

SEPT2021

ISSUE #5



Dr. M.G.R.

EDUCATIONAL AND RESEARCH INSTITUTE DEEMED TO BE UNIVERSITY

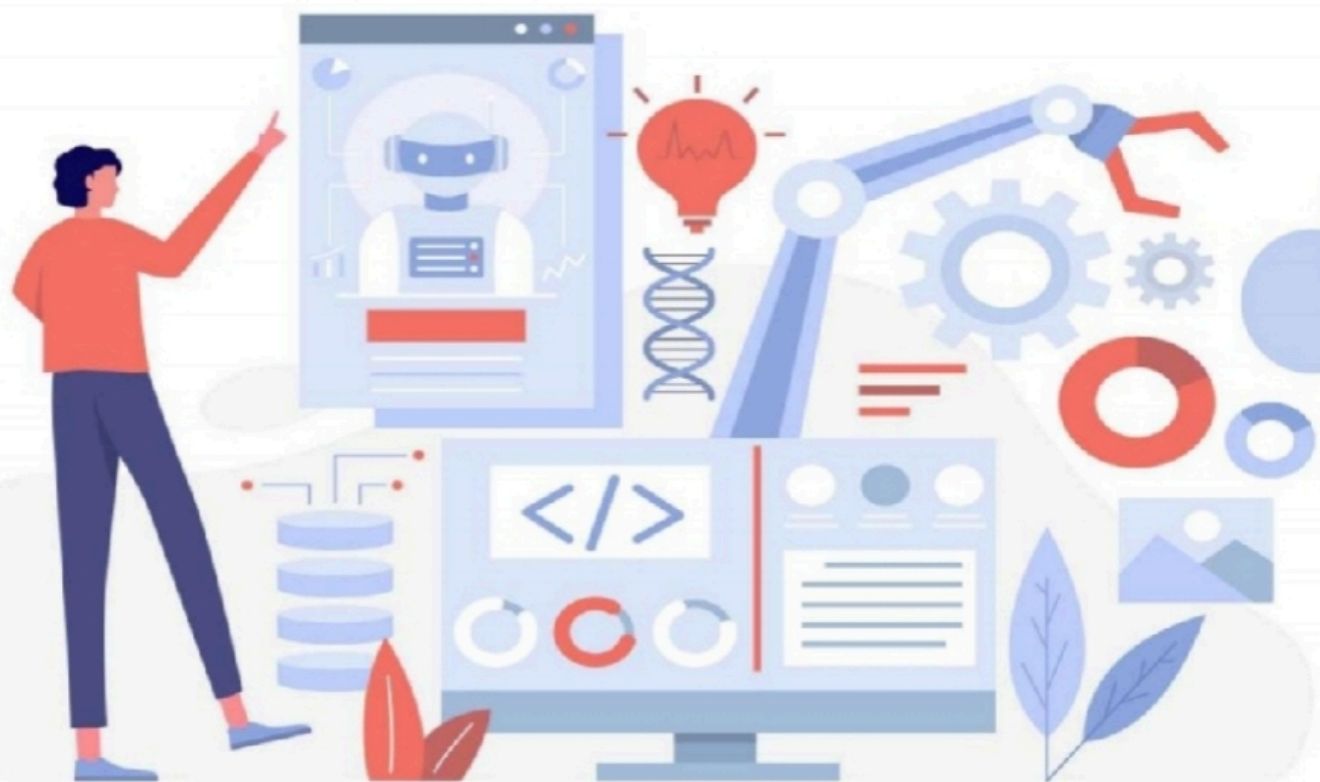
University with Graded Autonomy Status

(An ISO 21001 : 2018 Certified Institution)

Periyar E.V.R. High Road, Maduravoyal, Chennai-95. Tamilnadu, India.



DEPARTMENT OF INFORMATION TECHNOLOGY








TECH VOICE

DEPARTMENT OF INFORMATION TECHNOLOGY**VISION**

To create technology proficient and ethically enriched IT professionals through holistic and state of art curriculum.

MISSION

-  To update the IT skills of students and faculty adapting recent technology developments in the curriculum as recommended by academicians, industry experts and alumini.
-  To establish equipped laboratories to present excellent education in the conventional and modern vicinity of Information Technology.
-  To create responsible IT professionals with ethical values and social responsibilities.
-  To stimulate entrepreneurial mind-set among the students and enhance competency through regular industrial exposure.
-  To utilize the family of alma mater through strong interaction and networking making them instrumental for development of academic and industrial linkage.

Program Educational Outcomes (PEO)

Graduates will be able to:

- PEO 1: Excel by taking up key roles in IT and related industries, Government organizations and academia through strong leadership skills.
- PEO 2: Undertake higher studies and/or research in the field of Information Technology, management or other related domains.
- PEO 3: Develop innovative products and implement novel solutions to real world problems in IT and related interdisciplinary areas.
- PEO 4: Understand the societal impact of IT services and use their skills in an ethical, responsible and professional manner.
- PEO 5: Be updated with continuous learning and have a global perspective, so as to remain current in their profession while meeting the needs of the industry and nation at large.

Program Specific Outcomes(PSO)

- Ability to augment the understanding of broad themes of STEM using Information Technology.
- Ability to analyse, design, develop and implement sustained IT solutions as a team to improve the productivity of the organization with social and economic constraints.
- Ability to apply ethical decision making, use IT industry recognized best practices and standards in the development, implementation and management of IT system integrating multiple domains.
- Ability to understand and update current trends in web technology, distributed infrastructure, data management, software engineering, system engineering and secured applications.

**WE THANK OUR MANAGEMENT FOR THEIR
CONTINUOUS SUPPORT AND ENCOURAGEMENT**



**Dr..A.C.SHANMUGAM
FOUNDER CHANCELLOR**



**Er.A.C.S ARUNKUMAR
PRESIDENT**

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HOD DESK



It gives me great pleasure to give my best wishes to “TECH VOICE” , a newsletter from Department of Information Technology of Dr.M.G.R Educational and Research Institute. It is a technical platform to bring out the hidden talents of students and faculty. The students and faculties of department are always proactive in taking initiatives in technical, cultural and social events. I hope that this newsletter will serve the purpose of reflecting all activities of department and it will inspire others to do their best. Wishing you all the best. I take this opportunity to congratulate the students editorial team and our staff editors Dr.Dahlia Sam and Mr.A.Kameshwaran for their great effort to make this news letter as a reality. Also I invite the readers of “TECH VOICE” for their contribution and suggestions for the forthcoming issues. I wish good luck to the entire team of editors and look forward for your kind patronage to our newsletter.

Dr.N.Kanya

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INSIDE ISSUE

1.Robotic Process Automation

2.Text Analytics and Natural Language Processing

3.Artificial Neurons on Silicon Chips

4.Living Robots

5.Charging any Device in Air(Wireless)

6.New IT Rules

7.Twitter India Releases its Transparency Report under New IT Rules

8.Block Chain

1. Robotic Process Automation

Robotic Process Automation refers to the functioning of corporate processes due to the mimicking human tasks and automate them. In this particular sphere, it is important to bear in mind that AI is not meant to replace humans, but to support and complement their skills and talent. Companies like Pega systems, Automation Anywhere, Blue Prism, UiPath and WorkFusion focus on this process.

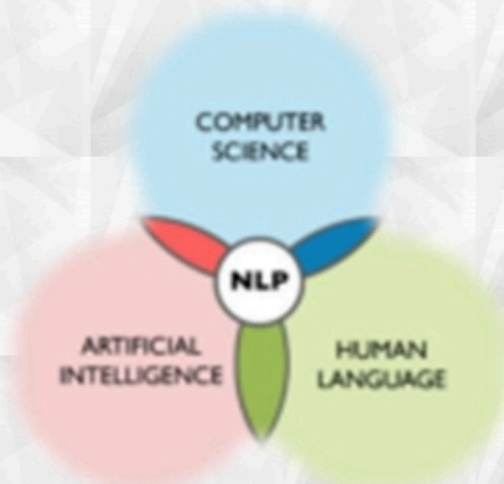
Suraj kumar(3rd year)



2. Text Analytics and Natural Language Processing

Natural Language Processing focuses on the interactions between human languages and computers. It uses text analytics to analyse the structure of sentences as well as their interpretation and intention through machine learning. This technology is widely adopted in fraud detection and for security systems. Many automated assistants and applications derive unstructured data by NLP. Basis Technology, Expert System, Coveo, Indico, Knime, Lexalytics, Linguamatics, Mindbreeze, Sinequa, Stratifyd and Synapsify are some of the service providers.

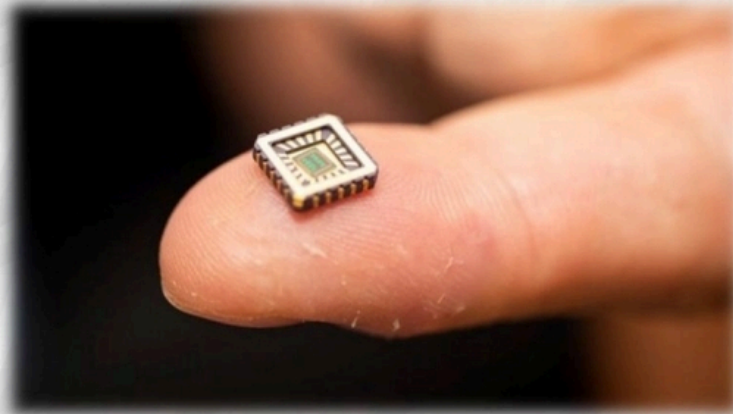
S.Divya shree(4th year)



3. Artificial Neurons on Silicon Chips

Scientists have found a way to attach artificial neurons onto silicon chips, mimicking the neurons in our nervous system and copying their electrical properties. Until now neurons have been like black boxes, but we have managed to open the black box and peer inside. The work is paradigm-changing because it provides a robust method to reproduce the electrical properties of real neurons in minute detail. "But it's wider than that, because our neurons only need 140 nanowatts of power. That's a billionth the power requirement of a microprocessor, which other attempts to make synthetic neurons have used. Researchers hope their work could be used in medical implants to treat conditions such as heart failure and Alzheimer's as it requires so little power.

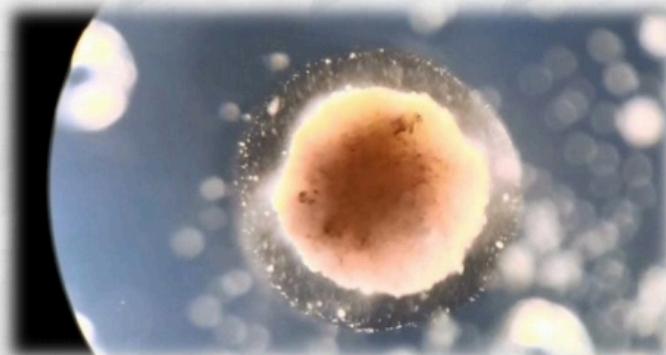
Zaid Rasool khan (4th year)



4. Living Robots

Tiny hybrid robots made using stem cells from frog embryos could one day be used to swim around human bodies to specific areas requiring medicine, or to gather microplastic in the oceans. These are novel living machines. A computer scientist and robotics expert at the University of Vermont, who co-developed the millimetre-wide bots, known as xenobots. "They're neither a traditional robot nor a known species of animal. It's a new class of artefact: a living, programmable organism.

Kavya Sree.(3rd year)



5. Charging any device in Air(Wireless)

We're excited to bring you the remote charging technology - Air Charge Technology! Charge multiple devices simultaneously while you're gaming, walking around or even when something's in the way, no strings attached. The transmitter looks quite large, as large as perhaps a living room side-table next to a couch. The transmitter can provide a 5W charge wirelessly to a smartphone. This kind of charging has nothing to do with the Qi standard. The smartphones need to be outfitted with a "miniaturized antenna array with built-in 'beacon antenna' and 'receiving antenna array'." The smartphone has 14 antennas to convert a millimeter wave signal that's emitted by the charging pile. The signal is converted into electric energy through a rectifier circuit.

Rajan Kumar(3rd year)



6. New IT rules: HC grants more time to Centre to file counter-affidavit

The new Rules are ultra vires the IT Act 2000 too, as no part of the Act confers power on the Union Ministry of Information and Broadcasting to regulate digital news media or online content producers through an Inter-departmental committee or otherwise and as such the rules made under Part III are wholly ultra vires the purported parent Act, the petitioners further contended.

Kaniksha (4th year)



7. Twitter India releases its transparency report under new IT rules

Twitter India on Sunday published its transparency report in accordance with the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules (IT Rules), 2021. It published the data it received via its grievance officer between May 26, 2021, and June 25, 2021, that included content on Twitter. It also includes complaints received from individual users with accompanying court orders.

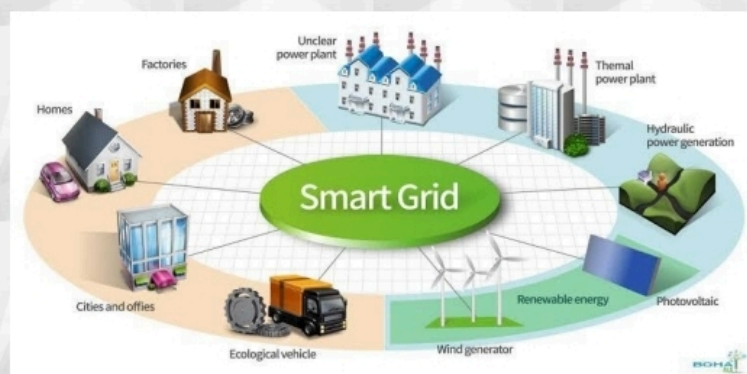


Jai Ganesh(4th year)

8. Block Chain

Blockchain technology is most simply defined as a decentralized, distributed ledger that records the provenance of a digital asset. Block chain, sometimes referred to as Distributed Ledger Technology (DLT), makes the history of any digital asset unalterable and transparent through the use of decentralization and cryptographic hashing. A simple analogy for understanding block chain technology is a Google Doc. This creates a decentralized distribution chain that gives everyone access to the document at the same time. No one is locked out awaiting changes from another party, while all modifications to the doc are being recorded in real-time, making changes completely transparent. Smart grids are currently advancing technologically at a very fast pace by using borrowed capitals for the benefits offered by Wireless Sensor Networks and the Internet of Things. They offer optimization in energy production and consumption by the adoption of intelligent systems that can monitor and communicate with each other. Automation of the smart sensor-based metering system by using Advanced Metering Devices leads to a lesser requirement of manpower and more accuracy. This promotes consumers to utilize renewable sources of energy. Applications of blockchain in smart grid are Security and Privacy-Preserving Techniques, Energy Trading in Electric Vehicles, Peer-To-Peer Trading Infrastructure. Blockchain is an especially promising and revolutionary technology because it helps reduce risk, stamps out fraud and brings transparency in a scalable way for myriad uses.

Mr.A.Kameshwaran(Assistant Professor)



EVENT OF THE MONTH

Guest Lecture

on

"Machine learning and Its Applications"

26.08.2021

The Guest lectures on Machine learning and it's application started with the *welcome address given by Dr. N. Kanya, Head of the Department*, followed by the Ms.R.S.Rashika, Assistant Professor / IT, introduced our *speaker Mrs. K.Nithya Assistant Professordept of IT*. She handled the session on " Machine learning and it's application" in which she covered the scope of Machine learning with the advantages of day today life. The lecture gave a great insite to the students on machine learning. The session was streamed through gmeet. The complete session was *moderated by Ms.R.S.Rashika, Assistant Professor /IT, Ms.Surya, Assistant Professor/IT, delivered the Vote of thanks*.

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A SAAC

FACULTY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF INFORMATION TECHNOLOGY

Organised
Guest Lecture
on
"Machine Learning and its Applications"
26.08.2021

WELCOME ADDRESS
Dr.N.Kanya
HOD/IT

SPEAKER OF THE DAY
Mrs.K.Nithya
AP/IT

HOSTING
Ms.R.S.Rashika
AP/IT

VOTE OF THANKS
Ms.U.Surya
AP/IT

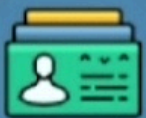


Job Seekers: How to Get Hired

Your cover letter is an employer's first introduction to who you are—your personality, your qualifications, and your goals. A professional cover letter helps you seem more legitimate to employers.

And It's is a great document to bring with you to an interview and to publish on your portfolio site.

What You Should Discuss In Your Cover Letter:



Your contact information



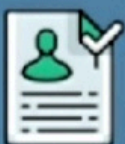
Mention the job that you're applying for



Formal, friendly salutation



Promote your skills related to the role



Your background experiences



Finish with a CTA (interview, call)

9 WAYS TO AVOID GETTING SICK

1. Get vaccinated

Every year the flu virus mutates and adapts to the previous year's vaccines. As more and more people get vaccinated, they also help those who can't (like infants and seniors) from getting sick by granting herd immunity.



2. Rethink that extra drink

Studies have shown that excessive alcohol inhibits the immune system by reducing the ability of white blood cells to effectively kill bacteria. Alcohol also dehydrates and can disrupt your sleep which is also another way to get sick.



3. Avoid sugar

Just like alcohol, sugar also inhibits white blood cells from fighting bacteria and viruses. Women shouldn't exceed more than 6 teaspoons of sugar, while men shouldn't exceed 9 teaspoons. A typical can of pop has 10 teaspoons.



4. Wash any item you touch

Washing machines, phones, microwaves, keyboards, doorknobs, light switches, bed rails, remote controls, and children's toys are all hotbeds for bacteria and germs! So washing all these objects occasionally helps reduce the risk of bacteria and germ build up.



5. Probiotics

Roughly 60% to 70% of your entire immune system is located in your gut. Your gut contains a healthy mix of bacteria which prevent pathogens and infections from being absorbed. So promote healthy bacteria by way of kombucha or kimchi (instead of sugary yogurts).



6. Stop biting your nails

Think about everything you touch in the course of the day. Biting your nails means exposing your mouth, nose and eyes to a variety of bacteria and germs that could be harmful to you. So wash your hands with soap often and avoid the nibbling.



7. Exercise moderately



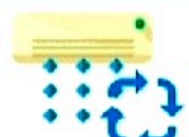
Moderate exercise, in the long run, strengthens your immune system. However, intense workouts leave your body in a weakened state that also weakens your immune system. After intense workouts, your body is more susceptible to getting sick for a 72-hour window.

8. Hold your breath



Studies show that the droplets from sneezes and coughs carrying germs travel much farther than previously thought. Holding your breath for even 10-15 seconds after a sneeze or cough can reduce your chances of getting sick.

9. Get fresh air



Sometimes, sharing warm air inside an office or home can lead to getting sick. The air that's circulating in a closed space carries germs and bacteria that can infect you. So take a few minutes occasionally to get some fresh air, when it's a little chilly outside.



Dr.Dahlia Sam



Mr.A.Kameshwaran

EDITING TEAM



S.Kanishka
B.Tech IT,III Yr



Shaik Nayab Rasool
B.Tech IT,III Yr



S.Divya Shree
B.Tech IT,III Yr



Zaid Rasool Khan
B.Tech IT,III Yr

DESIGNING TEAM



Charumathi.M
B.Tech IT,III Yr



S.Arun Kumar
B.Tech IT,III Yr



Rajat Shah
B.Tech IT,III Yr



Riya Bhatta
B.Tech IT,III Yr

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FACTS


Apple's first company logo featured a drawing of the father of physics, Sir Isaac Newton.





Russia built a computer that ran on water: in 1936

 <https://linkedin.com/in/department-of-information-technology-516a0a20a>

 <https://www.instagram.com/mgrclassroom/>

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TECH VOICE

DEPARTMENT OF INFORMATION TECHNOLOGY

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