



Gyan Ganga Institute of Technology and Sciences

March 2023

The Genesis

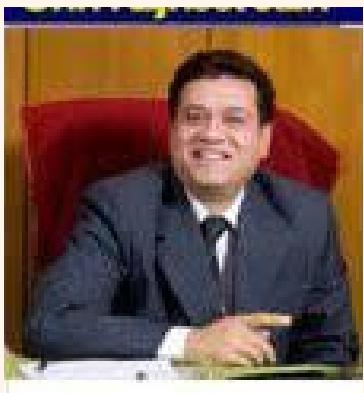
eNewsletter of
Department of Computer Science and Engineering



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Dr. Rajneet Jain
Chairman

Word From Chairman

Students have taken a good and important initiative to establish coordination between all the branches of engineering department. With this e-newsletter students will get chances to groom themselves with the innovations that are done in Technology sectors.

Word From Principal

I congratulate the students for coming out with this brilliant idea for starting this newsletter. In ancient times, the nations with greatest military power were considered the most powerful nations. Later on, nations with healthiest and wealthiest economy were deemed as powerful nations. But today, the countries with most abundant in knowledge and intellect are the greatest nations.



Dr. Ravindra V Kshirsagar
Principal

Vision

- Imparting the best technical and professional education to the students of the Institute.
- Developing all the Departments of the Institute as Centers of Excellence.
- Creating the most congenial and cordial environment of Teaching, Learning and Research in the Institute.

Mission

- Imparting intensive teaching and training through latest technology
- Motivating the teachers for higher learning and innovative research activities with social services.
- Producing highly intellectual citizens through technical education to constitute an elegant society and meeting social challenges.

BLOCKCHAIN TECHNOLOGY



Biggest Opportunity, we think of over the next decades or so.....

Stuart Haber and W. Scott Stornetta are the people who first visualize the concept of digital ledger technology what popularly known as Blockchain Technology, in 1991. They work on a concept of cryptographically secured chain of blocks and in 1992, upgraded their system to enhance efficiency by enabling the collection of more documents on a single block.

Further in 2008 Blockchain starts to gain relevance, thanks to Satoshi Nakamoto, Still Anonymous people considering a person or a group. Satoshi is the brain behind utilizing the concept of immutable digital ledger technology “Bitcoin” (A Crypto currency) as a first application of Blockchain technology and from here the technology found its way in many applications beyond crypto currencies.

In 2009, Satoshi published the first whitepaper on the technology. He explained in the whitepaper how the decentralized feature of the technology meant that nobody would ever be in control of anything and that it was therefore well suited to enhancing digital trust.

Then, Satoshi Nakamoto handed over Bitcoin development to other core developers, the digital ledger technology has evolved resulting in new applications that make up the blockchain History. Most of the people believe that Bitcoin and Blockchain is one and the same thing. However, that is not the case, as one is the underlying technology that powers most applications of which one of them is cryptocurrencies. Blockchain is a decentralized, immutable database that makes it easier to track assets and record transactions in a corporate network. An asset may be tangible (such as a home, car, money, or land) or intangible (intellectual property, patents, copyrights, branding). In a blockchain network, practically anything of value may be recorded and traded, lowering risk and increasing efficiency and trust for all parties.

Some Blockchain Use Cases:

- International Payments.
- Capital Markets.
- Trade Finance.
- Regulatory Compliance and Audit.
- Money Laundering Protection.
- Insurance.
- Peer-to-Peer Transactions.

Revolutionising Business Operations: The Power of AI

Artificial Intelligence (AI) is a revolutionary technology that is transforming the way businesses operate. AI is the simulation of human intelligence in machines that can perform tasks that require human intelligence. The technology is making significant strides in various areas of business operations, including customer service, predictive analytics, fraud detection, and marketing.

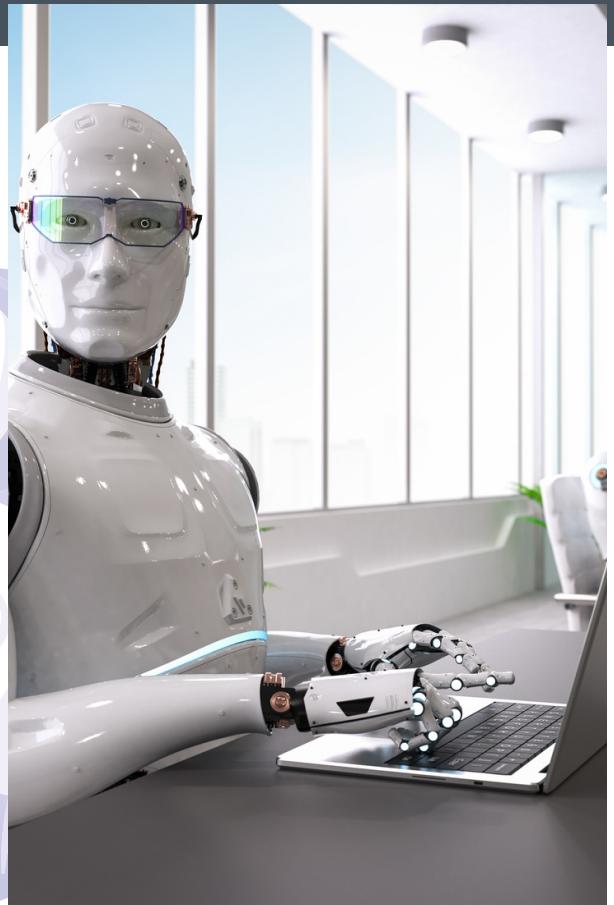
Customer service is one of the most important areas where AI is being used in business. With AI-powered chatbots, businesses can offer 24/7 support, significantly reducing response time and improving customer satisfaction. AI-powered chatbots use natural language processing to understand customer queries and provide accurate responses quickly.

AI-powered predictive analytics is another area where AI is making significant strides. Predictive analytics uses machine learning algorithms to analyze data, identify patterns, and make accurate predictions about future trends. This technology helps businesses forecast demand, optimize inventory, and manage supply chain operations more effectively.

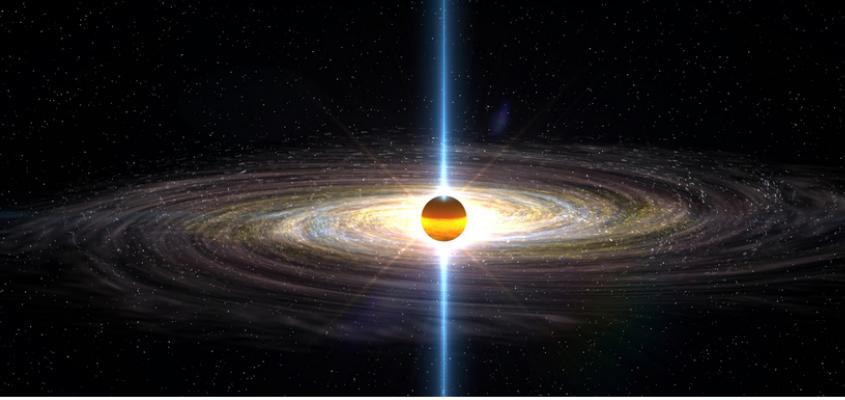
AI is also being used to detect and prevent fraudulent activities. Fraudulent activities can be detected and prevented in real-time using AI-powered fraud detection algorithms. These algorithms can detect suspicious patterns and prevent financial losses due to fraudulent activities.

AI-powered marketing is also becoming increasingly popular. This technology uses machine learning algorithms to analyse customer data and personalise marketing messages. This helps businesses deliver highly targeted marketing campaigns that are more likely to convert customers.

In conclusion, AI is transforming the way businesses operate, manage their processes, and connect with their customers. AI-powered technologies are helping businesses optimise their operations, make informed decisions, and stay ahead of the competition. As AI continues to evolve, businesses will need to embrace this technology to remain competitive and relevant in the rapidly changing business landscape.



DO BLACK HOLES INDEED EXIST?



BLACK HOLES are among the most alluring and peculiar objects in our universe . A black hole is a region in space where the gravitational force is extremely strong so that not even light can escape from it . Black holes are made from big stars . Due to strong gravitational force ,the star collapses and the mass of the star becomes small and condensed , then the star turns into a Black Hole . Scientists estimate that in our Milky Way Galaxy , there are anywhere between 10 million to 1 billion such black holes .

Black Holes remained largely unknown until the 20th century . When Einstein presented his Theory Of General Relativity , the concept of black holes first appeared . A major point in Einstein's theory was that “ light's speed limits gravity's influence ” . And Einstein knew that theoretically , objects that can absorb light completely were exist . But he did not know that these are Black Holes . After a lot of research , it was theoretically proven that things like Black Holes , do indeed exist . In 1916 , using Einstein's General Theory Of Relativity , a German physicist , Karl Schwartzschild estimated that any mass can become a black hole if it was compressed tightly . And by the end of 1960's , scientists had finally agreed , practically black holes do exist in space .

After that scientists have theorized several different types of black holes- **Stellar Black Holes , Supermassive Black Holes , Intermediate Black Holes and Miniature Black Holes** . Among these Stellar and Supermassive are most common . Stellar Black Holes are form when massive stars collapse . Supermassive Black Holes are so giant that their mass is more than that of 1 million Suns combined .

The Supermassive Black Hole in our Milky Way Galaxy is **Sagittarius A** . Scientists can only guess how Black Holes form but they still unable to find out what is actually inside a Black Hole and they are still trying to uncover the hidden secrets of Black Holes . In 2014 , there was a blockbuster film by Director Christopher Nolan , “ **INTERSTELLAR** ” in which the concept of Black Holes was depicted in a scientifically accurate way .

5G Stepping into the New World

Technology

5G is designed to provide more connectivity than was ever available before. 5G technology is meant to deliver higher multi-Gbps peak data speeds, ultra-low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users. It is a unified, more capable air interface. It has been developed with an extended capacity to enable next-level user experiences and deliver new services.

How will 5G impact Industries?

5G technology will affect many industries on a global level, but it will primarily impact the healthcare industry, transportation, media and entertainment, financial services, etc. In the healthcare industry, 5G technology can revolutionise the medical industry in many ways, like conducting remote surgeries as 5G promises ultra-low latency.

A 5G-enabled emergency response system allows patients to receive expert treatment while they are rushed to the hospital. Also, it will help in patient monitoring. Transportation systems ranging from public buses to private logistic fleets will gain increased visibility and control thanks to 5G, the report said. 5G will allow improved vehicle-to-vehicle communications, enabling more self-driving car testing.

These networks will also help cities gain access to more data about their transportation systems. The digitization of financial institutions can be improved with 5G. Moreover, increased speed and security will allow users to increasingly make transactions instantly on their devices.

5G is expected to usher in a new world of ultra-high-definition mobile streaming video as well as immersive media, such as real-time, 360-degree video, augmented reality (AR) and virtual reality (VR), in-car entertainment, advanced video games, holographic displays, immersive advertising, and many other incredible new environments and approaches for entertainment.

Tanishk Mahere
CSE (1st Year)

Diversify Your Portfolio



The world of Finance is Changing at a dazzling pace. Cryptocurrencies, decentralized finance, and tokenized assets are disrupting the whole concept of investing—and who is putting their, money to work to build their future. RealT is at the forefront of the investment revolution with latest technology blockchain real estate. Tokenized real estate makes it easier to buy and sell real estate interest, adding liquidity to the market while increasing transparency and security. Its providing a value that has been crucial to investors since dawn of time: diversification.

Yes, DeFi changing the way we invest, but certain economic core concept remain consistent, the importance of diversification being foremost. Diversification is a technique that reduces risk by allocating investments across various financial instruments, industries, and other categories.

Why Diversify your portfolio?

--Diversification ensures that by not “putting all your eggs in one basket”, you will not be creating an unwanted risk to your capital. Diversifying your stock portfolio is important because it keeps any part of your investments assets from being too heavily weighted toward one company or sector.

The Pure Crypto Investors

RealT fractional real estate ownership is powered by the latest technology blockchain (which help RealT to analyze data and calculate the risk and return percentage easily), so naturally it has gained the attention of crypto investors. To the pure crypto investors diversification means holding different crypto currencies at a time, but in RealT it is not true. (Cryptocurrencies are typically speculative investments and the entire crypto market sometimes moves in concert based on major news, such as China cracking down on crypto miners.)

The Traditional Real Estate Investors

On the other end of the scale, traditional real estate investors are enthusiastic for RealT's real estate blockchain. These individuals typically hold no crypto but have exciting real estate investments, such as single-family homes and apartment buildings. For this demographic, RealT provides two strong forms of diversification. First they can quickly and easily diversify their overall real estate holdings. (Instead of making one or two large real estate investments , they can harness the RealT platform to buy fractional ownership in a variety of properties in multiple cities.) Furthermore, RealT's marketplace flies at the speed of light compared to traditional real estate investing. In a matter of days, a real estate investor can own tokens in multiple properties generating rent, and he or she can also sell those tokens back to reinvest in another location or if they require additional liquidity.

Written by:

**Shashank Shekhar Pandey
CSE(2nd Year)**

Referenced From

RealT.co

Boundless Creations

The inner child

Everyone has an inner child inside,
Who wakes up and cries all night.
About the things she did wrong,
As she stayed strong for too long.
There's a massacre of innocence and
kindness in your heart,
That takes place as you grow up,
And this new void makes you fall apart,
So you can't show up,
But trust me,
Once you understand your soul's divinity,
In solitude, you'll find real joy and serenity.

- Aastha Mishra CSE 2nd Sem



- Shivani Bachle EC 8th Sem



- Tanishk Kushwaha CSE 4th Sem



- Shruti Pachori CSE 4th Sem

Boundless Creations

A name,

That's all that it is,

Five letters, but it's yours,

And suddenly those five letters will forever spill out an eternity of stories, promises and memories that sometimes I wish I could forget.

A name,

that's all that it is,

But I met someone today whose five letters were the same and something inside me twisted into a knot when they said it out loud,

I find it a bit criminal that anyone else should be allowed to claim it as their own,

A name,

only a few syllables,

But I've scribbled across this page and painted it across the walls of my heart as if you might materialize if I write it down enough times,

I'm trying to accept that crossing "t's" and dotting "l's" doesn't bring people back,

So when they see the way that I flinch when they say it out loud,

When they see it in the margins in my journal and ask what I've written down,

I swallow those five letters and I only say this,

a name,

that's all that it is,

- Harshwardhan Mourya AIML 4th Sem