

OCTOBER-NOVEMBER, 2020 EDITION

ITanium

Department of Information Technology

Special Edition: Technology and Innovation



IMS ENGINEERING COLLEGE, GHAZIABAD
NAAC ACCREDITED WITH GRADE - 'A'
APPROVED BY AICTE, NEW DELHI &
AFFILIATED TO DR. A.P. J. ABDUL KALAM
TECHNICAL UNIVERSITY, LUCKNOW

EXECUTIVE AND GOVERNING COUNCIL



Shri Naresh Agarwal
Chairman



Shri Ramesh Chaudhary
General Secretary



Smt. Anshu Gupta
Joint Secretary



Shri Sanjay Agarwal
Treasurer



Shri Rajiv Chaudhary
Executive Member



Shri Pramod Agarwal
Executive Member



Shri Ashok Chaturvedi
Executive Member



Shri Rakesh Chharia
Executive Member



Sh. Nitin Agarwal
Executive Member



Shri Sudhir Shukla
Executive Member



Shri Apurve Goel
Executive Member



Ms. Garima Aggarwal
Executive Member



Shri Vidur Chharia
Executive Member

Editorial Board



Chief Editor
Mrs. Pragya Agarwal



Editor
Mr. Updesh Jaiswal

Meet The Team



**Nayan
Dhawan**



**Ayush
Gupta**



**Chandan
Kumar**



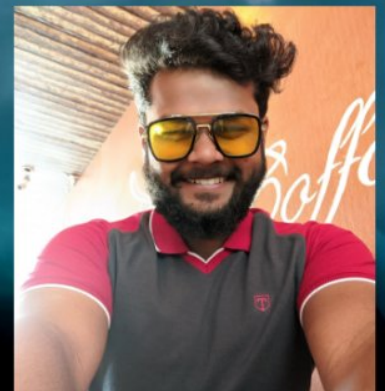
**Sanjay
Bharti**



**Ishita Roy
Choudhury**



**Devanshi
Srivastava**



**Abhishray
Gangwar**



VISION & MISSION

IMS ENGINEERING COLLEGE

VISION

Our vision is to impart vibrant, innovative and global education and to make IMS the world leader in terms of excellence of education, research and to serve the nation in the 21st century.

MISSION

- To develop IMSEC as a center of Excellence in Technical and Management education.
- To inculcate in its students the qualities of Leadership, Professionalism, Executive competence and corporate understanding.
- To imbibe and enhance Human Values, Ethics and Morals in our students.
- To transform students into Globally Competitive professionals.



Department Of Information Technology

VISION

To impart futuristic technical educational and establish a department of excellence by preparing students to apply their knowledge and varied skills as a competent technocrat to contribute towards solving complex societal problems and thus building a peaceful and prosperous nation.

MISSION

M1: To impart quality engineering education so that they become perfect IT professionals by getting high quality of technical education, research, training, professionalism with strong ethical values.

M2: To educate students in such a way that they shape up their minds to ensure their productive career in industry and academia.

M3: To help students to excel in research and innovation that discovers new knowledge which enables new technologies and systems.

M4: To prepare students to become an industry ready IT professional by inculcating creativity, team spirit, leadership and ethical competence through industry-academia collaboration, continuous curricular, co-curricular and extra-curricular activities.



Department of Information Technology

PROGRAM OUTCOMES (POs)

ENGINEERING GRADUATES WILL BE ABLE TO:

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. 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.
- 11. 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.
- 12. 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.



PROGRAM EDUCATIONAL OBJECTIVES [PEO]

PEO1: Graduates of the program will be able to apply fundamental principles of engineering in problem solving and understand the role of computing in multiple disciplines.

PEO2: Graduates will learn to apply the various computational techniques & tools for developing solutions & projects in real world.

PEO3: Graduate will be employed as Information Technology (IT) professional beyond entry-level positions or be making satisfactory progress in graduate programs.

PEO4: Graduate will be able to demonstrate that they can function, communicate, collaborate and continue to learn effectively, and ethically as a socially responsible information technology professional. They will contribute to the society by the

PROGRAM SPECIFIC OUTCOMES [PSO]

By the completion of program the students will have following program specific outcomes.

PSO1: Foundation of computer system: Ability to understand the principles and working of computer systems & information technology.

PSO2: Foundations of software development: Possess professional skills and knowledge of software design process. Familiarity and practical competence with a broad range of programming language and open source platforms.

PSO3: Foundation of mathematical concepts: Ability to apply mathematical methodologies to solve computation task, model real world problem, using appropriate data structure and suitable algorithm.

PSO4: Applications of computing and research ability: Ability to use knowledge in various domains to identify research gaps and hence to provide solution to new ideas and innovations.

HOD's Message



Welcome to the Department of Information Technology at IMS Engineering College. We started our journey in the year of 2002. Over the last two decades, we have grown our expertise and competence in the Information Technology curriculum & research. I would like to welcome all the new students to the Department. Information Technology is an essence of today's world. We are committed to providing not only the technical education to our students but also the leadership qualities through which they can create employment to others. The Department has recorded consistent improvement in its academic, research and placement performance.

The Department has a team of highly experienced and motivated faculty members who are in the process of tuning the young minds to make them globally competitive. Innovative methods of teaching & learning process are adopted to achieve learning abilities through practice, exposure and motivation. Department has an excellent infrastructural and computing facilities & provides a conducive environment to promote academic and research excellence. Above all, the entire teaching fraternity look forward to the holistic growth of the department & they aim at doing something extraordinarily remarkable in the academic arena of Information Technology and Computer Science.

The departmental e-Magazine **ITanium** is gaining popularity day-by-day. Through this magazine you must be enjoy reading about the exciting things that have been happening recently in the field of Information Technology & in department. My sincere thanks to the management, all my faculty members, & all my students for supporting the department at every point to keep the department in high esteem.

Wishing you all the best

Dr. S.N. Rajan

HOD (IT)



Student Achievement & Awards:

- Student participation & paper presentation in various National & International Conferences.
- Students awarded in various National Level Technical Project Competitions
- HACKATHON-2020 Screening
- Active participation in Cultural & CSR activities
- Active participation in Sports: Up to Zonal & State level

Innovation & Entrepreneurship:

- Students Innovative projects
- Demonstration in TECHNOVATION, HACKATHON -(SIH -2020)
- Regular interaction with Alumni Entrepreneur
- Participation in Entrepreneurship Awareness Camp(NIESBUD, Ministry Of Skills Development Government Of India)
- Startup Support(MSME)

IMS Engineering College

(NAAC 'A' Grade Accreditation, Affiliated to Dr A P J Abdula Kalam Technical University, Lucknow & Accredited by AICTE, New Delhi)

INFORMATION TECHNOLOGY DEPARTMENT

Campus:

Established in 2002,
NAAC Accredited with Grade 'A'
Approved by AICTE, New Delhi
Affiliated to Dr. A P J Abdul Kalam Technical University, Lucknow
Ranked 6th by TOI Survey



Department:

Quality focused & Global standard academic system
Highly qualified & well experienced faculty members
Faculty participation in research & Ph.D Programs
Excellent Placement Record
Departmental Club: InfoCorp , Techninjas 2.0
Departmental E-Magazine: ITanium
Alliance with RedHat Academy ,NPTEL, Local Chapter, NASSCOM, Amazon AWS, Adobe Spark, COURSERA

coursera



Laboratories:

- Data Analytic Lab
- Geo-Spatial Lab
- Open Source Lab
- Data Warehouse & Big Data Processing Lab
-



Placement (2018-19):

Major Recruiters: TCS, Wipro, Accenture, Infosys, Genpact etc.
Highest Package: 7.3 Lakhs
Students placed:101 (2018-19)
Companies Visited in Campus: 52



Industry MOU:

RedHat Academy
Tevatron Technology
HANTECH
ICT Academy IIT-K Prutor



Address : NH-24, Adhyatmik Nagar, Distt: Ghaziabad. Uttar Pradesh-201009.
Toll Free: 18001028393 E-mail: imsec@imsec.ac.in, www.imsec.ac.in
Landline : (0120)-4940000

Quotable Quotes

The true sign of intelligence is not knowledge but imagination.

– Albert Einstein

Since you cannot do good to all, you are to pay special attention to those who, by the accidents of time, or place, or circumstances, are brought into closer connection with you.

– Saint Augustine

There are only two forces in the world, the sword and the spirit. In the long run the sword will always be conquered by the spirit.

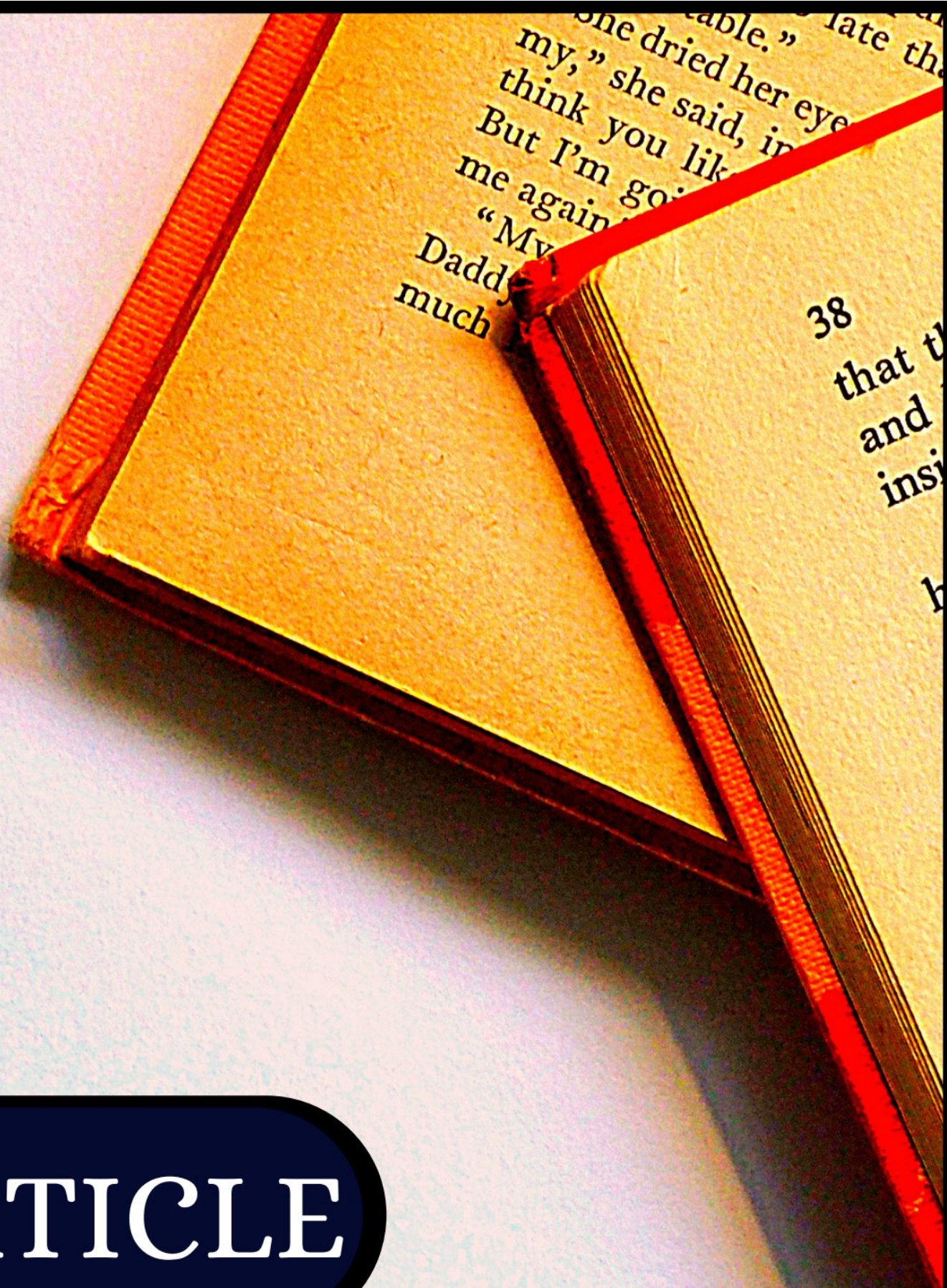
– Napoleon Bonaparte

TABLE OF CONTENTS



- **Articles**
- **Alumni Speaks**
- **Lit Drops**
- **Newsworthy**
- **Department News**
- **Student's Opinion**
- **Upcoming Events**
- **Brainstormers**





ARTICLE

ARTIFICIAL INTELLIGENCE – WHAT IT'S ALL ABOUT

Artificial intelligence (AI) is a wide-ranging tool that enables people to rethink how we integrate information, analyze data, & use the resulting insights to improve decision making . Most people are not very familiar with the concept of artificial intelligence. A survey conducted in USA in 2017 showed that only 17 percent people were familiar with it. A number of them were not sure what it was or how it would affect their particular companies. They understood there was considerable potential for altering business processes, but were not clear how AI could be deployed within their own organizations.

Turing's paper " Computing Machinery and Intelligence " (1950) , and it's subsequent Turing Test , established the fundamental goal & vision of artificial intelligence. At it's core , AI is the branch of computer science that aims to answer Turing's question in the affirmative . It is the endeavor to replicate or simulate human intelligence in machine. In another word AI is "the study of agents that receive percept from the the environment and perform actions."

AI generally falls under two broad categories : Narrow AI & Artificial General Intelligence (AGI)
Narrow AI : Sometimes referred to as "Weak AI," this kind of artificial intelligence operates within a limited context & is a simulation of human intelligence. Narrow AI is often focused on performing a single task extremely well and while these machines may seem intelligent , they are operating under far more constraints & limitations than even the most basic human intelligence. A few example of Narrow AI include: Google search, Image recognition software Siri , Alexa & other personal assistants, Self-driving cars, IBM's Watson.

Narrow AI is all around us & is easily the most successful realization of AI to date . With its focus on performing specific task, Narrow AI has experienced numerous break throughs in the last decade that have had "significant societal benefits & have contributed to the economic vitality of the nation".



Machine Learning and Deep Learning

Much of Narrow AI is powered by breakthroughs in machine learning & deep learning. Understanding the difference between artificial intelligence, machine learning and deep learning can be confusing . According to Venture capitalist Frank Chen "AI is a set of algorithms & intelligence to try to mimic human intelligence . ML is one of them and deep learning is one of those Machine techniques."

Simply put , ML feeds a computer data and uses statistical techniques to help it "learn" how to get progressively better at a task ,without having been specifically programmed for that task,eliminating the need for millions of lines of written code.Machine learning consists of both supervised learning & unsupervised learning (using unlabeled data sets).

Deep learning is a type of machine learning that run input through a biologically-inspired neural network architecture . The neural networks contain a number of hidden layer through which the data is processed , allowing the machine to go "deep" in its learning , making connections and weighting input for the best results.

Artificial General Intelligence (AGI):

AGI ,sometimes referred to as "Strong AI," is the kind of artificial intelligence we see in the movies,like the robots from Westworld ,Data from Star Trek :The Next Generation. AGI is a machine with general intelligence & , much like a human being ,it can apply that intelligence to solve any problem . The creation of a machine with human - level intelligence that can be applied to any task is the Holy Grail for many AI researchers, but the quest for AGI has been fraught with difficulty.The search for a "universal algorithm for learning and acting in any environment ,"isn't new , but time hasn't eased the difficulty of essentially creating a machine with a full set of cognitive abilities.



Forms & fields of AI Applications

There are many different fields of Artificial Intelligence , including 'robotics' ,but one of the most commonly known forms is referred to as 'machine learning ' . This involves a program applying known information to new experiences and 'learning' how to take this historical information & its experiences into account in future actions.

ML can find patterns in large amounts of data that humans might otherwise miss . Advanced ML is often described as 'deep' learning.While based on the human brain,these machines could one day exist on a whole other level,outsmarting us like we outsmart chimps.Programs are expected to not just learn pattern , but make decisions that will lead to new avenues for learning that aren't anticipated by the programmer. This could involve creating novel art pieces after analyzing a library of paintings,or coming up with a new game after playing through a history of computer games.

The use of AI , however , could also be more insidious. Prominent figures like Stephen Hawking & Elon Musk have been warning about the inevitable & imminent risk of AI for years . They're concerned it could soon become super intelligent, find it no longer has a need for us humans. Despite its widespread lack of familiarity , AI is a technology that is transforming every walk of life. It is a wide-ranging tool that enables people to rethink how we integrate information analyze data, use the resulting insights to improve decision making. Rather AI can be explained to an audience of policymakers, opinion leaders, and interested observers , & demonstrate how AI already is altering the world and raising important questions for society , the economy ,and governance. Although artificial intelligence evokes thoughts of science fiction , artificial intelligence already has many uses today for example:

Email filtering: Email service use artificial intelligence to filter incoming emails Users can train their spam filters by marking emails as “spam”.

Personalization: Online services use artificial intelligence to personalize your experience. Services ,like Amazon or Netflix, “learn” from your previous purchases & the purchases of other users in order to recommend relevant content for you.

Fraud detection: Bank use artificial intelligence to determine if there is strange activity on your account .Unexpected activity,such as foreign transaction,could be flagged by the algorithm.

Speech recognition: Applications use artificial intelligence to optimize speech recognition functions. E.g. include intelligent personal assistants, e.g. Amazon’s “Alexa” or Apple’s “Siri”.

In order to maximize AI benefits, we recommend nine steps for going forward:

- Encourage greater data access for researchers without compromising users personal privacy .
- Invest more government funding in unclassified AI research .
- Promote new models of digital education and AI workforce development so employees have the skills needed in the 21st-century economy .
- Create a federal AI advisory committee to make policy recommendation.
- Regulate broad AI principles rather than specific algorithms .
- Take bias complaints seriously so AI does not replicate historic injustice , unfairness, or discrimination in data or algorithms .
- Maintain mechanisms for human oversight and control .
- Penalize malicious AI behavior and promote cyber security.

AI is not a futuristic vision , but rather something that is here today & being integrated with and deployed into a variety of sectors . This includes fields such as finance , national security , health care ,criminal justice, transportation, & smart cities. There are numerous examples where AI already is making an impact on the world and augmenting human capabilities in significant ways.

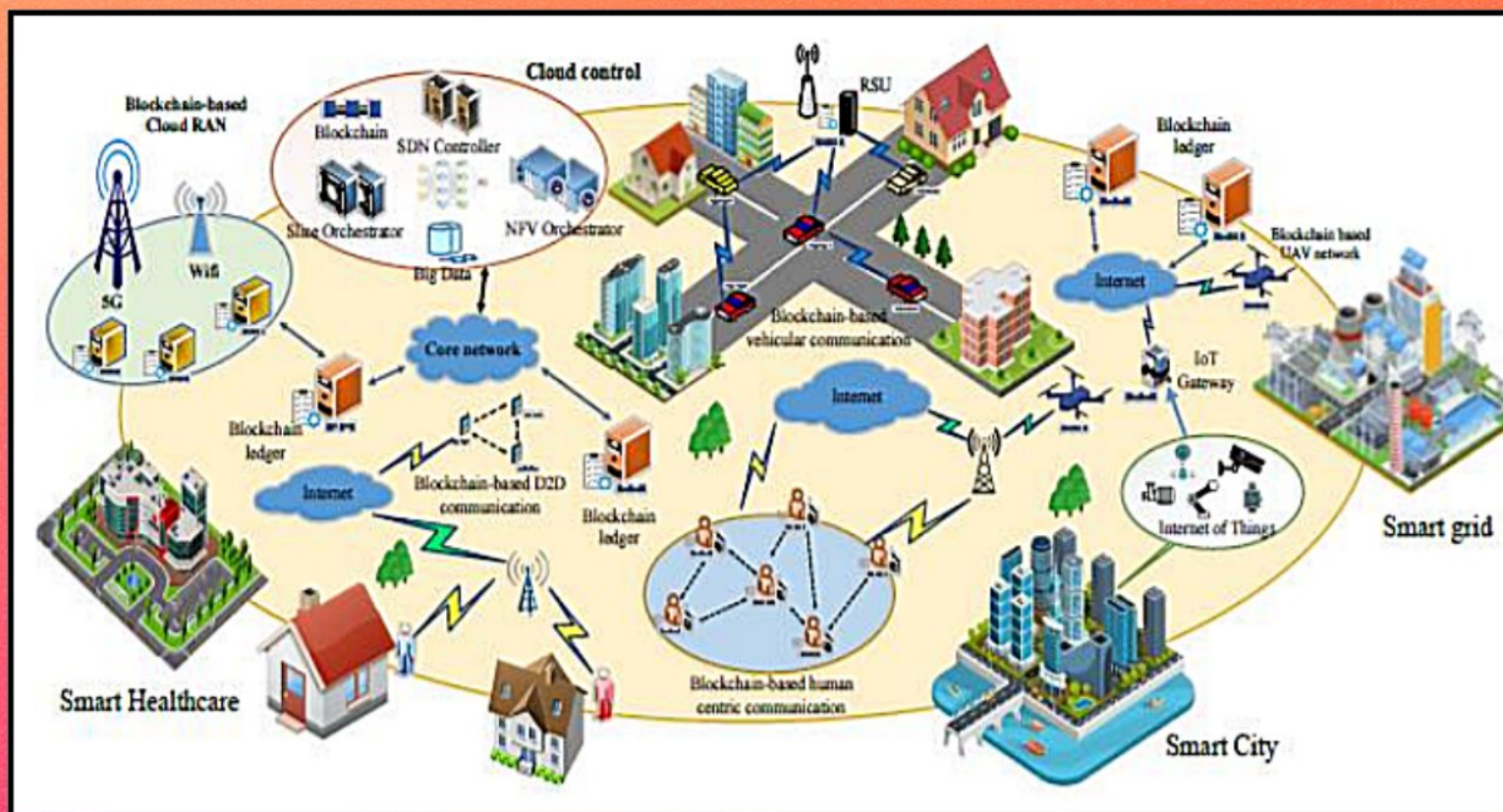
ARTICLE BY :

Dr. S.N. RAJAN

**Professor & Head
Department of IT**

Block chain for 5G: Opportunities and Challenges

The fifth generation (5G) wireless networks are on the way to be deployed around the world. The 5G technologies target to support diverse vertical applications by connecting heterogeneous devices & machine with drastic improvements in terms of high quality of service, increased network capacity & enhanced system throughput. Despite all these advantages that 5G will bring about, there are still major challenges to be addressed, including decentralization, transparency, risks of data interoperability, network privacy & security vulnerabilities. Blockchain can offer innovative solution to effectively solve the challenges in 5G networks. Driven by the dramatically increased capacities of the 5G networks and the recent breakthroughs in the blockchain technology, blockchain-based 5G services are expected to witness a rapid development & bring substantial benefit to future society.



5G is a revolutionary technology in mobile telecommunication that promises to be 20x faster than today's 4G technology. The novel characteristics of 5G can be exploited to support new business model & service that require seamless interactions among multiple parties that may include mobile operators, enterprises, telecom providers, government regulators & infrastructure providers. Meanwhile, blockchain technology has evolved as an enabling, disruptive, transformational technology that has started to be adopted across many industry vertical domains. Blockchain has been increasingly used to register, authenticate & validate assets & transactions, govern interactions, record data & manage the identification among multiple

parties, in a trusted, decentralized, and secure manner.

There are some more challenges that may hinder massive adoption and utilization of block chain in 5G.

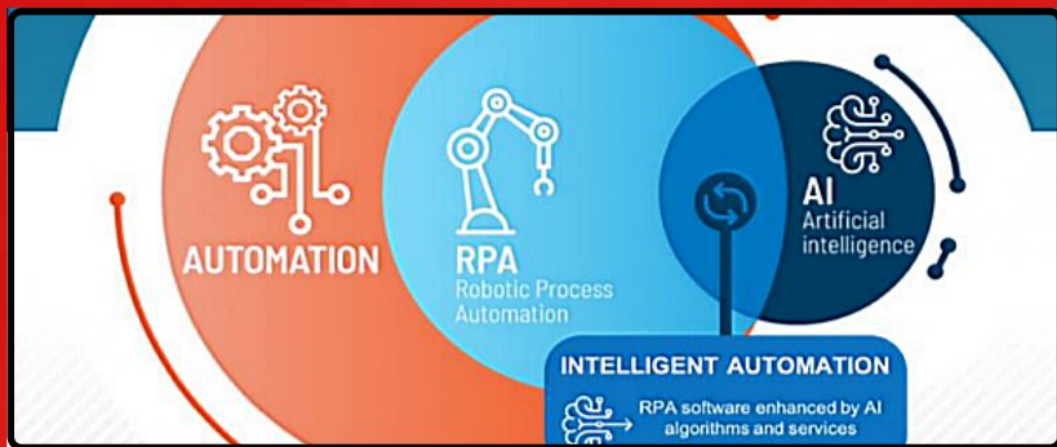
1. Scalability
2. Smart Contracts
3. Standardization and Regulations
4. Transaction and Cloud Infrastructure Costs
5. Data Privacy
6. Interoperability
7. Naming, Registration, and Reputation

ARTICLE BY :
Mr. Ajay Sahu
IT Department,
IMSEC, Ghaziabad

RPA and Chatbots: The Powerful Intersection of AI

Terminology abounds in the area of artificial intelligence (AI) & multiple definitions can lead to confusion and blurring.

In industry sectors like manufacturing, utilities, energy, finance, healthcare, & telecommunications, routine, rules-based, & repeatable business processes have been subjected to increasing degrees of automation throughout the decades. Increased accessibility & advances in the area of Artificial Intelligence are creating another wave of opportunities to not only increase the degree of automation but also to apply greater intelligence & cognitive understanding to workflows and processes.



RPA and Chatbot Approaches Differ

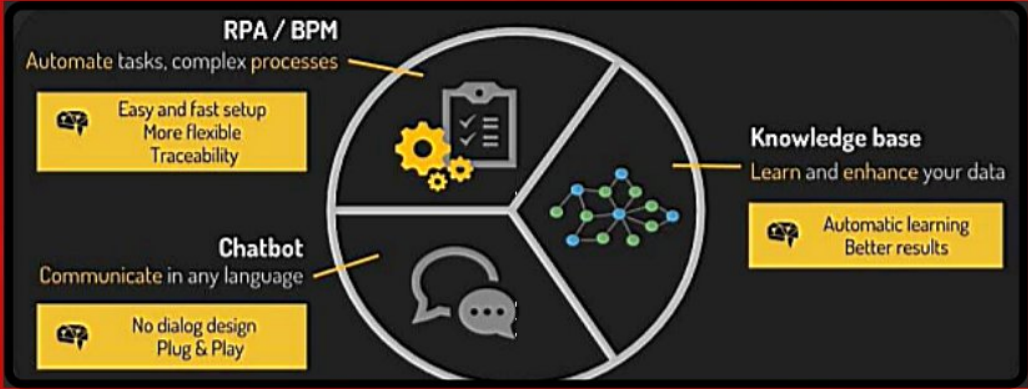
Process automation has been around for decades with robotic process automation representing more of an evolution in approach. In RPA, processes are automated by teaching robots what to do rather than automating them through code or scripts. So, it's a step up the curve towards more intelligent automation. As RPA evolves it is increasingly intersecting with conversational AI technology. In fact, more and more, recent media articles have added the word bot or chatbot when referencing RPA, making things even more blurred. However, it's important to recognize that the RPA approach is much different from the conversational AI approach.

Conversational AI represents a revolutionary approach, where conversations & user intent dictate the tasks & processes that are executed in order to fulfill the intent.

By its nature, it is more free-flowing and unstructured requiring a high degree of flexibility and versatility in orchestrating the right tasks at the right time. This contrasts with RPA where the processes are less fluid and more rigid. Layering chatbots on top of RPA creates the potential to force a more guided and process-driven, rather than a conversation-driven flow of activities.

Bot orchestration is probably one thing that makes the conversational approach much easier, faster & more versatile than an RPA approach. At Servis BOT, by using a clever bot orchestration approach, a virtual assistant can hand off a high-level customer intent to an appropriate task-oriented bot who can either execute on the intents or invoke the help of another bot, if needed. In this way, an Army of Bots can be assembled to handle multiple tasks in a customer journey &

individual bots can be deployed or removed according to how the conversation guides the execution of tasks. This is a much more flexible & modular approach than traditional RPA.



But will Chatbots replace RPA?

Whether RPA will be fully replaced by chatbots is doubtful as there will always be use cases that lend themselves more to RPA, but there definitely are strong arguments that may lead to conversational bots stealing some of the thunder from RPA. Or maybe there's merit in them working together to unite the best of both worlds?

Conversational AI is a greenfield technology and approach to smart conversations, & these are increasingly not just focused on simple Q & A type interactions. Rather, chatbot can now understand high-level customer intent & pass that to a task-oriented bot to gather any additional data needed and execute the necessary tasks.

Robotic Process Automation versus Conversational AI		
CHARACTERISTICS	ROBOTIC PROCESS AUTOMATION (RPA)	CONVERSATIONAL AI (CHATBOTS & AI)
Type of Business Processes	Repeatable, rules-based, predictable	Any user-centric processes
Approach	Process-centric and bottom-up	Conversation-centric and top-down
Focus	Process Automation	Fulfill Customer Needs
Typical Use Cases	Back-office, administrative processes	User-centric, conversation-driven processes
Inputs	Structured data	Free form, unstructured conversations
Business Outcome	Cost savings	Improved engagement at lower cost
Communication Channels	N/A (no chatbot involvement)	Voice, Web, Chat, SMS, Messaging, Email
Decision-making	IT-led	Business-led
Impact	Automate	Transform

As this evolves and matures, smart conversational bots are set to eat away at the RPA space. The emergence of conversational AI platforms, unlike RPA, represent the latest technologies, tools, and approaches and are not lumbered with legacy systems & methodologies. And that can be a double-edged sword. The conversational AI platforms must prove their approach & technology while the RPA players are generally incumbents that are deeply embedded with middleware solutions in the enterprise.

ARTICLE BY :
Mr. Shardul Singh Chauhan
Assistant Professor
IT Department, IMSEC

ALUMNI SPEAKS

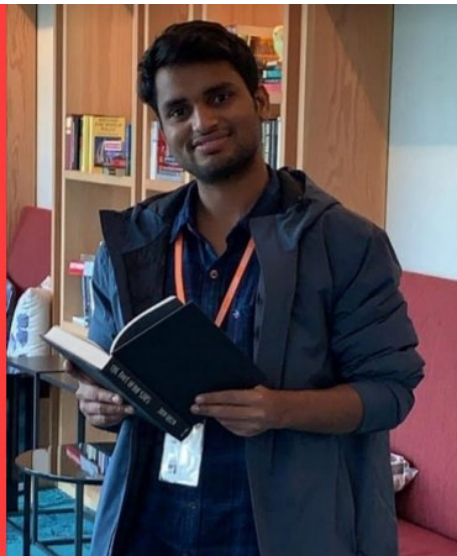




Sheena Hora
B.Tech- IT (2010-2014) Batch, Worked
in TCS for five years (2014 to 2019),
Currently pursuing Masters in
Computer Science (Specialization:
Artificial Intelligence),
University of Windsor,
Ontario, Canada

I still remember the day when I left my home for the 1st time and started my Engineering in IMSEC, Ghaziabad. It was difficult for me to adjust in the new environment but my teachers and seniors supported me a lot. Eventually, I made friends who made my college life memorable. Speaking specifically about IMSEC, it has a rich campus with both amazing teachers & ample opportunities. The environment which IMSEC provides to the students is outstanding. I am and will always be thankful to IMS for adding amazing memories in my life.

Reflecting back to the whole experience, I would encourage all students to recognize that like anything in life you will face both ups and downs throughout your college life. The important thing to remember is to always try your best and not let the instances where you may have fallen short hold you back from continuing to work hard and reach your full potential. These four years are going to be the deciding years of your life giving you an opportunity to become someone you never were..for perhaps you can never be..but at least you can try to. So, fasten up your shoe laces and buckle up your belts for the journey ahead, because the best part of your life is waiting for you. My best wishes are always with you, I wish you all climb to the top level on ladder of success.



Mohan Agrawal
IT (2011-2015) Batch,
Project Lead and IT Consultant,
MAQ Software,
Redmond, Washington, USA

Four years in IMS Engineering College, surely the best time of my life. The thoughts of not being able to enjoy those lectures, drown in all the technical learnings, and of course bond with my fellow batchmates always made me nervous. "IMSEC" is a temple where I learnt how to be a skilled software developer, a thorough professional, and most importantly a better human being.

We, in the IT branch, consisted of a heterogenous mixture of students fostering a strong familial bond. Some of us were extremely altruistic, while some had astute goal clarity, however we were bound by a strong sense of gratitude and pride towards the institute. I am simply blessed to be a part of this family which is nourished by some of the finest IT Department Professors/Teachers.

"Those evening walks and late-night talks, those luncheons in Kaveri while discussing C++ theories, those lectures of Software Engineering and last page doodling, and those birthday bumps, while constant fear of placement trumps."

I would strongly recommend compartmentalizing your daily dose of learning and fun. This has worked for me, and I'm sure it'll work for you as well.

I feel nostalgic every time when I come across these words: IMSEC, Class, Library, Books, Friends, Seniors, Professors, Juniors, Kaveri, Nilgiri, Shivalik, Aravali, and last but not the least Mandakini.



Divya Garg
IT (2011-2015) Batch,
Senior IT Consultant,
Alcor Solutions,
Noida

It would be difficult to sum up 4 years of IMS college life in just few lines. I must say that the learning and exposure which IMSEC gives is just commendable and especially IT Department. The faculty is just amazing and they stand by you from the first day to the end of placement days.

I would always be grateful to my faculties for giving me multi dimensional learning by providing the apt mix of academics, industry exposure, attitude and leadership.

I would also like to thank to the "IT Department" for preparing and helping me for getting first placement at TCS as it's always special for a student getting placed for the first time:)

I will always cherish the feeling of studying at an institute which focused on career enhancements along with overall skill development.

Last but not the least I make wonderful friends during my college days and I will always cherish those. Junior students be strong as you fight your way to success, the difficulty you face is nothing compared to the joy of success.

"Right Time, Right Dress, Right Place" the 3 'R' makes you perfect which I learnt during my college time.



Isha Atreya
IT (2012-2016) Batch,
Senior System Engineer,
Tata Consultancy
Services Limited,
Nagpur, Maharashtra

I would love to share my experiences with you people.

It's been 4 years since I passed out of IMSEC and a lot of things would have changed to an extent of me not recognising even bits of it.... but what would not have changed would be the warmth and support from the teachers of the IT Department..

Honestly, if you ask any of the faculties about me... They'd tell you how notorious I was and how I used to keep laughing come what may.. and that would bring smile on the face of even the strictest faculties.. And surely these are the best memories of me as a student of IMSEC.

Coming to our IT Department Faculties; a whole bunch of talented guides/mentors who make our future bright and help us in getting success in our life..

That's is my experience of being an "IT STUDENT" of IMSEC.

A lot of things have changed.. but the aim of the IT Faculties to nurture their students to be the best still remains the same..

All the very best to these people..

Dear junior students: Study well and do enjoy your college life.. be it the classroom life or the hostel one.. because when it all ends... You'd only be able to say " I'm really gonna miss this place.... I'm gonna miss my college days ".



Lit Drops





“NOSTALGIA”

How'd you describe, when your belly burns
with fire on hearing a song
Your stomach hurts in pain but actually it's
your heart that is wrong
Stranded alone in misery, strolling through my
humdrum evening walk
Pining for giggles, our clasped hands, and
yearning for a romantic small talk
Whilst time moves forward and body adjusts
to the commotion
But my soul is still stuck with you, standstill
showing no sense of emotion
Traversing around the remembrances, reminiscing
through our past
Wish I'd filter out the pain, by focusing on
moments where we'd a blast
I am eternally thankful for a word like "nostalgia"
to be created
To describe the moments we shared, cherished,
and intersected

चलो अच्छा हुआ

URMIS AGNIHOTRI, IT, 3RD YR



ए दुनिया चलो ,अच्छा हुआ तुमने गिरा दिया,
मुझे खुद से खुद मैं हरा दिया।
समा गई एक पल को मैं धरती में ,
परास्त हुई एक पल कोशिश करती मैं।
कलंक तो सबने ऐसे लगा दिया,
समाज के लाज के लिए बेटी की लाज को भी भुला दिया।
प्रयोग की वस्तु हूं ये सोच है तुम्हारी, ये तुमने मुझे दिखा दिया,
जिस सांसारिक सच्चाई से विमुख थी मैं, उस सच्चाई को सामने ला दिया।
द्वापर में वो एक द्रौपदी थी किन्तु मैं भी एक द्रौपदी हूं ,ये तुमने मुझे बता दिया,
इजाज़त बग़ैर छू सकते हो तुम, मन को ऐसे मेरे सता दिया।
आगे बढ़ना चाहूं मैं तो मुझको वहीं रुका दिया,
किसी ने पैदा होने से पहले ही मुझे वहीं पर झुका दिया।
प्रेम के बहाने मुझपर हाथ ऐसे उठा दिया,
अपनी गलतियों की सज़ा को मेरे सर बिठा दिया।
मैं पुरुष हूं ये कहके अपने अंदर का हैवान जगा दिया,
तुम लड़की हो रिश्ते निभाओ ये कहकर मेरे मुंह में ताला लगा दिया।
पर अच्छा हुए सच्चाई से वाकिफ़ करा दिया,
ए संसार मेरे मन को तुमने इतना शिथिल बना दिया।
ठीक है मैं एक लड़की हूं,
गिरकर उठ भी सकती हूं।
करुणामयि दुर्गा हूं तो शत्रु विनाशिनी महाकाली भी हूं,
ये दृढ़ मन ही मेरा शस्त्र है,अपने मां की चुनरी की लाली भी हूं।
ए संसार ये डर जो तुमने मुझे दिखाया है,
मुझे गिराकर को ऐसे मिटाया है।
तो ये समझलो अब मैं हार ना मानूंगी,
इस गिरने को अपनी शक्ति बनाना जानूंगी।
अब भय नहीं मुझे किसी से ,फिर उठकर आगे बढ़ जाऊंगी,
अपने भीतर इस डर से मैं यूं ही लड़ती जाऊंगी।।

VANSH TYAGI, IT, 2ND YR



आखिर क्यों नहीं 'भारत'!

विषय थोड़ा अटपटा सा लग सकता है परंतु वास्तविकता से परिपूर्ण है। किसी भी देश की नींव का निर्धारण यदि कोई करता है तो वह है उस देश का युवा। प्रत्येक देश का युवा उस देश के लिए रीढ़ की हड्डी का कार्य करता है। परंतु यदि इस रीढ़ की हड्डी को देश से अलग कर दिया जाए तो वह देश कुछ कदम चलते ही जमींदोज हो जाएगा। ऐसी ही कुछ परिस्थितियां इस वक्त हमारे देश भारत में उत्पन्न हो रही हैं। आज का युवा ना तो भारत में रह कर उच्च शिक्षा प्रदान करना चाहता है और ना ही यहां रहकर कोई नौकरी अथवा व्यवसाय करना चाहता है। इसका हालिया उदाहरण हमें देखने को मिला जब इस वर्ष **IIT Rank holder AIR-1** ने भारत में रहकर अपनी आगे की पढ़ाई करने से इनकार कर दिया और यह कोई नई बात नहीं है और ना ही कोई पहला केस है जब कोई प्रतिभावान छात्र विदेश जाकर अपनी आगे की शिक्षा ग्रहण कर रहा है और ऐसे में प्रश्न उठना लाजमी है कि आखिर ऐसा क्यों? इसका उत्तर हमारे समाज में और हमारे सिस्टम में ही कहीं छुपा हुआ है। यदि बात करें हम शिक्षा के क्षेत्र की तो प्रति वर्ष बजट में **6% GDP** का हिस्सा शिक्षा क्षेत्र में लगाए जाने का दावा किया जाता है परंतु क्या पिछले **70** वर्ष में एक बार भी **6%** शिक्षा क्षेत्र में लग पाया? अगर लग पाया होता तो शायद आज तस्वीर कुछ और ही होती। दिल्ली विश्वविद्यालय जिसकी गणना देश के प्रतिष्ठित विश्वविद्यालय में की जाती है यदि उसकी ताजा कटऑफ की बात की जाए तो इस वर्ष उसने आंकड़ा छुआ है **100%** का। अब इससे बुरा तो शायद कुछ नहीं हो सकता! हमारे देश के यशस्वी प्रधानमंत्री बात करते हैं “**New skill – New India**” की। परंतु क्या हम लोग वास्तव में **skill** या फिर कहें प्रतिभा की बात करते हैं। शायद नहीं! भारत में यदि आप नौकरी करना चाहते हैं तो यहां की कंपनियां कल भी डिग्री की भूखी थी, आज भी डिग्री की भूखी है और शायद कल भी डिग्री की ही भूखी रहेगी। यदि हमारे देश में प्रतिभा की थोड़ी भी कदर होती और डिग्री को प्रतिभा से अधिक महत्व ना दिया जाता तो शायद कोरोना काल में छात्र छात्राओं को अपनी जिंदगी का सौदा परीक्षाओं के साथ ना करना पड़ता। जिस देश में छोटी से छोटी कोई भी नौकरी प्राप्त करने के लिए एक अतिरिक्त भाषा को आपके ऊपर थोपा जाता हो और अपनी मातृभाषा को बोलने में लोग शर्म महसूस करते हैं वहां विकास हो पाना थोड़ा मुश्किल है। जिस देश में शिक्षा को राजनीति और व्यवसाय के चश्मे से देखा जाता हो वहां शिक्षण व्यवस्था कभी सुदृढ़ नहीं हो सकती। अक्सर हम भारतवासी इस बात पर गर्व महसूस करते हैं कि भारत एकमात्र ऐसा देश है जहां के निवासी विश्व के हर देश में, हर शहर में और हर कोने में बसे हुए हैं। परंतु क्या वास्तव में यह गौरवान्वित होने का विषय है? हरगिज़ नहीं! बल्कि यह विषय है सिस्टम की नब्ज़ टटोलने का, खुद की अंतरात्मा से सवाल करने का कि आखिर क्या कमी है हमारे देश में यहां का युवा अपने खुद के देश से ज्यादा किसी अन्य देश को अधिक महत्व देता हो। और मैं पूर्ण विश्वास के साथ यह कह सकता हूं कि जिस दिन हमने इस समस्या का हल ढूंढ लिया उस दिन सिर्फ हमारे देशवासी ही वापस नहीं लौट आएंगे वरन अन्य देशों के निवासी भी यहां शिक्षा और नौकरी के संदर्भ में आएंगे



NEWSWORTHY

CURRENT AFFAIRS

INDIAN RAILWAYS LAUNCHES OPERATION "MERI SAHELI"

Indian Railways has launched on operation "Meri Saheli" for focused action on the security of women across all zones to provide safety & security to lady passengers travelling by trains for their entire journey from starting station to destination station. The "Meri Saheli" initiative was started as a pilot project in South Eastern Railway in September 2020.



Ministry of Indian Railways

COVID-19 VACCINE EXPECTED TO BE READY WITHIN FEW WEEKS OF DECEMBER



Prime Minister Narendra Modi had called for an all-party meeting on December 4, 2020 to discuss the ongoing COVID-19 pandemic situation and all the related challenges including vaccine distribution and post-COVID India. During the meeting, PM Narendra Modi informed the opposition leaders that a COVID-19 vaccine is expected to be ready in the next few weeks of December.

INDIA SUCCESSFULLY TEST-FIRES "SHAURYA MISSILE" FROM ODISHA COAST

Defence Research and Development Organisation (DRDO) successfully test-fired a new version of the surface-to-surface nuclear-capable ballistic missile "Shaurya" at Balasore, off the coast of Odisha. The new version of the nuclear-capable missile can strike targets at a range of around 800 km.



INDIAN ARMY CELEBRATES 240TH CORPS OF ENGINEERS DAY



Indian Army celebrated the 240th Corps of Engineers Day on 18 November 2020. At the grand ceremony held at the "National War Memorial", Chief Engineer Lieutenant General SK Shrivastava, along with other serving officials, JCO and other military ranks, laid a wreath here to pay tribute to those brave soldiers who gave their lives for the country.

News & Politics

PRESIDENT BIDEN'S FOREIGN POLICY WILL STAND BETWEEN ASIA AND A NUCLEAR DYSTOPIA

The awful destructive potential of nuclear weapons make it impossible for either side to hope to win anything that can meaningfully be called a victory. Yet, each Chinese soldier or sailor crossing into its neighbours' borders is also, inexorably, ensuring this dystopic world will be built.



RAJINIKANTH'S POLITICAL PARTY WILL FIGHT ON ALL 234 SEATS IN 2021 TN ASSEMBLY ELECTIONS



The political advisor of actor-turned-politician Rajinikanth, Tamilaruvi Manian said that their political party which will be launched in January 2021 will fight on all 234 seats in the next Assembly elections. "We will contest on all 234 seats in next Assembly elections. Our politics will be spiritual politics unlike the politics of hatred, currently being practised. We will not slam anybody," Manian told reporters here.

BJP PICKS SUSHIL MODI FOR BIHAR RAJYA SABHA BYELECTION

BJP has picked Sushil Modi for Rajya Sabha byelection from Bihar. His election to the Upper House is all but certain as the BJP-led National Democratic Alliance has a majority in the state assembly. Election to the seat is due for December 14 if the rival alliance led by the RJD decides to contest.



BIDEN SAYS HE WON'T IMMEDIATELY REMOVE TRUMP'S TARIFFS ON CHINA



President-elect Joe Biden said he won't immediately remove the elevated tariffs that the Trump administration imposed on China, according to The New York Times. Biden intends to first review the existing U.S.-China agreement and develop a "coherent strategy" with traditional allies in Europe and Asia.

SCIENCE & TECH.

Liquid Air to be Used in Energy Plant

ON NOVEMBER 5, AN ENERGY PLANT IN MANCHESTER, ENGLAND IS BEGINNING TO USE LIQUID AIR TO STORE ENERGY. IF SUCCESSFUL, THE PLANT WILL HOLD ENOUGH ENERGY TO POWER 50,000 NEARBY HOMES. THE INVENTOR, PETER DEARMAN, IS CONFIDENT HIS CREATION WILL HELP THE CLIMATE; HOWEVER, HE ADMITS IT'S LESS EFFECTIVE THAN BATTERIES FOR NOW.



China launches Chang'e-5 to bring back material from moon



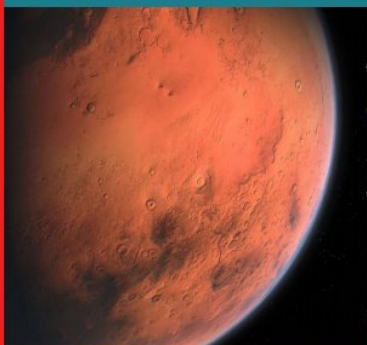
CHINA LAUNCHED AN AMBITIOUS MISSION TO BRING BACK ROCKS AND DEBRIS FROM THE MOON'S SURFACE FOR THE FIRST TIME IN MORE THAN 40 YEARS — AN UNDERTAKING THAT COULD BOOST HUMAN UNDERSTANDING OF THE MOON AND OF THE SOLAR SYSTEM MORE GENERALLY.

India takes step closer towards mass production of hydrogen fuel from biomass: IISc Bengaluru

THE IISC AND THE RESEARCH AND DEVELOPMENT CENTRE OF INDIAN OIL CORPORATION LIMITED HAD SIGNED A MEMORANDUM OF UNDERSTANDING TO DEVELOP AND DEMONSTRATE BIOMASS GASIFICATION-BASED HYDROGEN GENERATION TECHNOLOGY FOR PRODUCING FUEL CELL-GRADE HYDROGEN AT AN AFFORDABLE PRICE.



Scientists once again discover signs of water in the lakes of planet Mars



AS PER A RESEARCH PAPER PUBLISHED IN THE JOURNAL NATURE ASTRONOMY, RECENTLY, SCIENTISTS HAVE FOUND THREE MORE UNDERGROUND WATER LAKES IN THE SOUTH POLE OF THE RED PLANET. BESIDES THE MAIN LAKE, SMALLER SURROUNDING LAKES HAVE ALSO BEEN DISCOVERED.

Sports

▶ **INDIA VS AUSTRALIA: LIKE YUVRAJ SINGH AND MS DHONI, HARDIK PANDYA CAN CHASE ANY TARGET, SAYS GAUTAM GAMBHIR**

Former India batsman Gautam Gambhir said that Hardik Pandya belongs to the category of players such as Yuvraj Singh and MS Dhoni, who are capable of chasing down whatever target is set in front of them.



▶ **Bala Devi becomes 1st Indian woman to score in a top-tier Europe league**



Star footballer Bala Devi became the first Indian woman to score in a professional league in Europe when she netted for the Rangers FC in a 9-0 decimation of Motherwell FC in the Scottish Women's Premier League.

▶ **T Natarajan ecstatic about first series win for India calls it 'memorable and special'**

Thangarasu Natarajan, who hails from Tamil Nadu, claimed two crucial wickets in the second T20I as India beat Australia by six wickets to seal the three-game series with one match to go.



▶ **Kerala jeweller to honour 'close friend' Diego Maradona with museum**



Boby Chemmanur, a Kerala-born business magnate and philanthropist, announced on Monday the building of a museum in memory of Diego Maradona, with a gold sculpture of the football legend as the main attraction.

▶ **KENYA'S KIBIWOTT KANDIE SMASHES HALF MARATHON WORLD RECORD IN VALENCIA**

Kibiwott Kandie finished the Spanish annual race in 57 minutes and 32 seconds, breaking the previous record of 58:01 set by compatriot Geoffrey Kamworor in September 2019.



A close-up photograph of a person's hand with a black watch resting on a desk. The desk is cluttered with various papers, including a newspaper with a large orange and black graphic, a smartphone, and several sheets of paper with handwritten notes and diagrams. The background is blurred, showing a person's head and shoulders.

DEPARTMENT NEWS



Department of Information Technology

Talk On

Joining a Dream Company: Strategy and Groundwork

Mayank Kumar Gaur

IT (2010-2014) Batch
Product Manager
Junglee Games, Gurugram



Date: Sunday, 8th November, 2020
Timing: 10:00am onwards

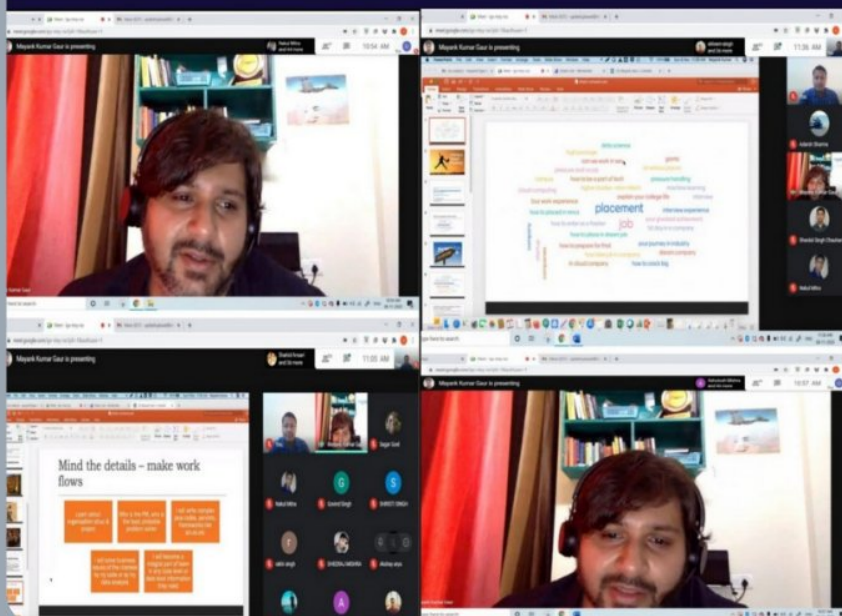
Information Technology Department of IMS Engineering College organized alumni industry expert talk on 8th November 2020. In this Mr Mayank Kumar Gaur (2010-2014 Batch IT alumni), working with Junglee Games (Gurgaon) as a Product Manager and having experience of working with IBM, Cognizant, and Droom as a Software Developer & Advisory Product Consultant, guided the students regarding groundwork and strategy for clearing the dream company placement drives.



Department of Information Technology

Talk On

Joining a Dream Company: Strategy and Groundwork





IMS ENGINEERING COLLEGE



TALK ON

**National Education Policy 2020
- Framework & Objectives**



By

**Prof Chandra Bhushan Sharma
IGNOU, Ex-Chairman NIOS.**

On

5th November 2020

Time: 10:00AM to 11:00AM

Participants: Students & Faculty Members

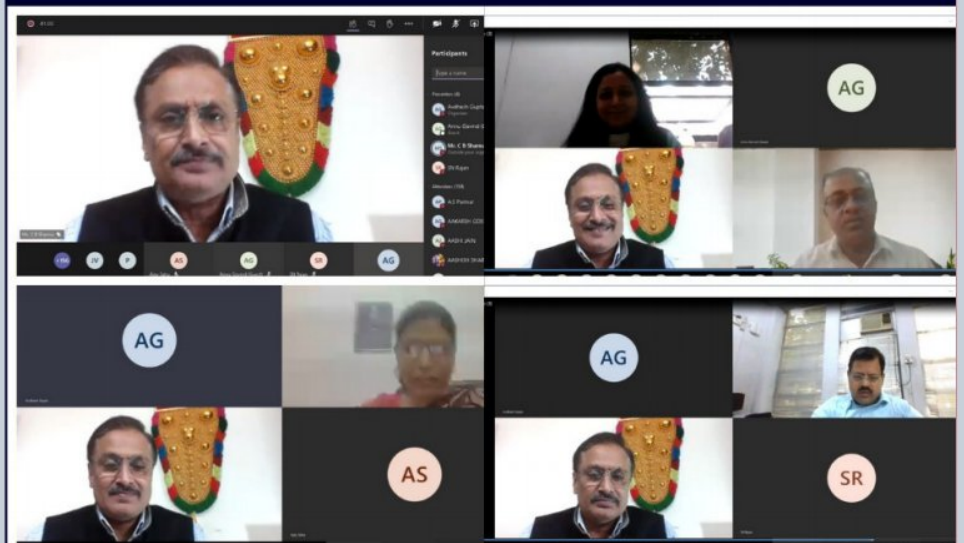
DEPARTMENT OF INFORMATION TECHNOLOGY



IMS ENGINEERING COLLEGE



**Talk On National Education Policy 2020
- Framework & Objectives**



DEPARTMENT OF INFORMATION TECHNOLOGY

IT Department organised special talk on “National Education Policy-2020: Framework & Objectives” under the IIC (Institution Innovation Council) guidelines of Ministry of HRD, Govt of India. Prof Chandra Bhushan Sharma (Professor at IGNOU & Ex-Chairman NIOS) delivered his talk through webinar. A large number of faculty members & students joined the program.



IMS ENGINEERING COLLEGE



Congratulates



**Batch 2019-20
Final Year**

MR. SHIVAM SHUKLA

**University Rank Holder
9th In AKTU Top 10 Rank**

**Department Of
Information Technology**

IMS Engineering College Congratulates Shivam Shukla, 2019-20 , 4th year student of Department of Information Technology, who secured 9th Position in University Top Ten Rank.



Ayush Singh , from Department
of IT. Selected as System
Engineer Specialist, in Infosys..

INFOSEC BASICS

15 DAYS CYBERSECURITY WORKSHOP

OCT 12, 2020 - OCT 26, 2020

**DEPARTMENT OF
INFORMATION TECHNOLOGY**

MR. AYUSH GUPTA

3rd Year, B.Tech(IT)
IMS Engineering College



**Team
TechNinjas 2.0**

**AYUSH GUPTA, STUDENT OF IT DEPT,
CONDUCTED FREE WORKSHOP FOR 15 DAYS
ON "ETHICAL HACKING", WHICH COMPRISED
CONCEPTS OF INFORMATION SECURITY,
ETHICAL HACKING AND CYBER SECURITY.
THE EVENT WAS THROUGH YOUTUBE
WEBINAR MODE.**

Department of IT organised webinar for higher education and employability opportunity at Canada. The program was organised on 27th November 2020, in association with INCANADA.ME for Quebec, Canada.



In Partnership with



Become Employable. Worldwide.

Webinar on Industry lead Courses tied to 100% Job Placements in Quebec, Canada.

- Build on your current efforts & foundation skill set
- Refine In - Demand Practical Skills
- Gain International Exposure: Paid Internships, Recruitment on Campus
- Compliment your degree with an AEC Recognized Diploma



Placement Details (2020-21 Batch)

Roll No	Name	Placed In
1714313010	Akshit Chaudhary	VVDN Technologies
1714313016	Aryan Mishra	Vinove Software
1714313021	Ayush Singh	Infosys
1714313030	Harshit Sharma	Cloud Analogy
1714313036	Kajal Khanna	Pimcore Global Services
1714313058	Nirmit Srivastava	VVDN Technologies
1714313061	Palak Kapoor	Nagarro Software
1714313079	Saloni Singh	VVDN Technologies

STUDENTS' OPINION





SRISHTI GARG

B.TECH, IT-4th Year

**"Try not to become a man of success.
Rather become a man of value." By Albert
Einstein**

What does the success mean ? The good or bad outcome of the undertaking. When a person works hard to get any success then he is happy but when he did not achieve his success he is disappointed. A person should not be like that he should be happy with everything. Success commands hard work and persistence. Every individual have various implementation of their success. We need to make our own way of making progress to get our success. Successful individuals do what they feel to do. One cannot be successful until they have reached this mindset of happiness; it is not possible for one to be successful unless they are happy with their goals and achievements. To be successful one must discover who they are as a person and whether or not they make decisions based on thinking or on feelings.



AKRITI SINGH

**B.TECH, IT-3rd
Year**

Do You Really Enjoy Coding???

For some people ,programming is fun, enjoyable and outstanding if they love to code, fix the bug and solve the problems but there are some people who really think it sucks and programming is not for them. But then what...??? you are graduate, not good at coding but you want a job in tech. A common myth between a lot of students is you need to know how to code if you want to work in tech. Let's break this myth and we will tell you some career options in tech where you don't need to scratch your brain to use all those programming loops or function or coding logic.

User Experience Designer , User Interface Designer , Data Analyst , Technical writer, Growth hacker , SEO specialist(Search engine optimization) , Software testing, Network engineer ,Cloud Engineer ,DevOps Engineer and many more. So stop believing in myth and choose the right path for yourself..



KRITIKA

B.TECH, IT-2nd Year

Topic - "Time management... An important aspect of Engineering. "

The wise men says "Never leave till tomorrow that which you can do today". The Great lesson Engineering student should learn, and is learning through Engineering is Time management. We all know that procrastination isn't great for our productivity, but that doesn't stop us from doing it anyway. We fill our precious time with "productive" activities like coffee breaks, or searching for the perfect new notepad. But while you procrastinate, time slips away. And this often means rushing to catch up later, resulting in jeopardized time with family or leisure activities. The perfect management of working hours along with proper balancing of studies and extracurricular activities is very important and engineering teaches us the same. The better we know time management the more we evolve as a successful human. With a heavy Engineering course load, one of the most important skills for Engineering students is Time Management. Prioritization is one of the most important components of managing your time. Engineering students need to learn to prioritize duties and tasks to get everything important done.

UPCOMING EVENTS



DATA SCIENCE AND MACHINE LEARNING WORKSHOP

"One Month Power Training on Data Science and its Industry Application from scratch" Topics Covered: Python Programming, Data Types, Functions and Classes, Errors and Exception Handling, Loops and Conditional, Advanced Python- List Comprehension, Dictionary Comprehension, Packages- Numpy, Pandas, Matplotlib, Seaborn, Stats and Math, Sklearn, Introduction to Machine Learning, Types of Data Basic Data Preparation, Statistics, Applied Maths- PnC, Probability, Gaussian Distribution, Binomial Distributions, Poisson Distributions.

Date:- 30 November, 2020

Time:-10:00 AM - 12:00 PM

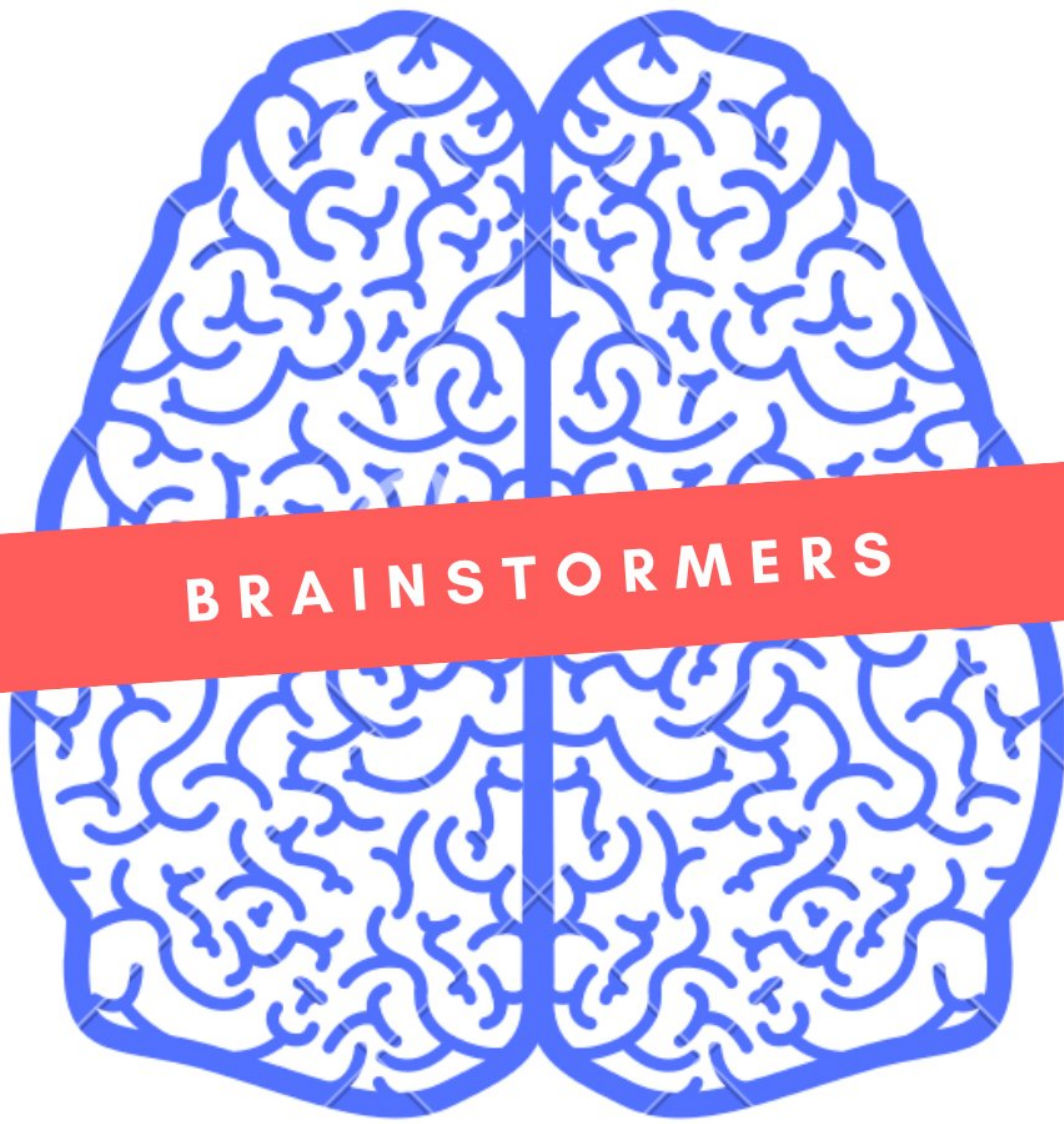
TECHCIRCLE LIVE

TechCircle Live is a crossroads for the country's most active, powerful investors and disruptive emerging technology companies. It brings together disruptors and accelerators who believe in the power of technology & its importance in transforming businesses and society. The exclusive event is limited to select tech revolutionaries, leaders, entrepreneurs, investors and relevant government representatives. Bringing together disruptors & leading investors for fostering innovation.

Date:- 4 December, 2020

Time:- 1:00 PM - 8:00 PM

SOLVE IT, IF YOU CAN



BRAINSTORMERS

CHALLENGES FOR YOU

Questions

1. Solar power generates electricity from what source?
2. Did the Apple iPhone first become available in 2005, 2006 or 2007?
3. In terms of computing, what does CPU stand for?
4. True or false? Nintendo was founded after the year 1900.
5. The Hubble Space Telescope is named after which American astronomer?
6. Is the wavelength of infrared light too long or short to be seen by humans?
7. Firefox, Opera, Chrome, Safari and Explorer are types of what?
8. True or false? Gold is not a good conductor of electricity?
9. The technologically advanced humanoid robot ASIMO is made by which car company?
10. True or false? Atomic bombs work by atomic fission.
11. In terms of computing, what does ROM stand for?
12. Did the original Sony Playstation use CDs or cartridges to play games?
13. What is the Earth's primary source of energy?
14. IBM is a well known computer and information technology company, what does IBM stand for?
15. Along with whom did Bill Gates found Microsoft?

Answers

1. The Sun
2. 2007
3. Central Processing Unit
4. False - 1889
5. Edwin Hubble
6. Long
7. Web browsers
8. False
9. Honda
10. True
11. Read Only Memory
12. CDs
13. The Sun
14. International Business Machines
15. Paul Allen

*Thank
You
&*

*Happy New Year
in advance*

**Send your articles at
itanium.imsec@gmail.com**



**IMS Engineering College, Ghaziabad
NAAC Accredited with A grade
Approved by AICTE. New Delhi & Affiliated to Dr.
A.P.J. Abdul Kalam Technical University. Lucknow**