



## Vision of the Department

“To impart knowledge to young aspirants to develop Information Technology based solutions for the Industrial and Societal needs”

## Mission

- Prepare students to acquire knowledge in the field of Information Technology through effective teaching learning methodologies.
- Establish conducive environment for better learning through the state of the art curriculum to exhibit talents and ingenuity.
- Nurture the students to be industry ready by enhancing their employability skills and entrepreneurial skills
- Develop Information Technology based solution as per the need of Society.

## Program Specific Outcomes(PSOs)

- Able to apply appropriate techniques for storage of huge amount of data and ensuring its integrity.
- Choose appropriate method for data acquisition from real world and propose suitable solutions to solve problems.

## Editorial Board

### Chief Editor:

Mrs. Sushma M, Assistant Professor

### Student Editors:

1. Rohith C R, 5<sup>th</sup> Semester.
2. Shruthi, 5<sup>th</sup> Semester.

## Artificial Intelligence and Machine Learning - In Engineering

The field of artificial intelligence (AI) was begun in 1956, but it has been only in the last decade that significant progress has been made to allow the technology to be widely used and experienced by many outside technology circles. Today, artificial intelligence is one of the fastest-growing emerging technologies and describes machines that can perform tasks that previously required human intelligence. Machine learning takes it a step further. It's one of the latest artificial intelligence technologies where machines can learn by taking in data, analyzing it, taking action, and then learning from the results of that action.

Artificial intelligence that's used in the engineering sector uses software and hardware components. As machines become more sophisticated, they will be able to support not only smart production lines and complex manufacturing tasks, but will also be able to design and improve tasks over time—with little or no human intervention—through machine learning. Robots have been used by automobile manufacturers on the production line for quite some time and have gone from completing simple engineering tasks to now handling many precision moves required for some of the most intricate parts of the process.

Many of the tasks engineers are responsible for, such as design and simulation, can be enhanced with the support of artificial intelligence tools. Consider how Computer Aided Design (CAD) was once just a supplemental tool to engineering, and today it is a fundamental part of the daily workflow. These tools will help improve the capabilities of engineers and make it possible to explore design and weight-saving options that weren't ever possible before.

Another way artificial intelligence can support engineering tasks is to break down silos between departments and help to effectively manage data to glean insights from it. AI engineers to perform higher-value tasks. By using machine learning to discover programmes can provide automation for low-value tasks freeing up patterns in the data, machines will be incredibly important to help with engineering judgment. While there are many benefits of artificial intelligence and machine learning in engineering, some engineers are concerned their jobs will be taken over by machines.

Automation has and will continue to take over jobs humans have done historically; however, that can free humans to do higher-level tasks as well as take over jobs that require the unique skills of humans that don't even exist yet. In one study by Stanford University, "One Hundred Year Study of Artificial Intelligence, " there's nothing imminent about the threat to jobs, and even when or if we get there, it will be balanced out by the positive impacts on society and the increased capabilities technology offers. A report from the University of Oxford states that science and engineering professions are the least threatened and will experience great benefits from artificial intelligence tools.

In order for engineers to prepare for Industry, when factory automation, big data, artificial intelligence, and machine learning transform the way we work, available to them and learn how to work alongside robots and machines advising them. Engineers must optimize the work that needs to be done so that the interactions between humans and robots are as good as they can be.

Artificial intelligence and machine learning are the foundation of advanced engineering. While there remain questions, most notably about how the job of engineers will change, it is futile to resist the transformation. There's no doubt that AI will help manage engineering data more efficiently and will be an essential component of engineering's future. The sooner it's adopted and adapted to; the sooner engineering will be able to capitalize on the advantages of the technology.

**Mrs. Champakamala S**

Assistant professor,  
Dept of ISE.

"If we could change ourselves, the tendencies in the world would also change. As a man changes his own nature, so does the attitude of the world change towards him. We need not wait to see what others do."

By DR. A P J Abdul Kalam

## Perfect Online Privacy

Twenty years ago, no one could have predicted just how far-reaching and powerful the Internet would become today. They also couldn't have predicted just how much cyber-crime would permeate the online world, and how our personal and financial privacy would continue to fall away as governments and groups fight harder to gain more information on us.

Signing up for social media or creating any sort of account means creating a digital trail that inevitably leads back to the source, and more and more people are becoming disconcerted with the idea of having their personal information leaked online.

While there are some ways to circumvent prying eyes, such as using VPNs and networks like Tor, these are often for more advanced users, and there's a huge market for a privacy solution for the general public. But recent developments from innovative software like blockchain means we're seeing a new wave of online privacy that could benefit sectors like banking, gaming, and sports betting NZ.

### The Latest Cryptographic Protocols

The latest in the world of virtual privacy comes in the form of a new tool called Perfect Online Privacy, which is still currently in development. The aim of the tool is to create a means for people to make use of online services without ever having to submit and personal or financial information. While it may seem too good to be true, initial sources believe that Perfect Online Privacy may allow us to continue using the internet as openly as we do now, with the added bonus that governments, social media, and online criminals can't find any real information on our identities.

The protocol involved in this technology is called zero-knowledge proof. It's by no means a new concept, and developers have been working on zero-knowledge proof protocols for the last two decades. But thanks to the current obsession with cryptocurrencies and a new market for the need for online privacy, it's the first time we're seeing major breakthroughs in the tech.

### Usage in Every Day Life

While it will most certainly have practical usage in many sectors of our online lives, the focus of Perfect Online Privacy at the moment is for online transactions and transferral of money. The methods we use to transfer money right now are not totally secure, and most banks' security systems tend to have backdoors and loopholes that can be exploited, allowing criminals to gain access to personal information.

The idea is to use the tool in tandem with blockchain systems, which are currently becoming more established around the world, and have already been adopted by a number of international banks. Blockchain is an almost perfect way to move funds around online, but it still does leave some digital footprints – which is where Perfect Online Privacy comes in.

Users receive an online key, which they can then use to access blockchain and other accounts, allowing them to transfer money almost entirely anonymously. The system isn't completely safe just yet, but development should yield results in the next few years.

**Mrs. Rashmi H C**  
Assistant Professor,  
Dept of ISE

## Conference and Publications

- SreeKumar,, Karunakara K, Particle swarm optimization based identification of face images from video International Journal of Advanced Computational Engineering and Networking Volume-4, Issue-2, 2018.
- T. Shreekumar, K. Karunakara, “A Video Face Recognition System with Aid of Support Vector Machine and Particle Swarm Optimization (PSO-SVM)”, Journal of Advanced Research in Dynamical and Control Systems (JARDCS), ISSN: 1943-023X, 2018, vol-10, 496- 507.
- Ravi Ram V., Premasudha B.G., Suma R. “Design and Implementation of a Scenario-Based Communication Model for VANETs in EXata”, in Proceedings of the Second International Conference on Smart Computing and Informatics (SCI 2018), 27-28, Januray 2018, PVPSIT, Vijayawada, India, Volume 2, pp. 577-587. In: Satapathy S., Bhateja V., Das S. (eds) Smart Intelligent Computing and Applications. Smart Innovation, Systems and Technologies, Vol 105, Springer, Singapore. First online 05 November 2018, DOI [https://doi.org/10.1007/978-981-13-1927-3\\_61](https://doi.org/10.1007/978-981-13-1927-3_61) (Scopus Indexed).
- Ravi Ram V., Premasudha B.G., Suma R. “Design and Implementation of a Scenario-Based Communication Model for VANETs in EXata”, in Proceedings of the Second International Conference on Smart Computing and Informatics (SCI 2018), 27-28, Januray 2018, PVPSIT, Vijayawada, India, Volume 2, pp. 577-587.
- Kushala. V. M, Dr. Supriya. M. C,” Deep Learning Ontology: Dimensions in the Field of Agriculture, A Survey”, International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS) Volume 7, Issue 1, January 2018
- Naveen Kumar A. N. and Dr. N. L. Udayakumar, “Running Instances of Virtual Machines Concurrently and Securely in Cloud Environment”, Proc. of International Journal of Computer Trends and Technology [IJCTT], Publisher Seventh Sense Research Group, Vol. 62, No. / Issue 01, PP. 71 – 74, 2018.

## PLACEMENTS - 2017-18

*Congratulations to all the placed students*

Sl. No.	Name of the student placed	Enrollment no.	Name of the Employer
1	Rohith Bhushan	14IS030	TCS
2	Skanda Bharadwaj	14IS032	TCS
3	Prathiksha K J	14IS028	TCS
4	Anupama Banakar	14IS002	TCS
5	Likitha C	14IS014	TCS
6	Mamatha N S	14IS015	TCS
7	Monisha B N	14IS018	TCS
8	Pooja G	14IS024	TCS
9	Vidya M S	14IS034	TCS
10	Vinutha R	14IS047	TCS
11	Rohini P	14IS029	SCII