULA PRIYANKA	Navayuga Infotech	2.40
22	B15IT036	ADDAGUDI SRI HARSHINI	TATA Elxsi	3.00
23	B15IT037	MOTHE DIVYALAKSHMI	CtrlS	3.75
24	B15IT038	DODDA SNEHA	AD3i	3.50
25	B15IT039	GADE SAIPRIYA	HCL	3.50
26	B15IT046	SABA SHIREEN	Syntel	3.20
27	B15IT049	BADAVATH VIHARIKA	Red Carpet	3.50

S. No.	Roll No.	Name of the Student	Selected for company	CTC (LPA)
28	B15IT051	GAMPA SRUJANA	Mphasis	2.52
			Wipro	3.50
			Optum UHL	6.50
29	B15IT053	NARLA RASWITHA	Wipro	3.50
30	B15IT055	SUSHMITHA LAKMA	Mphasis	2.52
			Infosys	3.60
31	B15IT056	VAKULABHARANAM MANIDEEP	TCS-Ninja	3.36
32	B15IT059	JOHN NIKHITHA	QSpiders	3.60

Faculty Contribution:

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By Dr.P.Kamakshi

Professor & Head, Dept. of I.T.

Colors of Life

Everyone and everything, known and unknown sprinkled

the colors on canvas of my life.

The dark and bright colors have shown the darker and brighter side of life.

Some special nice colors with different gradient still need to define their names

because they were not exactly same as taught in my childhood.

I also believed the opinions of people like advertisements,

that one special color will be very good and permanent throughout the life.

But it was all fantasy, it faded as time passed by.

You are the only stranger who was with me but hidden yourself for nine months.

Dear son one day you came to this world and spread the canvas with lovely colors ,

Making a beautiful picture with meaning of my life.

Dr. P.Kamakshi
Professor & Head, Dept. of I.T.

Student's Contribution:

You are a dictionary to define my words..

You are a map to direct my path..

You are a spark to ignite my soul..

You are a solution to every problem I face..

You are a creeper to hold me tight..

You are a king to protect your princess..

You are a savior to my life worthy..

You are the only love for me to stay alive..

For world he is just a man..

For a daughter he is the world("D@D")..

-D.Preethika
B16IT040

BLOCK CHAIN TECHNOLOGY

The growth of Bitcoin and Blockchain technology has been so rapid, that even those who haven't heard of cryptocurrency or know about its working, are looking to invest and explore this field. This

Blockchain tutorial blog will essentially provide you with all the fundamental knowledge you need regarding Bitcoin and Blockchain in the following sequence:

1. Issues with the current Banking System
2. How Blockchain solves these issues
3. What is Blockchain and Bitcoin
4. Features of Blockchain
5. Use Case
6. Demo: Implementing Digital Banking using Blockchain

Blockchain technology and the crypto-currencies have today become a parallel platform where people have started performing their standard transactions. Now, if a new system is slowly replacing an existing system then there must be some issues with the current system. We will begin this Blockchain tutorial blog by understanding the problems of the current banking system.

Issues with Current Banking System:

Any existing system will have some issues. Let us look at some of the most commonly faced issues with the Banking system

- High Transaction Fees

Let's look at an example to understand this issue better:

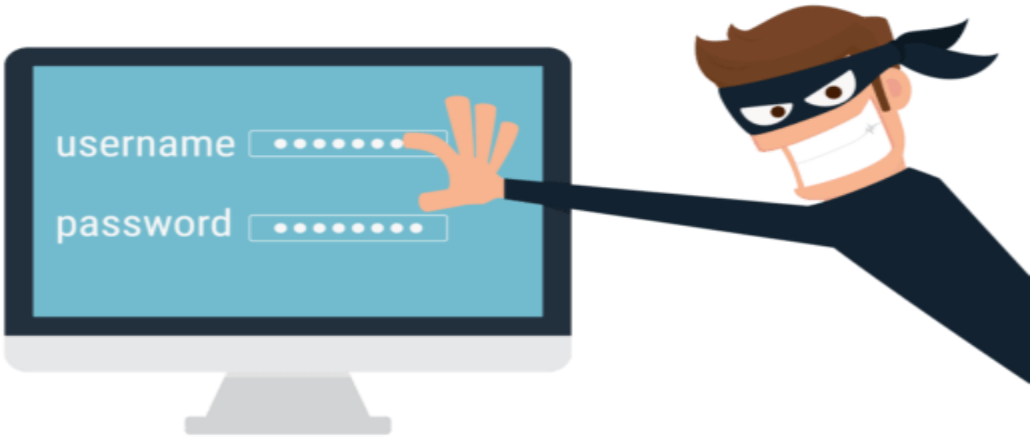
Here, Chandler is sending $100 to Joe but it must pass through a trusted third party like a Bank or Financial service company before Joe can receive it. A transaction fees of 2% is deducted from this amount and Joe only receives $98 at the end of the transaction. Now this may not seem a big amount but imagine if you were sending $100,000 instead of $100, then the transaction fees also increases to $2,000 which is a big amount. As per a report from SNL Financial and CNN Money, JPMorgan Chase, Bank of America and Wells Fargo earned more than $6 billion from ATM and overdraft fees in 2015.

- **Double Spending**

Double-spending is an error in digital cash scheme in which the same single digital token is spent twice or more. To help you understand this problem better, let me give you an example:

Here Peter has only $500 in his account. He initiates 2 transactions simultaneously to Adam for $400 and Mary for $500. Normally this transaction would not go through as he doesn't have sufficient balance of $900 in his account. However, by duplicating or falsifying the digital token associated with every digital transaction, he can complete these transactions without the needed balance. This operation is known as Double Spending.

- **Net Frauds and Account Hacking**



In India, the number of fraud cases related to credit/debit cards and Internet banking was 14,824 for the year 2016. The net amount involved in these frauds was Rs 77.79 crore, of which Rs 21 crore was from internet frauds and Rs 41.64 crore was from ATM/debit card-related frauds.

- **Financial Crisis and Crashes**

Imagine giving all your saving to someone you trust only to know that they have gone and lost it somewhere else. That's what happened in the 2007-08 when Banks and Investment Organisations had borrowed heavily and lent it as subprime mortgages to people who could not even pay back these loans. This in turn lead to one of the greatest financial crisis ever seen and was estimated to have caused losses close to $11 Trillion ($11,000,000,000,000) worldwide. This was just one of the most popular examples, how often have we heard of Banks and Financial service companies crash due to internal frauds? The whole third-party system is something that is built on blind trust on the middle man.

We have seen some of the most common problems faced by everyone. Wouldn't it be great to have a system that overcame these problems and provided us with a That's exactly what Blockchain Technology does.

Let us now try to understand how Blockchain and Bitcoins solve these issues as the next part of this Blockchain tutorial blog.

How does Blockchain solve these issues?

Below are some of the ways through which the Blockchain technology tackles the above mentioned issues:

- **Decentralized System**

The Blockchain system follows a decentralized approach when compared to banks and financial organisations which are controlled and governed by Central or Federal Authorities. Here, everyone who is part of the system becomes equally responsible for the growth and downfall of the system. Rather than one single entity holding the power, everyone who is involved with the system holds some power.

- **Public Ledgers**

The ledger which holds the details of all transactions which happen on the Blockchain, is open and completely accessible to everyone who is associated with the system. Once you join the Blockchain network, then you can download the complete list of transaction since its initiation. Even though the complete ledger is publicly accessible, the details of the people involved in the transactions remains completely anonymous.

- **Verification of Every Individual Transaction**

Every single transaction is verified by cross-checking the ledger and the validation signal of the transaction is sent after a few minutes. Through the usage of several complex encryption and hashing algorithm, the issue of double spending is eliminated.

- **Low or No Transaction Fees**

The transaction fees are usually not applicable but certain variants of Blockchain do implement certain minimal transactions fees. These transaction fees are however relatively quite less when compared to the fees implied by banks and other financial organisations. If a transaction needs to be completed on priority then an additional transaction fees can be added by the user so as to have the transaction verified on priority.

Now that we have spoken about the issues with the current existing system and understood how the Blockchain technology overcomes these challenges, I am quite sure you must have got some understanding of the Blockchain System.

At this point you might still be wondering as to what exactly is the Blockchain and Bitcoin

What is Blockchain and Bitcoin?

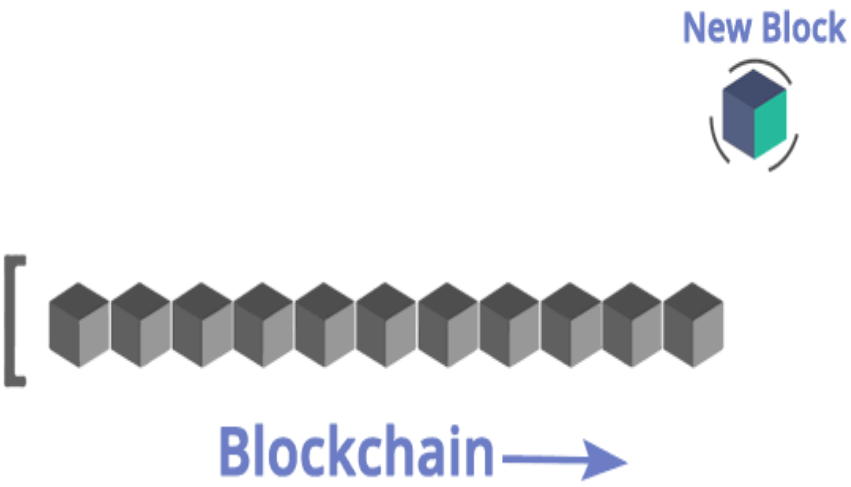
Before we go on to understand what is Blockchain, it important that you understand what is Bitcoin:

Bitcoins are a crypto-currency and digital payment system invented by an unknown programmer, or a group of programmers, under the name Satoshi Nakamoto. That means they can be used like a usual currency, but don't physically exist like dollar bills. They are an online currency which can be used to buy things. These are similar to "digital cash" that exist as bits on people's computers. Bitcoins exist only in the cloud, like Paypal, Citrus or Paytm. Even though they are virtual, rather than physical, they are used like cash when transferred between people through the web.

The Bitcoin system is peer-to-peer network based and transactions take place between users directly, without an intermediary. These transactions are verified by network nodes and recorded in a public distributed ledger called a Blockchain. Since the system works without a central repository or single administrator, Bitcoin is called the first decentralized digital currency.

Bitcoin production makes them a unique currency. Unlike normal currencies, Bitcoins cannot be created as needed. Only 21 Million Bitcoins can be created, of with 17 million have already been created. Bitcoin get created whenever a block containing valid transactions is added to the Blockchain. This is the only means for creating Bitcoins and through various mathematical and encryption algorithms we ensure no fake Bitcoins are created or circulated. Let us now understand more Blockchain.

What is Blockchain?



Blockchain can be called the spine of the entire crypto-currency system. Blockchain technology not only helps with the users perform transactions using crypto-currencies but also ensures the security and anonymity of the users involved. It is a continuously growing list of records called blocks, which are linked and secured using cryptographic techniques. A Blockchain can serve as "an open and distributed ledger, that can record transactions between two parties in a verifiable and permanent way." This ledger that is shared among everyone in the network is public for all to view.This brings in transparency and trust into the system.

A block is the 'current' part of a Blockchain which records some or all of the recent transactions, and once completed goes into the Blockchain as permanent database. Each time a block gets completed, a new block is generated.

The Blockchain is typically managed by a peer-to-peer network, collectively adhering to a protocol for validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all subsequent blocks and a collusion of the network majority. Transactions once stored in the Blockchain are permanent. They cannot be hacked or manipulated. We will learn more about this once we get into the concepts of Blockchain.

Now I hope you have a better understanding of both Bitcoin and Blockchain. Moving ahead in our Blockchain tutorial blog, let us look at the features of Blockchain technology to help us understand why it has become so popular.

Results:

- Provided a secure **Data Exchange** platform for all the stakeholders involved in the supply chain system.
- Established a **Tamper proof repository** to store all the documents involved as part of the process.
- Regular shipping events help reduce significant **Delays and Frauds**, saving Billions of dollars annually.
- **Reduced the barrier** between trade organisations thereby increasing worldwide GDP by 3%.
- Helped **increase the overall trade volume** by 12%.