

# CS WORLD

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## **ABOUT IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)**

IEEE, an association dedicated to advancing innovation and technological excellence for the benefit of humanity, is the world's largest technical professional society. It is designed to serve professionals involved in all aspects of the electrical, electronic, and computing fields and related areas of science and technology that underlie modern civilization. IEEE's roots go back to 1884 when electricity began to become a major influence in society. There was one major established electrical industry, the telegraph, which since the 1840s had come to connect the world with a data communications system faster than the speed of transportation. The telephone and electric power and light industries had just gotten underway.

#### **DevOps**

Developers and IT/Ops professionals had separate (and often competing) objectives, separate department leadership, separate key performance indicators by which they were judged, and often worked on separate floors or even separate buildings. The result was siloed teams concerned only with their own fiefdoms, long hours, botched releases, and unhappy customers. The bad news is that DevOps isn't magic, and transformations don't happen overnight. The good news is that you don't have to wait for upper management to roll out a largescale initiative. By understanding the value of DevOps and making small, incremental changes, your team can embark on the DevOps journey right away. Let's look at each of these benefits in detail.

> -NANAM VAISHNAVI (17881A0556) 3rd Year,CSE

## **ABOUT IEEE CS (COMPUTER SOCIETY)**

IEEE Computer Society is the leading provider of technical information, community services and personalized services to the world's computing and computer science professionals. IEEE Computer Society strives to be essential to the global technical community and computer professionals everywhere and be universally recognized for the contributions of technical professionals in researching, developing, and applying technology to improve global conditions. The Computer Society serves the information and career-development needs of today's computing researchers and professionals with books, conferences, conference publications, magazines, online courses, software development certifications, standards, and technical journals. Known worldwide for its computer-standards activities, the Computer Society promotes an active exchange of ideas and technological innovation among members and technology companies producing today's innovative products and services. Teaching more than 100,000 science and technology professionals, the computer society is the largest of IEEE's 38 societies.

#### Angular and React:

Angular and React are JavaScript based Frameworks for creating modern web applications. while React is a frontedlibrary with lots of opensource packages to integrate with..Using React and Angular one can create a highly modular web app. So, you don't need to go through a lot of changes in your code base for adding a new feature. Angular and React also allows you to create a native mobile application with the same JS, CSS & HTML knowledge.Best part -Open source library with highly active community support. The goal of this article is not to find the best technology, but to compare, highlight, and clarify few misconceptions. We'll also focus on what is important instead of minor details that do not really matter in the long-term.

> P SatyHarika (18881A05N7) 2nd Year CSE D

#### Internet of Things (IoT):

IoT essentially is connecting many devices and creating a virtual network where everything works seamlessly via a single monitoring center of sorts.IoT is a giant network of connected devices – all of which gather and share data about how they are used and the environments in which they are operated.Another buzzword that no longer remains a buzzword but has become a full-fledged technology ecosystem in itself.

- S.SHASHI KUMAR 17881A0544

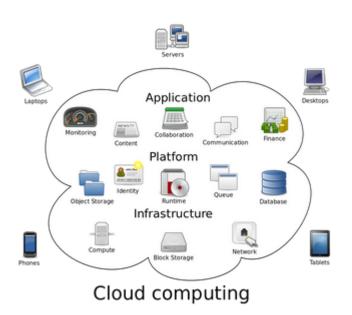
## **NEXT GEN CLOUD**

A cloud system or cloud computing technology refers to the computing components (hardware, software and infrastructure) that enable the delivery of cloud computing services such as: SaaS (software as a service), PaaS (platform as a service) and IaaS (infrastructure as service) via a network (i.e. the Internet). Cloud system users access computing services using web browsers, which represents a computing model that shifts the computing workload to a remote location. Internet based email applications are a prime example of a cloud system that provides a platform for the delivery electronic messaging services. Cloud computing is also sometimes referred to as utility computing, since consumer usage of cloud systems is metered and billed in a manner similar to a commodity like water or electric services.

A cloud allows users to access application, information, and data of all sorts on an online level rather than by use of actual hardware or devices. A company offering reliable cloud technology allows for computing to be done in a much more shared way, as a cloud provides a service rather than a product. Users get and share their information in a way that can allow them to access and give access to the whole world or any groups of people within their cloud.

With cloud computing and the technology behind it there are many potential opportunities and capabilities. Cloud computing can open a whole new world of jobs, services, platforms, applications, and much more. There are thousands of possibilities beginning to form as the future of cloud computing starts to really take off. For instance, vendors and service providers can get on board to develop new and different ways of selling their goods and services to the cloud users through the cloud technology. It opens up a whole new platform for designers and web developers. Businesses and organizations can organize themselves and conduct business much more affordable and professionally. Social networking and keeping in touch with friends gets a great deal easier as well.

The main reason that the future of cloud computing will be as powerful and expansive as it portends to be is that cloud technology is extremely beneficial. For one thing, the extreme agility and accessibility of a cloud is far superior to the use of current technology. No matter where in the world someone happens to be, or what device they are using, they can access their cloud and continue to do their work or share their information.



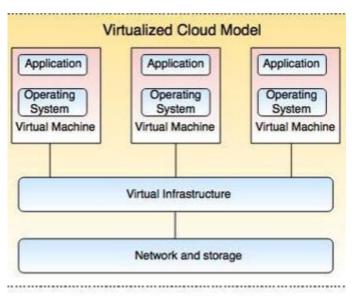
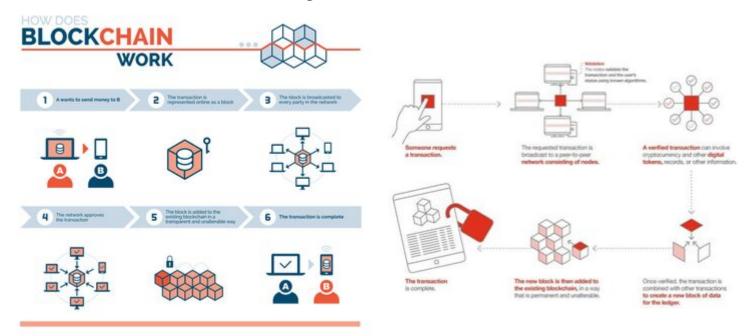


Fig.- Virtuallized Cloud Model

# THE THEORY OF CHAINS

If this technology is so complex, why call it "blockchain?" At its most basic level, blockchain is literally just a chain of blocks, but not in the traditional sense of those words. When we say the words "block" and "chain" in this context, we are actually talking about digital information (the "block") stored in a public database (the "chain"). "Blocks" on the blockchain are made up of digital pieces of information. Specifically, they have three parts:Blocks store information about transactions like the date, time, and dollar amount of your most recent purchase from Amazon. (NOTE: This Amazon example is for illustrative purchases; Amazon retail does not work on a blockchain principle) Blocks store information about who is participating in transactions. A block for your splurge purchase from Amazon would record your name along with Amazon.com, Inc. Instead of using your actual name, your purchase is recorded without any identifying information using a unique "digital signature," sort of like a username. Blocks store information that distinguishes them from other blocks. Much like you and I have names to distinguish us from one another, each block stores a unique code called a "hash" that allows us to tell it apart from every other block. Let's say you made your splurge purchase on Amazon, but while it's in transit, you decide you just can't resist and need a second one. Even though the details of your new transaction would look nearly identical to your earlier purchase, we can still tell the blocks apart because of their unique codes. While the block in the example above is being used to store a single purchase from Amazon, the reality is a little different. A single block on the blockchain can actually store up to 1 MB of data. Depending on the size of the transactions, that means a single block can house a few thousand transactions under one roof.



Each computer in the blockchain network has its own copy of the blockchain, which means that there are thousands, or in the case of Bitcoin, millions of copies of the same blockchain. Although each copy of the blockchain is identical, spreading that information across a network of computers makes the information more difficult to manipulate. With blockchain, there isn't a single, definitive account of events that can be manipulated. Instead, a hacker would need to manipulate every copy of the blockchain on the network.

Anyone can view the contents of the blockchain, but users can also opt to connect their computers to the blockchain network. In doing so, their computer receives a copy of the blockchain that is updated automatically whenever a new block is added, sort of like a Facebook News Feed that gives a live update whenever a new status is posted.

# **Upcoming Events**

#### **INTERNATIONAL IEEE DAY CELEBRATIONS 2019**

The celebration of IEEE Day on 1 October 2019 is the 10th year celebrating this historic event! Worldwide celebrations demonstrate the ways thousands of IEEE members in local communities join together to collaborate on ideas that leverage technology for a better tomorrow. The IEEE Day team is made up of IEEE volunteers and staff. Together, they work to assure that this year's celebration will be even bigger and more impressive than the last editions. The principle task of the IEEE Day team is to initiate, motivate, and coordinate events and efforts to celebrate this day worldwide. In addition to a enjoyable time and empowering members to engineer the future and beyond, the team actively supports members and volunteers.

#### IEEE XTREME 13.0(www.ieeextreme.org

IEEEXtreme is a global challenge in which teams of IEEE Student members – advised and proctored by an IEEE member, and often supported by an IEEE Student Branch – compete in a 24-hour time span against each other to solve a set of programming problems.

This year's competition will be held on 19 October 00:00:00 UTC.

Any case of code plagiarism will result in disqualification of both the users from the contest. We've a fairly good plagiarism detector that works at the opcode level. You can code directly on our interface. We support 20 major languages. You can have a look at the environment in which we run your code. You can try out sample code given in Solve Me First to get familiar with I/O.

#### 11th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2019)(www.mirlabs.net/SoCPaR19)

SoCPaR 2019 is organized to bring together worldwide leading researchers and practitioners interested in advancing the state of the art in Soft Computing and Pattern Recognition, The themes for this conference are thus focused on "Innovating and Inspiring Soft Computing and Intelligent Pattern Recognition".

The conference is expected to provide an opportunity for the researchers to meet and discuss the latest solutions, scientific results and methods in solving intriguing problems in the fields of soft Computing and Pattern Recognition. The General Chairs, along with the entire team cordially invite you to submit your latest research results and to take part in the upcoming conference, to be held during December 13-15, 2019 in Hyderabad, India.

#### 11th World Congress on Nature and Biologically Inspired Computing (NaBIC 2019)(www.mirlabs.net/nabic19)

.The 11th World Congress on Nature and Biologically Inspired Computing (NaBIC 2019) to be held in Hyderabad, India during December 13-15, 2019. NaBIC 2019 is organized to provide a forum for researchers, engineers, and students from all over the world, to discuss the state-of-the-art in machine intelligence, and address various issues on building up human friendly machines by learning from nature. The conference theme is "Nurturing Intelligent Computing Towards Advancement of Machine Intelligence".

# **OUR SB ACTIVITIES**

IEEE Computer Society Vardhaman Chapter has a comprehensive and vibrant schedule of events which are being hosted this academic year. This chapter is targeting the most happening tech in the computer science world and is hosting workshops on these cutting edge technologies.

The chapter has so far hosted hands on workshops on "Web-Technologies" and "Azure /Docker/kubernetes", with many more to come this year.

# Programming contest on C and Data Structures

The aim of the Contest was to Getting aware Competition around world and organized a contest on topics like C,DATA STRUCTURES, and It was a complete handson session so as to make students to learn in a completely different fashion opposite to regular learning. The Competition was attended by 70 students from department Of C.S.E. in Vardhaman College of Engineering.

-September 7th 2019

### Programming Codethon on Java

he aim of the Contest was to Getting aware Competition around world and organized a ontest on topics—like JAVA and It was a omplete hands-on session so as to make tudents to learn in a completely different ashion opposite to regular learning .The competition was attended by 50 tudents from epartment Of C.S.E. in Vardhaman College of ngineering.

- September 13th 2019

# COMMITTEE

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### IEEE Computer Society Project Expo

The aim of the Contest was to Getting aware Competition around world and organized a contest on topics like to develop new strategys on trending technologies and build their own perspective models which was on application board are ranked according to their scores. Cumulative time taken to solve the challenge is used as a tie-breaker. Each challenge has a pre-determined score. Please refrain from discussing strategy during the contest was the stratergy used for participants and It was a complete hands-on session so as to make students to learn in a completely different fashion opposite to regular learning. The Competition was attended by 40 students from department Of C.S.E. in Vardhaman College of Engineering.

September 25th 2019.

### Programming Codathon on SQL and Python

The aim of the Contest was to Getting aware Competition around world and organized a contest on topics like PYTHON,S QLParticipants are ranked according to their scores. Cumulative time taken to solve the challenge is used as a tie-breaker. Each challenge has a pre-determined score. Please refrain from discussing strategy during the contest was the stratergy used for participants and It was a complete hands-on session so as to make students to learn in a completely different fashion opposite to regular learning. The Competition was attended by 80 students from department Of C.S.E. in Vardhaman College of Engineering.

Any case of code plagiarism will result in disqualification of both the users from the contest. We've a fairly good plagiarism detector that works at the opcode level.

-September 21st 2019.