



**HINDUSTHAN COLLEGE OF  
ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF COMPUTER SCIENCE  
AND ENGINEERING**

**2021 – 2022  
(ODD)**

**CYBERLINES**

**VOLUME:14**

**EDITOR'S DESK****From the Chief Editor Desk...**

It gives me immense pleasure to bring out the issue of our magazine “CyberLines” as the name itself symbolize it marks the whole timeline of our department of Computer Science and Engineering.

The main motto of bringing out this magazine is to show the surrounding, our achievement, work and contribution to the society for every academic year. The magazine reveals all the hard work of our students, their extracurricular activities, and we complement their hard work under the winners and toppers in this magazine, and I am quite happy in sharing these details with the Heads of the Departments, our well wishers and all others who are bonded to CSE, through this magazine.

This magazine is also for us to look back to the past, the path we travelled together as a unit. The supports we got from our colleagues and subordinates. It reflects our complete journey of the past year. It gives us time to think about our beloved passed out students, and wish them all success in the corporate life they are undergoing now. The current volume has come out well, and the work from our students has made it more colourful. We hope our forthcoming volume will be enriched more delightful incidents, ideas and thoughts to share.

With Regards

**Dr. S. Shankar**

**Head of the Department**

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## CYBERLINES CYBERLINES

Computer has become the part of our life. The work of a computer engineering is not only restricted to the field of IT, their job continues even outside that, like Automobiles and many other fields. The department of Computer Science and Engineering is linked and synchronized with all other department of Engineering. Hence the world moves ahead along with us!

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### ***PROGRAM EDUCATIONAL OBJECTIVES***

**PEO1:** To acquire knowledge in the latest technologies and innovations and an ability to identify, analyze and solve problems in computer engineering.

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**PSO1:** An ability to understand, apply, design and develop principles in the areas related to algorithms, Software engineering, Networking and database concepts for computer-based systems in solving engineering problems.

**PSO2:** An ability to employ modern computer languages environments and platforms to excel in their careers.

## Articles by Students

### “WOMAN A PERENNIAL SOURCE OF STRENGTH AND LOVE”

Alen Lawrence  
IV CSE A  
Department of CSE  
HICET

The role of woman in India today has been formed by traditions. The nature and role of women in the society is presented by great heterogeneity, divergence and multiple paradoxical appearing phenomena as India itself. In order to remedy these conflicts, women have to play an active role in the society.

While travelling through India, we will notice that we cannot elude ourselves from a spiritual omnipresence. The principle of 'being' forms this country far too much and play a crucial role at every level of human existence. In order to understand her role in modern times, one must look to the past. It is important to recall that the femininity is seen as a creative manifestation of the cosmic principle.

The devotion towards the superior and also towards the family and the willingness to sacrifice, forms the existence of women in India at all societal levels in all periods. Unfortunately today woman is discriminated at all levels. Surprisingly, Indian society considers women as an embodiment of love and kindness. She is also considered as Creator and Destroyer (all powerful). The same society which is

patriarchal subjects her to oppression and humiliation in political, social and economical aspects of life.

There is a need for women in modern India to be aware of their strength and their potential. They have to oppose any thing that is meant for their suppression. In order to do this they must be educated and made economically independent. They have to assert themselves and must change the social frame work in order to stand up for the goals and values, which are important for them. The turning point in India can only be achieved through active participation of women in national movements in which education must precede. Education and freedom, as well as its acceptance by the male side would arrange a new self-confidence, a newly defined image. She can then no longer let herself be subordinated, but operates on equal height with men in the society. Man and woman are still trying to find their place in a society which balances between spiritual tradition and market based modernity. Woman is and will remain a source of strength and love. She always remains the embodiment of the values of Dharma.

**DOES MONEY MAKE MANY THINGS?**

Nandha Kumar  
III CSE B  
Department of CSE  
HICET

Now-a-days people work like machines just to earn more money from more than one source and they feel that they can get everything with money. In trying to earn money they miss small and precious pleasures that life offers to humans. There is no end to that want of earning. And at a peak stage, they feel that they are the only persons responsible for their huge success. But it is sad that at that stage most of the people forget taking care of their parents and other family members, supporters, and friends who made them strong to be in that position and overcome the difficulties that life poses them. There is a saying "Money makes many things" which may be good or bad depending on how we use it. Now, people earn lakhs of salary per month. Are they happy with that money? No, because they miss something, something which money cannot buy. Something which they cannot have by just working like a machine i.e., they miss the feel

of being alive and spend the quality time with family.

How much money should a person earn in his life? It is enough if he earns to satisfy the basic needs of the family and education and future of the children. But people wish to have a lavish and luxurious life. With this aim they work like slaves and become slaves of money.

At the end, they realise that they couldn't take even a single rupee with them. The great Alexander is the best example for this. This is the reality of life. Depending on how you use money can either free you or enslave you. So, let's spend money wisely by donating some to the needy. With this perspective, if a person earns there will be no regrets due to lack of money. And we can spend time with our beloved parents who gave us such a wonderful life and this world. Money is only something that we need but not everything in life

**SAVE WATER AND SAVE LIFE**

SARVESH

II CSE C

Department of CSE

HICET

Water covers 70% of earth's surface. But in that only 3% of water is clean and suitable for human consumption. Water has a very important role to play in our daily life. According to a survey, the average family of four members, uses 450 litre of water per day, 1,64,000 litres of water per year. If it is continued in future we are going to face water wars. To avoid this we have to save water for the coming generations. Some Important Tips to Save Water at Home :

- ◆ Turn off the tap when you brush your teeth which can save 6 litres of water per minute.
- ◆ Place a cistern displacement device in your toilet cistern to reduce the volume of water used in each flush.
- ◆ Take a shorter shower. Shower can use any thing between 6 and 45 litres per minute.
- ◆ Fix a dripping tap. A dripping tap can save 15 litres of water a day or 5,500 litres of water a year.
- ◆ Install a water butt to your drain pipe and use the water collected to water your plants, wash your windows or cars.
- ◆ Water your garden with a watering can rather than a hose pipe. A hosepipe uses 1,000 litres of water an hour. Watering the plants in the early morning and late

MPS(TM) afternoon will reduce evaporation and also save water.

- ◆ Repair dripping faucets by replacing washers. If your faucet is dripping at the rate of one drop per second, you can expect to waste 2,700 gallons per year which will add to the cost of water and sewer.
  - ◆ Invest in water-efficient goods when you need to replace household products. You can now buy water – efficient shower heads, taps, toilets, washing machines, dish washers and many other water saving products.
  - ◆ Verify that your home is leak-free, because many homes have hidden water leaks. Read your meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak.
  - ◆ When adjusting water temperature, instead of turning water flow up, try turning it down. If the water is too hot or cold, turn the offender down rather than increasing water flow to balance the temperatures.
- So please.....save water and save life.  
And save water, secure your future.



**Articles by Faculty Members****KNOW YOUR EMPLOYEES TO IMPROVE WORK CULTURE**

Dr. J. Prakash  
Associate Professor  
Department of CSE  
HICET

Employees are indeed true assets of an organization. Managers need to know their employees well to expect them to contribute their level best and also to remain loyal towards the organization. Employees need to feel valued and important at the workplace for them to deliver their level best.

Human beings need people around to talk to and express their feelings. We spend the maximum part of our day at workplaces and it is essential for us to have friends here. Work becomes a mere source of burden when individuals are glued to their computers the whole day. Discussions and brainstorming sessions lead to innovative solutions and quick results.

Knowing employees strengthens the relationship between employees and their Bosses. Being rude to employees will not only demotivate them but also make you an unpopular member within the organization. Call them by their names rather than addressing as “Mr/Ms” or “Hey”, greet them with a smile and enquire what is going on in their personal lives once in a while and see the difference yourself. Trust me; you will be elated to see employees striving hard to accomplish assigned targets within the shortest possible time frame.

Conflicts and misunderstandings lead to no solutions. Fights over petty issues not only lead

to frustration but also spoil the ambience at the workplace. Do not forget that we are not school going kids who would fight over small things. It is essential to behave as mature professionals. Encourage healthy communication at workplace where employees get an opportunity to interact with each other, discuss ideas and also gain from each other’s expertise. Let them open up. Knowing each other well leads to better understanding among employees and they seldom fight with each other, eventually leading to a healthy and positive work culture. It also leads to peace at the workplace. Knowing employees helps managers to understand how he can motivate his team members and use them to the best of their abilities. It helps you to understand which team member would fit into which particular role and which employee would not do justice to his work? Knowing employees helps you judge your subordinates well and hence there is no question of confusions at the workplace. There is seldom any overlapping of work and everyone knows what he/she is supposed to do? Individuals feel attached towards their organization and love coming to work.

Appreciate employees whenever they perform any extraordinary task. Praise them in front of all. Let him/her feel indispensable for the organization. This way, you are not only motivating the employee who has performed well but also others who have failed this time.

**NEW TRENDS IN COMPUTER SCIENCE**

D. Satheesh kumar  
Associate Professor  
Department of CSE  
HICET

Wireless charging :

Place a laptop on a table, and it'll automatically start charging. No wires needed and no need to carry a power brick. That's how Intel views wireless charging for laptops, which could become a reality next year. Intel wants to make wireless chargers as easy to find as a Wi-Fi signal, and wants to bring the technology to cafes, restaurants, airports and other public places. So laptops can be recharged without power adapters. The first laptops with wireless charging could come out next year, and Intel has shown a few prototyped laptop being recharged on a table. Intel is backing the Rezence magnetic resonance wireless charging technology, promoted by the Alliance for Wireless Power, or A4WP. The power flow will initially be limited, enough to wirelessly recharge ultra portables and hybrids. Plans call for increased power output to recharge mainstream laptops. But getting the technology to public places and entertainment spots could take some years. Some cafes and restaurants already provide wireless charging bases for tablets and smart phones, and are interested in adding laptops to the mix.

It may also become possible to connect laptops wirelessly to displays, which could eliminate expensive HDMI or Display Port display cables. A wireless display will start working as soon as a laptop is within range. Intel envisions a laptop ultimately being able to connect to multiple wireless monitors, which could be useful in classrooms or meetings. One laptop will be able to stream to monitors on multiple desks. Intel is pushing the initial idea through a "smart dock" that connects a laptop to a wireless monitor.

Wireless displays will gain momentum with the growing adoption of WiGig, a faster version of Wi-Fi that can handle wireless 4K video streams without any

lag. In addition to Intel, Qualcomm will bring WiGig to smart phones and tablets next year, so users will be able to stream Netflix directly from a smart phone or tablet to a wireless TV. Display makers will also build WiGig technologies into monitors and TVs in the coming years.

Creative desktops :

From its origin as a dull white box, the desktop has become a hub of creativity and imagination, with technologies like depth-sensing cameras and 3D printing spinning off a variety of innovations. One example is HP's Sprout, which looks like a normal all-in-one PC, but packs the latest imaging and collaboration technology. At the base of Sprout is a giant touch pad called a Touch Mat, which is a dual-purpose digital canvas on which images can be scanned and also manipulated.

A 3D depth-sensing camera lodged in Sprout scans the objects placed on the Touch Mat - for example, if a coffee mug is placed on the canvas, the 3D camera will scan it to depth and size. A projector on top of Sprout can then reflect the scanned image of a coffee mug on the Touch Mat, which artists can then manipulate by touching the digital canvas. HP says the scanning and manipulation could be useful for creating objects that could be 3D-printed. But at \$1,899, Sprout is considered an expensive experimental desktop.

Otherwise, Dell has developed a "smart desk," with an all-in-one PC beaming a virtual keyboard onto a desk on which users can type. It's an interesting concept, but a proper keyboard may be a better idea.

**ROLE OF LEADERSHIP IN KNOWING EMPLOYEES**

D. Magesh  
Associate Professor  
Department of CSE  
HICET

Employees are the backbone of an organization who play a crucial role in its success and failure. Employees need to feel comfortable at workplace and work should never be a mere source of burden for them. Employees ought to be valued if you want them to deliver their level best. They need to be appreciated and their hard work ought to be acknowledged in front of all.

Leadership plays a crucial role in knowing your employees.

Believe me, gone are the days when managers used to keep their subordinates at arm's length. This way, please do not expect your team members to listen to you or respect you. You need to make your employees feel important at workplace. Remember, as a manager, your job is not only to delegate responsibilities to your team members but also take them along. Please do not restrict yourself to your cabins only. Come out, sit with your team members, find out what they have planned for the entire day, know whether they are satisfied with their performance or not and so on.

What is the use of being a manager if you do not know what your team members are up to? Always make it a habit to call your team members by their first name. Avoid calling them by their nicknames. It is completely unprofessional. Make it a point to speak to your team members at least once in a day. Enquire about their family members, their well being etc but do not interfere too much in their personal lives. They might not like it. Employees expect

managers to enquire about their personal lives but you do not need to interfere much.

Join your team members for lunch once in a while. Be careful; do not discuss only work during lunch hours. If you do so, don't be surprised if your team members don't call you for lunch the next day. Take them out for small get-togethers after work. Ask your employees to bring their families as well. As a manager, you have to take the initiative to bring the employees closer to each other and also know each other well.

Organize small activities at the workplace which help break the ice among employees. Who says you can't be friends with your co workers. Yes competition is necessary at workplace but do not forget that we need people around to speak to, discuss our problems, share our happiness and so on. After all, we are human beings, not machines. There is no problem if you speak to individuals representing other departments as long as you are not revealing your team's projects and strategies.

You need to be a strong leader who plays a crucial role in letting your team members know that there is someone who cares for them. They need to be supported and assisted in their day to day operations. Strong leadership goes a long way in binding the team together. Know what motivates your employees. Find out what all is lacking in your team members and what all additional skills can make them a better and efficient resource.

## Department Related Information

### 1. Guest Lecture on “Let’s Make Equity A Reality”

One day Guest Lecture on “Let’s Make Equity A Reality” was conducted on 7<sup>th</sup> of December 2021. It was inaugurated by Dr. S. Shankar, Head of the Department. EQUALITY aims to ensure that everyone gets the same things in order to enjoy full, healthy lives. On the other hand, EQUITY involves trying to understand and give people what they need, to enjoy healthy lives. Equity refers to fairness and equality in outcomes, not just in supports and opportunity. It gauges someone readiness to handle the workload of a university.



A party of around 220 students from CSE department have benefited through this program. It was handled by Dr. S. Naganandini, Senior, Director, MBA, Nehru Institute of Technology, Coimbatore.

### 2. Seminar on “Recent Trends in IT”

One day Seminar on “Recent Trends in IT” was conducted on 11<sup>th</sup> of December 2021. It was inaugurated by Dr.S.Shankar, Head of the Department.

In the digital summary of the past decade, we have previously seen how the social balance of power has changed completely and how new



social goals have been formed. We have seen how the foremost tool for this has become the technology that took full command, and what consequences it in turn had for leadership and global markets.

To Impart knowledge about the emerging trends of new management concepts and to provide knowledge about the significance of the integration of information technology as the platform for the application of various management concepts.



A party of around 260 students from CSE department have benefited through this program. It was handled by Dr. K. Sasi Kala Rani, Professor , CSE, Sri Krishna College of Engineering and Technology, Coimbatore.

### **3. Guest Lecture on “Cloud Native Application Development with Microwave Architecture”**

One day Guest Lecture on “Cloud Native Application Development with Microwave Architecture” was conducted on 3<sup>rd</sup> of September 2021. It was inaugurated by Dr. S. Shankar, Head of the Department. Cloud-native applications are a collection of small, independent, and loosely coupled services. They are designed to deliver well-recognized business value, like the ability to rapidly incorporate user feedback for continuous improvement. In short, cloud-native app development is a way to speed up how you build new applications, optimize existing ones, and connect them all. Its goal is to deliver apps users want at the pace a business needs.



A party of around 260 students from CSE department have benefited through this program. It was handled by Dr. T. Keerthika , Assistant Professor , CSE, Sri Krishna College of Engineering and Technology, Coimbatore.

#### **4. Seminar on “Deep learning Models for measuring patient Similarity”**

One day Seminar on “Deep learning Models for measuring patient Similarity” was conducted on 8<sup>th</sup> of December 2021. It was inaugurated by Dr. S. Shankar, Head of the Department. The main objective of this course is to make students comfortable with tools and techniques required in handling large amounts of datasets. They will also uncover various deep learning methods in NLP, Neural Networks etc.

Several libraries and datasets publicly available will be used to illustrate the application of these algorithms. This will help students in developing skills required to gain experience of doing independent research and study



A party of around 250 students from CSE department have benefited through this program. It was handled by Mr.Vignesh , CEO, Nandha Infotech, Coimbatore.



### 5. Seminar on “MAC and IOS Application Development”

One day Seminar on “MAC and IOS Application Development” was conducted on 10<sup>th</sup> of December 2021. It was inaugurated by Dr. S. Shankar, Head of the Department. The language used in iOS development is objective C. It is an object-oriented language and hence, it would be easy for those who have some background in object-oriented programming languages.

The Medium Access Control (MAC) protocol is used to provide the data link layer of the Ethernet LAN system. The MAC protocol

encapsulates a SDU (payload data) by adding a 14 byte header (Protocol Control Information (PCI)) before the data and appending an integrity checksum, The checksum is a 4-byte (32-bit) Cyclic Redundancy Check (CRC) after the data.



A party of around 240 students from CSE department have benefited through this program. It was handled by Ms. Deepa Srinivasan, Branch Head, IDP Education Pvt. Ltd, Coimbatore.

**Awards and Recognition of Staffs and Students**

Name: Shriram S

Reg. No: 19104145

Department: CSE

Year: III Year

1. Done internship under Atal Innovation Mission, NITI AAYOG, Central Government India (Jul, 2021 – Dec, 2021), Worked under Atal Innovation Mission Website Revamping Project.



2. The Project on AI Virtual Mouse has been selected through various stages for National Awards on E-Governance and I became the finalist and presented the project before Jury at New Delhi.





**PLACED STUDENTS (2018- 22 Batch)**



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Aadil Fayas      Prakash.P.S



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Sheshadhree N S  
HICET - CSE

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GIRDHARAN.S



NAGARATHINAM.N



VIGNESH.G

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JAYA ANTONY ALBERT L

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HICET - CSE

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Transformative Intelligence  
Course5 Intelligence



**CTC 3.50 LPA**

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**2021 – 2022**

**(ODD)**



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**Department of Computer  
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It gives me immense pleasure to bring out the issue of our magazine “CyberLines” as the name itself symbolize it marks the whole timeline of our department of Computer Science and Engineering.

The main motto of bringing out this magazine is to show the surrounding, our achievement, work and contribution to the society for every academic year. The magazine reveals all the hard work of our students, their extracurricular activities, and we complement their hard work under the winners and toppers in this magazine, and I am quite happy in sharing these details with the Heads of the Departments, our well wishers and all others who are bonded to CSE, through this magazine.

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## Articles by Students

### HOW MULTI-CLOUD HAS BECOME AN ACCELERATOR FOR DIGITAL TRANSFORMATION

BALAJI  
IV CSE A  
Department of CSE  
HICET

As multi-cloud adoption expands, lessons learned keep coming in. Solution providers are rising to the challenges of enterprises seeking the most cost-effective, reliable and secure way to embrace multi-cloud.

More and more companies are pursuing three key cloud initiatives to help maximize value while minimizing TCO:

1. Modernizing infrastructure
2. Modernizing operations
3. Modernizing applications

“We found that 83% of enterprises are already distributing applications across their own data centers, in one or more public clouds, and edge environments. As a result, roles within IT are also changing, with 90% of individuals in these same companies having roles that now span multiple cloud environments,” said Mark Lohmeyer, SVP and General Manager of the VMware Cloud Infrastructure Business Group, during VMware Explore 2022.

“We’re living now in a much more distributed, multi-cloud world,” Lohmeyer continued. “However, with this distributed environment comes a whole new set of challenges, because we now have these disparate cloud operating models, skillsets, tools and processes, SLAs, and security models.”

In many environments, that can lead to greater risk, longer time-to-value and higher cost.

“One question we’re often asked is, ‘What is the total cost of ownership (TCO) of VMware Cloud running as a native service in a public cloud compared to alternatives?’” Lohmeyer said.

VMware studied the question with hundreds of VMware Cloud users and discovered that TCO can be 67% lower with VMware Cloud.<sup>1</sup> Customers need to look not only at the technology costs but all the enterprise-class support and workload migration costs. Because VMware has both private and public cloud services, it’s a lot easier and faster for customers to move their SDDC/private-cloud workloads to VMware Cloud on public clouds. This helps create a virtuous cycle in which more companies embrace multi-cloud architectures while freeing up investment for new innovation initiatives.

For example, Lohmeyer said, many enterprises moving workloads to VMware Cloud on AWS have realized they’d prefer to scale their storage requirements independent of their compute needs. “It’s been a longstanding customer request,” he said.

To date, storage for VMware Cloud on AWS has been based on VMware vSAN, leveraging economical, directly attached SSDs for high-performance, low-cost host-based storage integrated directly into VMware Cloud. But as enterprises continued moving workloads to the cloud, some realized they needed more storage than compute power and would prefer to address the two separately. Meeting that request, VMware introduced VMware Cloud Flex Storage, a VMware-based, cloud-native storage service.

## THE FUTURE OF EDUCATION

SRIRAM  
III CSE  
Department of CSE  
HICET

As classrooms closed across the world, nearly every country implemented some form of remote learning. Suddenly, school was in session—at home.

For years, colleges and universities offered remote learning options, particularly for non-traditional students, like working adults. Students learn off-campus using online tools (or even broadcasts on a TV or radio station). Courses can be live and/or self-paced.

As countries loosened restrictions, many schools reopened with an expanded approach: hybrid learning. This typically means each student can choose to participate either in person or remotely—or a combination of both.

By August 2020, 69% of U.S. K-12 leaders told EdWeek Research Center they adopted a hybrid learning approach. And 87% of U.S. colleges and universities planned to offer a hybrid fall semester, according to the Institute of International Education's COVID-19 survey. In fact, half of the adults surveyed across 29 countries believe hybrid learning will be the standard for higher education by 2025.

Many students will continue logging into virtual classes for the foreseeable future. That's a relief to many students, who enjoy the benefits of remote learning, like the flexibility to learn at their own pace. However, new distractions, technological barriers, and poor digital experiences make remote learning difficult for others.

As education experts quickly pointed out, remote and hybrid learning aren't the same as true online learning. The former tends to be business continuity plans—a “quick, ad hoc, low-fidelity mitigation strategy,” said Susan

Grajek of Educause. The latter is a more deliberate, planned, digital-first approach to student-centric education.

oughly 1-in-5 adults said educational institutions deliver a better digital experience now than before the pandemic, according to a 2020 global survey led by VMware. Less than one-third of respondents said they would happily continue interacting digitally with educational institutions. Yet, education generally ranked *behind* all other industries' digital experiences.

The global shift to remote learning abruptly moved students to a digital campus. Educators across the world scrambled to teach students in their homes. Students and teachers accessed video conferencing, online learning platforms and other online tools and content.

That was step one, though. Next, educators need to make these digital experiences:

- Simpler to access.
- Faster to connect.
- More reliable and consistent.
- Less confusing and complicated to troubleshoot.

It starts with the institution's digital infrastructure. Virtual data centers that run on software are less rigid (and less expensive) than hardware. IT organizations with these modern data centers have much more flexibility and agility to accommodate online learning.

IT can quickly gain computing capacity in the cloud, so they can distribute and manage new devices, apps, and virtual desktops from anywhere. IT teams also have more constant visibility into a software-based infrastructure.

**Articles by Faculty Members****KEEPING STUDENTS SAFE IN A DIGITAL LEARNING ENVIRONMENT**

Mrs. M.UMAPRIYA  
Assistant Professor  
Department of CSE  
HICET

In the global Digital Frontiers survey, people revealed how assured they felt about their data security by different industries.

Compared to before the coronavirus pandemic began, which if any of the following organizations, would you say have given you the assurance you need that your data and information is secure?

- Financial Services – 45%
- Healthcare – 31%
- Government – 28%
- Retail – 23%
- Education – 17%

They felt *least* assured by educational institutions.

Educators are also responsible not only for students' safety. In hybrid learning environments, these responsibilities expand:

- Protecting students' data privacy.
- Safeguarding them from online threats and harmful content.
- Complying with digital guidelines and regulations.

Outdated security models and ineffective tools impede the progress of digital-first learning. It also puts students and institutions at risk. So,

education IT leaders are implementing more modern technologies with built-in security and modern security frameworks, like unified endpoint management and zero-trust security. For example, Brisbane Catholic Education (BCE) manages tens of thousands of different mobile devices and applications across hundreds of schools all from a single, cloud-based platform. From this control center, IT proactively spots malicious activities and can remotely act on security incidents.

"We've had a cloud-first strategy for quite some time, so we're consuming a lot of software-as-a-service (SaaS), which gives us great visibility into our traffic, so we can notice any anomalies," said Paul Saltmarsh, senior IT officer at BCE. "We have a highly distributed environment—147 sites over a fairly large geographical area—so the ability to remotely wipe or disable the device at any moment in time has been a cornerstone of us being comfortable with distributed learning."

With confidence in its security posture, BCE gives students the freedom to take their devices home, so they can develop their digital skills and "always-on" learning mindsets

**STRONG SECURITY PAVES THE PATH FOR DATA PRIVACY**

Dr. G. SAKTHI  
Associate Professor  
Department of CSE  
HICET

VMware is proud to be a 2022 Champion for Data Privacy Week, supporting the principle that all organizations share the responsibility of being conscientious stewards of personal information. The goal of Data Privacy Week is to raise awareness about the importance of privacy and remind organizations that respecting privacy is good for business. The initiative is led by the National Cybersecurity Alliance, a leading non-profit organization on a mission to create a more secure, interconnected world by promoting public-private partnership. Between the universal shift to anywhere work and what is being labeled as “The Great Resignation,” the evolving enterprise landscape has required organizations to adjust their security strategies in real-time to stay one step ahead of attackers and protect stakeholder data. To improve security postures, organizations should consider conducting a baseline vulnerability assessment or threat hunting exercises to identify where systems are vulnerable and where increased security controls need to be applied.

“The lines between work and our personal life have increasingly been blurred over the past few years as our homes now double as our offices,”

said Karen Worstell, senior cybersecurity strategist at VMware. “This is not likely to change soon, as companies continue to delay their return to office plans. As we settle into a new era of anywhere work, enterprises must understand that data privacy practices rest on a foundation of strong cybersecurity controls. Data Privacy Week is a time for organizations to set goals for implementing best practices that improve data protection and cybersecurity. These include robust vulnerability management, implementing multifactor authentication, threat hunting, and network micro-segmentation, among others.”

At VMware, we envision a future where customers of all companies are confident their data is secure and being used responsibly, employees can be sure their employers are transparent and ethical, and all stakeholders are effectively safeguarded from the cyberattacks threatening our digital world. VMware is helping to build a more secure future for all through our security solutions that strengthen customers’ ability to defend against cyberattacks and better protect their apps and data. This empowers customers to build trust across any app on any cloud across any device.

**Department Related Information****1. Guest Lecture on  
“Curriculum Development  
and Integration on MATLAB”**

One day Guest Lecture on “Curriculum Development and Integration on MATLAB” was conducted on 3<sup>rd</sup> of March 2022. It was inaugurated by Dr. S. Shankar, Head of the Department. MATLAB is considered as one of the most important tools and modern computer language, and this course enable the students to learn many of MATLAB commands and how to use them in programming to solve many problems in different mathematical subjects, specially in numerical analysis and other subjects which connected to computer oriented mathematics.



A party of around 225 students from CSE department have benefited through this program. It was handled by Dr. Lakshminarayan Viju Ravicgandran, Education Technical Evangelist, Math Worjs Pvt.Ltd.

**2. Seminar on “An Aesthetics  
view of Robotics”**

One day Seminar on “An Aesthetics view of Robotics” was conducted on 25<sup>th</sup> of February 2022. It was inaugurated by Dr. S. Shankar, Head of the Department. Robotics is a branch of engineering that involves the conception, design, manufacture and operation of robots. The objective of the robotics field is to create intelligent machines that can assist humans in a variety of ways.

Robotics can take on a number of forms. A robot may resemble a human, or it may be in the form of a robotic application, such as robotic process automation (RPA), which simulates how humans engage with software to perform repetitive, rules-based tasks.



A party of around 180 students from CSE department have benefited through this program. It was handled by Mr.Niranjan S D R , Founder & CEO , Mukkudai Robotics,Coimbatore.

### 3. Seminar on “Machine Learning for Medical Data”

One day Seminar on “Machine Learning for Medical Data” was conducted on 10<sup>th</sup> of March 2022. It was inaugurated by Dr. S. Shankar, Head of the Department. The goal of machine learning is often — though not always — to train a model on historical, labelled data (i.e., data for which the outcome is known) in order to predict the value of some quantity on the basis of a new data item for which the target value or classification is unknown.

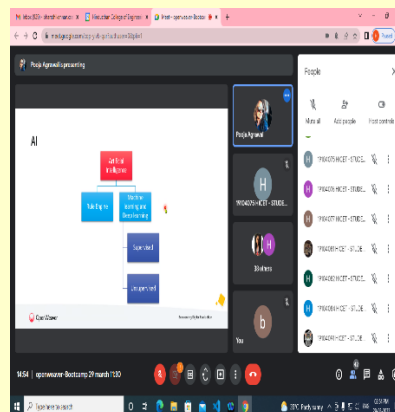




A party of around 200 students from CSE department have benefited through this program. It was handled by Mr.Premanand, Data Engineer, AICL, Coimbatore.

#### **4. Webinar on “open waver Bootcamp”**

Webinar on “open waver Bootcamp” was conducted on 29<sup>th</sup> of March 2022. It was inaugurated by Dr. S. Shankar, Head of the Department. Have a good working knowledge of the Fundamentals of Natural Language Processing. Learn various concepts involved in building the virtual agent such as data analysis, text mining, calculating sentence embeddings and computing sentence similarity. Have a fully functional virtual assistant that you can customize, showcase, share, using the existing source code.



A party of around 165 students from CSE department have benefited through this program. It was handled by Ms.Pooja Agarwal, Apple Certified Trainer, Consolidated techware pvt.ltd, Coimbatore.

#### **5. Seminar on “Trending Technology in IT Industry”**

One day Seminar on “Trending Technology in IT Industry” was conducted on 1<sup>st</sup> of March 2022. It was inaugurated by Dr. S. Shankar, Head of the Department. New technology is emerging every day to make life simpler, more advanced and better for everyone. The rate at which technology is evolving is almost exponential today. For business organisations, new technology helps to reduce costs, enhance customer experiences and

increase profits. It has seen a massive surge in demand for skilled professionals, making it an attractive trend to watch.

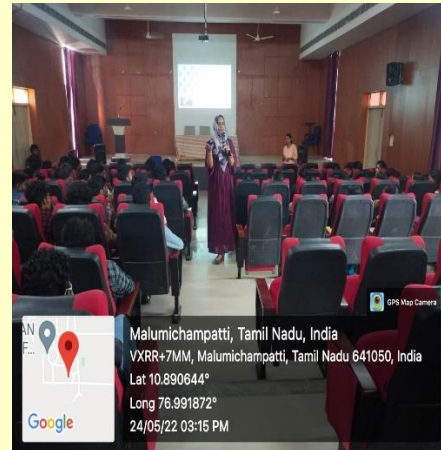


A party of around 185 students from CSE department have benefited through this program. It was handled by Mr. Suraj.R, CEO, Haqto Technologies, Coimbatore.

### **6. Seminar on “Tips & Tricks to be successful in Achieving Dream Carrier”**

One day Seminar on “Tips & Tricks to be successful in Achieving Dream Carrier” was conducted on 24<sup>th</sup> of May 2022. It was inaugurated by Dr. S. Shankar, Head of the Department. It is so important to plan your career goal, even from school or college, these planning help you build a successful career and that you enjoy a lot. Keep in

mind your 1<sup>st</sup> job is not your dream job but it definitely steps towards the long term career goal. It is important to find your dream position is and also It is important to be clear with your goal.



A party of around 120 students from CSE department have benefited through this program. It was handled by Ms.Asha M Sait , HR Director, Squash Apps pvt,ltd, Coimbatore.

### **7. Seminar on “Internet of Things based Automation Using Machine Learning ”**

One day Seminar on “Internet of Things based Automation Using Machine Learning” was conducted on 7<sup>th</sup> of March 2022. It was inaugurated by Dr. S. Shankar, Head of the Department. The Internet of Things (IoT) is a name for



the aggregate collection of network-enabled devices, excluding traditional computers like laptops and servers. Types of network connections can include Wi-Fi connections, Bluetooth connections, and near-field communication (NFC). These devices use Internet protocol (IP), the same protocol that identifies computers over the world wide web and allows them to communicate with one another. The goal behind the Internet of things is to have devices that self report in real-time, improving efficiency and bringing important information to the surface more quickly than a system depending on human intervention.



A party of around 120 students from CSE department have benefited through this program. It was handled by Ms.P.Chitra , Assistant Professor,CSE, Sri Eshwar College of Engineering, Coimbatore.

**Awards and Recognition of Staffs and Students**

Name: Shriram S

Reg. No: 19104145

Department: CSE

Year: III Year

1. Done internship under Atal Innovation Mission, NITI AAYOG, Central Government India (Jul, 2021 – Dec, 2021), Worked under Atal Innovation Mission Website Revamping Project.



2. The Project on AI Virtual Mouse has been selected through various stages for National Awards on E-Governance and I became the finalist and presented the project before Jury at New Delhi.



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Anbarasu G  
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GIRDHARAN.S



NAGARATHINAM.N



VIGNESH.G

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