



# **KONGU ENGINEERING COLLEGE**

**(AUTONOMOUS)**  
**PERUNDURAI- 638 060**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**SCRIPTUS**

**November 2020 edition**

## Quick Glance

- ∂ From our Desks
- ∂ Association Activities
  - Work shop
  - Guest lecture
- ∂ Tech Corner
- ∂ Students' Segment
- ∂ Hear what our Alumni Says...
- ∂ Pioneers
- ∂ Placement highlights
- ∂ Quiz

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**“YOU SHOULD NEVER LET YOUR FEAR PREVENT YOU FROM DOING WHAT YOU KNOW IS RIGHT”**

**- Aung Son Suu Kyi**

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Correspondent

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Principal

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Head of the Department

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III CSE

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III CSE

**Ms. D. Oviya**

II CSE

# EDITOR'S DESK

DEAR READERS,

Our team is extremely privileged in presenting you the second edition of our department's newsletter "SCRIPTUS". We are back again with informative segments including up-to-date technologies, sublime artworks and eloquent poetry.

After a great start, our department continues to host excellent Guest lectures and Seminars by various tech experts all around the world. Students are able to acquire an overall understanding of the tech world and are provided opportunity to clear their queries with pioneers in technology through such interactions. Our Newsletter covers all such activities. It also showcases all publications and research work of our faculty.

Young budding engineers furnish information on various technical findings in the students' section, Art works and Poetry by our students are icing the cake.

We received immense support and wishes from all our readers. Your encouragement and feedback bolsters our work. With upsurge in number of articles submitted this time, I feel the newsletter has achieved its objective. Your positive spirit and innovative contributions keep us going. I am really contented with our initiative and your participation. I would like to conclude with my sincere gratitude towards the entire Newsletter team, faculty and my student friends for contributing and supporting us in all possible ways.

Hope you enjoy reading.....



**KAVINBHARATHI A,**  
EXECUTIVE MEMBER,  
CSEA

## HOD DESK



**Dr. N. Shanthi**  
HOD, CSE

DEAR READERS,

With the intense effort given by Mr.S.Abinash and team, our “First Newsletter” for the academic year 2020-2021, made its release very successful. On behalf of the entire teaching faculty, I would like to proclaim my solemn thanks to the team that worked for the “Second Newsletter” for this academic year. This newsletter will encompass all important events and activities of our department. Additionally, it also provides a platform to recognize and congratulate our department’s achievers. Exploring hidden talents from students’ side and providing remarkable insights from the world of technology has been the main motive behind the newsletter.

“Hide not your talents, they for use were made,  
What's a sundial in the shade?” — **Benjamin Franklin**

In this very competitive world, flaunting your skills becomes a necessity rather than will. We feel extremely privileged to provide a place where our students can present not just their artistic flair but also their technical quotient. Thereby I encourage all the students to actively participate and contribute to our very own newsletter. I hope this initiative builds team work and inspires young minds by providing a larger visibility and dimension to our department. I hope this culture of releasing newsletter continues forever.

## FACULTY DESK

DEAR READERS,

I would like to express my sincere appreciation for all the tremendous efforts put forth by the newsletter team. This Newsletter is a forum to expose the events, happenings, and achievements in the department as well as provide a platform to exhibit the talents of the budding engineers and the faculty as well. It also helps in building up teamwork among the students, which is very much important in this competitive world. I hope the students can make use of this opportunity to develop their inherent talents and actively contribute the same to the newsletter. This newsletter will definitely create an impact in the minds of readers by providing a wider visibility and new dimension to the learning community. I hope that this culture of releasing Newsletter will continue forever with the support from both the students and the faculty. Signing of with a quotation "Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away."



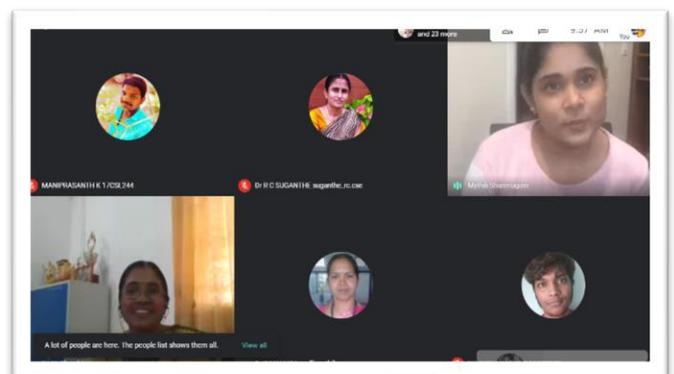
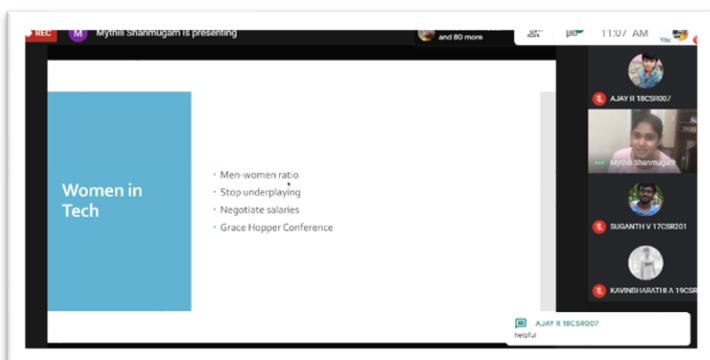
**Dr. R. C. Suganthe**  
Professor

"The secret of success is to do the common thing uncommonly well."

-John D. Rockefeller Jr.

## “You never change things by fighting the existing reality”

The third event marked up in the Calendar of CSEA with the Guest Lecture by Ms. Mythili Shanmugam, Software Development Engineer, Amazon, California, USA. She delivered a speech on “How can I be prepared for the Industry” on 6<sup>th</sup> October 2020 at 10 am. The Guest Lecture was virtually organised through the Google meet with all faculty members and association office bearers. The event was commenced by Ms. N. Janani with a Divine prayer song followed by Ms. T. Ranjani, Secretary of CSEA with a warm welcome. Then, our honourable Head of the department, Dr. N. Shanthy, delivered the presidential address which was fascinating. Ms. Mythili, the Software Development Engineer at Amazon, threw light on the ideas of what company expects?, importance of interrogation, and qualities demanded by the Industries. She also briefed the knowledge that has to be gained before entering interview of any company. She also mentioned the websites to cram ideas. Further the Guest lecturer ended with questions and answer session. The entire event was streamed live throughout the whole time on the YouTube channel of CSEA Association. The guest lecture was clinched with the vote of thanks delivered by Ms. R. Rajharini. The Compering team Ms. D. Anusruthi and Ms. A. Monisha made the event interactive till the end.

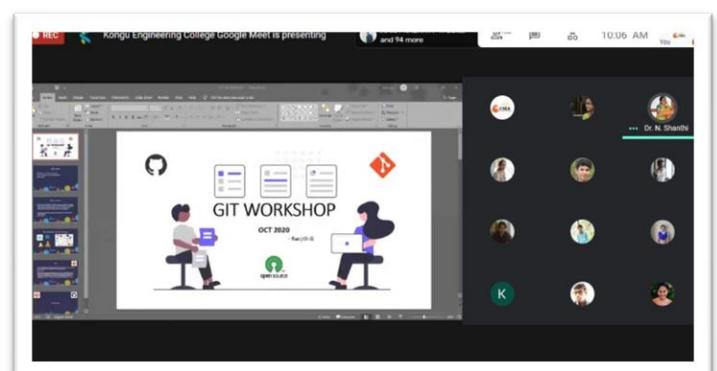
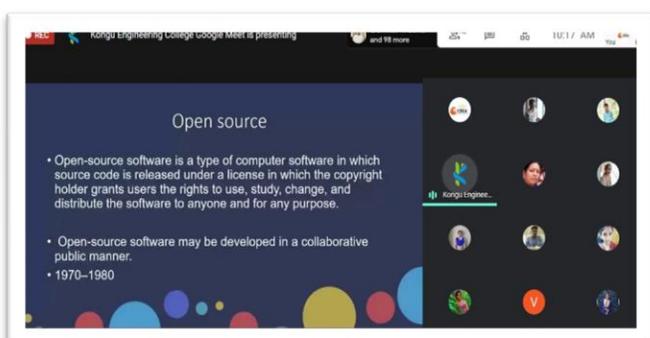


“However difficult life may seem, there is always something you can do and succeed at”

-Stephen Hawking

**“Giving is not just about making a donation, it is about making a difference”**

The fourth event marked in the Calendar of CSEA, workshop by G.Ranjith, Final year Computer science and Engineering student on the topic “Introduction to Git and GitHub” happened on 31<sup>st</sup> October 2020 at 10 am. The workshop was virtually organized through Google meet with all faculty members and association office bearers. The event was commenced by T.Ranjani, Secretary of CSEA with a warm welcome. Then, our honourable Head of the department, Dr.N.Shanthi, delivered the presidential address which and she graced us with her presence and guidance. G.Ranjith was selected by Coding Mart through campus interview. Even though he joined the company and is doing his Intern, he always wishes to contribute to the student community from where he learned a lot. So, when association planned to conduct the workshop, he volunteered to share his knowledge on Git and Git Hub. Nowadays, the companies during recruitment process check about projects done by students. The GitHub profile will be an amazing advantage with numerous benefits. He started the workshop with the importance of contribution to open source projects and presented scenarios of it .Then he taught the participants, various features in Git, clearly starting from installing and configuring the git software. Further in afternoon session, he lectured about GitHub and its operations. The entire workshop was hands on which made the students to understand the process easily. He was open to any doubts at any point during the session. Finally, he shared his experiences in Git hub. The guest lecture was clinched with the vote of thanks delivered by Mr.K.Gowtham.



**IOT AIR MISSILE**

IoT in Air and Missile Defence is the concept and technology of Internet of Things (IoT) and its applications implemented by military. The authors, having provided a brief review of cases of partial deployment of the technology in air and missile defence (AMD) systems, argue that when implemented as a system solution IoT may enhance the capability of the whole system. This air and missile defence system has been analytically divided into four subsystems, and with the use of conceptual approach each of them has been examined in terms of how it could be strengthened by the implementation of IoT solutions, and how the latter may translate into the enhancement of the entire AMD system.

Source: [https://en.wikipedia.org/wiki/Air-to-air\\_missile](https://en.wikipedia.org/wiki/Air-to-air_missile)



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**INDIRA.K.K(18CSR61)**  
**III-CSE-B**

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**THE RISE OF FOLDABLES**

Phones have clearly changed over the last decade. Touch screens with one or no buttons have taken over the market. Over the last couple of years, foldable devices have begun making a comeback. 2019 saw the release of foldable devices like the Samsung Galaxy Fold and the Huawei Mate X. These smartphones fold to compress or expand the screen size based on user preferences. For example, a user might make a call with the device closed, but watch a video on a larger screen by unfolding the device. From an app development perspective, developers and content creators need to account for these devices when building or updating an app. The idea is that an app should seamlessly adjust its display as the screen folds or unfolds. According to Statista, roughly 3.2 million foldable phones were shipped in 2019. This forecast is expected to reach 50 million units by 2022. For that growth to happen, 2020 will be a big year for foldable, which means app developers must plan accordingly.

Source: <https://buildfire.com/mobile-app-development-trends/>



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**RAVEEN.A(19CSR154)**  
**II-CSE-C**

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“You must trust the small voice inside you which tells you exactly what to say, what to decide” - *Ingrid Bergman*

## COGNITIVE CLOUD COMPUTING

Human thinking is beyond imagination. Can a computer develop such ability to think and reason without human intervention? This is something programming experts at IBM Watson are trying to achieve. Their goal is to simulate human thought processes in a computerized model. The result is cognitive computing - a combination of cognitive science and computer science. Cognitive computing models provide a realistic roadmap to achieve artificial intelligence. Cognitive computing represents self-learning systems that utilize machine learning models to mimic the way the brain works. Eventually, this technology will facilitate the creation of automated IT models which are capable of solving problems without human assistance. And now to cognitive computing which works on deep learning algorithms and big data analytics to provide insights. Thus the brain of a cognitive system is the neural network, fundamental concept behind deep learning. The neural network is a system of hardware and software mimicked after the central nervous system of humans, to estimate functions that depend on the huge amount of unknown inputs. The purpose of cognitive computing is the creation of computing frameworks that can solve complicated problems without constant human intervention. In order to implement cognitive function computing in commercial and widespread applications.

Source: <https://marutitech.com/cognitive-computing-features-scope-limitations/>




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**YAMUNA.C(18CSR223)**  
**III-CSE-D**

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## TINY SILICA STORAGE MEDIUM

Microsoft cloud computing business unveiled Project Silica, a cold-storage device that's designed to stand the test of time. Essentially an optical storage media, it is a 7.5cm \* 75mm \* 2mm square piece of glass that can store up to 75.6GB of data (inclusive of error-correction code). Unlike conventional optical media such as hard disk or CD or Blue ray, which relies on etching pits of different lengths on a plastic substrate to denote ones and zeroes, project silica uses nanoscale gratings and deformations, while AI is used for error-correction to overcome any aging of the media. The company developed a proof-of-concept using quartz glass. A laser encodes data in glass by creating layers of three-dimensional nanoscale gratings and deformations at various depths and angles. Machine learning algorithms read the data back by decoding images and patterns that are created as polarized light shines through the glass. CD can typically hold data for 1-2 centuries provided that the disc is stored properly. After that, the plastic physical layer decays, losing data integrity. To overcome this problem they introduced Project Silica, is designed to be resilient not just in a box, but also outside it. The media can withstand being boiled in hot water, baked in an oven, microwaved, historic archives or cultural treasures if things go wrong, says Microsoft.

Source: <https://news.microsoft.com/innovation-stories/ignite-project-silica-superman/>




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**MOHAMED SHIHAB AAQIL .ESR (17CSR113)**  
**IV-CSE-B**

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“Progress has never been a bargain. You’ve got to pay for it.”

At the beginning of this new decade, these lines inherit the appropriate phase of our technology industry. It’s time for the industry to take the next step. There are tremendous benefits available through technology for both business and society, but there are major questions around safety, privacy, sustainability, and trust. “The answers to these questions come from combining technical expertise with social awareness.” The IT tech industry can be responsible for driving future progress.

Every industry deals with a tension as it becomes more mature—but the new variables we have here are the scale, that tech is able to achieve and the evolutionary aspect of mixing digital and physical worlds.

#### Here are the Top-10 Trends :

1. Tech Washing Fades in favour of Real Strategy
2. Workforce Diversity Grows in Many Ways
3. Tech Topics Are Front and Centre in U.S. Elections
4. Hype Meets Reality with Emerging Technology
5. Internet of Things Continues to Redefine IT Architecture
6. Artificial Intelligence Eats the World
7. Demand for Integration Leads to Demand for Automation
8. Cyber security Becomes More Operational
9. Deep Fakes and 5G Exacerbate the Data Management Challenge
10. Tech Industry Regulation Stirs Fears

The tech industry is faced with a tricky **balancing act**: continuing to drive innovative solutions while grappling with the side effects of those solutions in the global economy.

#### Industry Overview

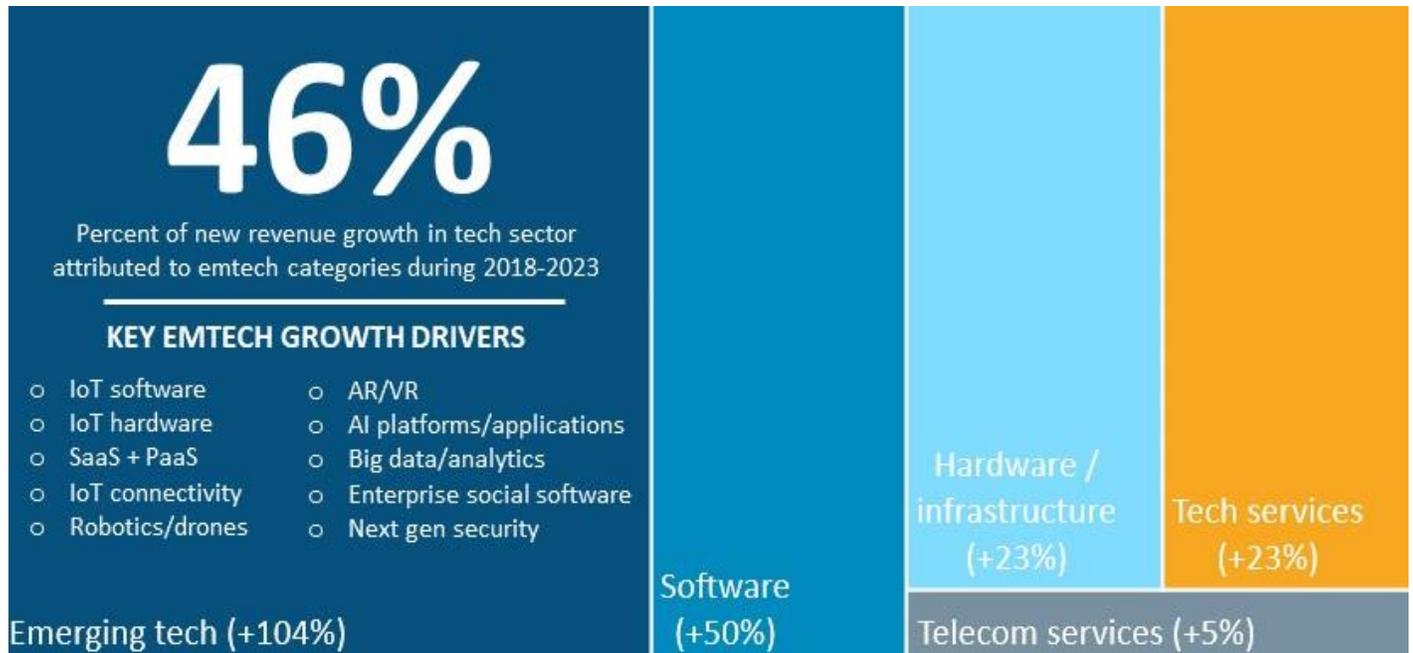


The global information technology industry is on pace to reach \$5.2 trillion at the end of 2020, according to the research consultancy IDC. Economies, jobs, and personal lives are becoming more digital, more connected, and more automated. The United States is the largest tech market in the world, representing 32% of the total, or approximately \$1.7 trillion for 2020. In the U.S., as well as in many other countries, the tech sector accounts for a significant portion of economic activity. Cyber states report reveals that the economic impact of the U.S. tech sector, measured as a percentage of gross domestic product, exceeds that of most other industries.

Among global regions, “western Europe” remains a significant contributor, accounting for approximately one of every five technology dollars spent worldwide. However, as far as individual countries go, China has clearly established itself as a major player in the global tech market. “China has followed a pattern where there is a twofold effect of closing the gap in categories such as IT infrastructure, software, and services, along with staking out leadership positions in emerging areas such as robotics”

## Emerging Tech Categories Drive Revenue Growth :

(Estimated contribution of new global tech spending during the 2018-2023 time period)



## IT Professionals See a Promising Future



If the industry is strong and maturing, and if businesses are taking the next step in developing technology strategies, then it stands to reason that IT professionals should feel confident about their future prospects. Overall, this seems to be the case. The vast majority of technology workers feel optimistic about their role as an IT professional. “In the U.S., 86% of IT pros rate their outlook as very good or fairly good. In different geographies, the sentiment is the same—81% in Canada, 75% in the UK, 82% in Australia/New Zealand (ANZ) and 85% in the Benelux region (Belgium/Netherlands/Luxembourg).”

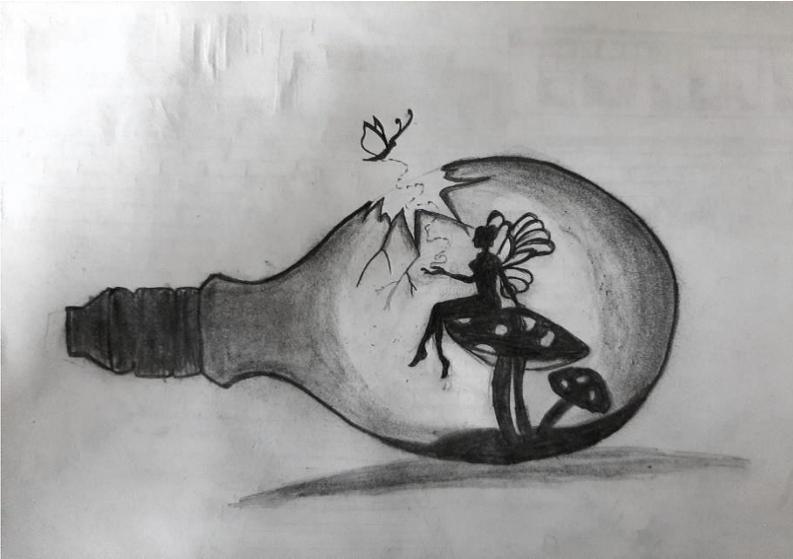
The primary reason for the positive sentiment is high demand for technology skills, which in turn leads to robust career options. There is also a sense that the importance of technology to business objectives makes technology a more integral part of business.

## Factors Contributing to Difficult Hiring Environment :

- Competing with other tech firms for talent. - 60%
- Rising Salary Expectations. - 46%
- Competing with other industry sectors for talent. - 41%
- Finding workers with the right soft skills. - 39%
- Rising benefit/perks expectations. - 34%
- Finding desired skills in emerging areas. - 33%
- Limited pool of available workers in my region. - 30%
- Not enough young people entering tech fields. - 5%

Additionally, channel firms today are making larger investments in marketing as they become more services-oriented in nature and rely less on hitching their brand to that of the vendors they sell. This is new territory for many smaller firms, in particular, that have never had devoted marketing headcount. Now they are looking.

## STUDENT'S CORNER



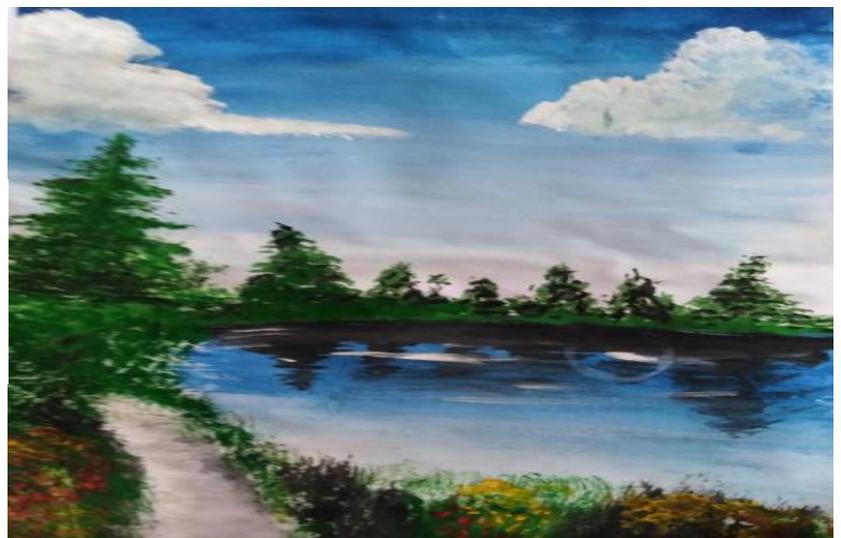
**OVIYA.D(19CSR130),  
II-CSE-C**

**HARSETA.S(19CSR58),  
II-CSE-A**



**KIRTHIKATHARANI.A.S  
(19CSR93),  
II-CSE-B**

**MONISHA.A(19CSR110),  
II-CSE-B**



## ஆசான்

அதிகாலை எழுந்து  
ஆரவாரமாய் கிளம்பி  
இன்முகம் கொண்டு  
ஈராறு மாதமும்  
உண்மையாய் உழைத்து  
ஊர்போற்றும் நல்லவராய்  
எளிமை கொண்டு  
ஏணியாய் நின்று  
ஐயம் நீக்கி  
ஒழுக்கம் கற்பித்து  
ஓதுவதில் சிறந்து  
ஒளடதம் தவிர்த்து  
தன்னை மெழுகென உருக்கி மாணவர்களின் வாழ்வு -  
வெளிச்சம் பெற  
நாளும் உழைத்து,  
எடிக்காயான கருத்துக்களையும்  
ஏலக்காயாய் மணக்கச் செய்யும் வள்ளல்கள்  
எம் ஆசிரியர்கள்

- சன்மதி.

SHANMATHI.C (18CSR184),  
III-CSE-D

SAKTHI SRLS.V(18CSR167)  
III-CSE-D

For School Students,  
You gave a long summer vacation!  
For College Students,  
You gave a yearning for their Heavens to reopen!  
For all those IT dudes,  
You gave a very cosy Work from Home!  
For all those day wagers,  
You showed them that it's a dog's life!  
For all the doctors and health workers,  
You made them stand at death's door!  
For all those lungs you entered,  
They were about to be pushing up daisies  
And some saw the Pearly Gates!  
For all those Sports fans,  
You made them play the best game ever-  
The so called 'life' with lots of twists and turns!  
To all those who are about to throw in the towel,  
This lockdown is just a time out in our lives  
Like the one the players get in IPL matches  
To take rest and plan for the next few overs  
And have the world at their feet!

"There are no secrets to success. It is the result of preparation, hard work, and learning from failure."

- Colin Powell

DEAR READERS,

Imagine a day without your phone, internet or email.

How about a week or a year? Seems impossible, right?

When we started at KEC that was how we were. We were not constantly engaged with the outside world but we still sent and received mails through Indian postal service and read printed Newspapers every day.

You may think that we lived in Jurassic world but we still had phones - the non-portable land lines through which we could talk to our families once in a week. It did not mean that we did not have fun. First of all, we were not constantly tracked by our parents! We might not have had internet but our computers and the “floppy disks” were infested with viruses.

Go figure out the causes! When Computer Science (CS) was introduced in KEC three decades ago, I joined the branch out of my own curiosity. Using a PC (which was called XT) for the first time in my life, I was in cloud 9! The number of students outnumbered the no. of computers by a ratio of 2 is to 1 and so, if half of the class went to Microprocessor lab, the other half would wait for its turn. I guess any resource that is dearer becomes even more valuable. FORTRAN was our first programming language that was taught in the second year, Pascal & COBOL in the third year and C in the final year.

Without the internet, our only resources were textbooks and magazines. Now for you, internet sessions have turned into classrooms. Trust me, it was lot more fun to bump into your classmates, catching a look and laugh once in a while earns you more than a degree! Not to mention that it was an honour to learn from our very own principal Dr. Arumugam. As a passionate teacher with CS background, he almost forgot that he was the Principal for the whole college but dedicated himself to our subjects. Learning Math was a mystery that persisted all through my college days because half of our first year Math was about learning BASIC Programming but still Math would sneak till our seventh semester. Learning Math every semester “seemed” important but its real world application was not self-evident until I started to work in Data Science. If one thing you want to learn from our days, let it be about working in the real world and understanding all the classroom learning.

All the best!

**You have to dream before your dreams can come true. - Dr. APJ Abdul Kalam**



**-RAJAMANI**

# PIONEERS



We, the Department of Computer Science and Engineering, is extremely happy and honoured to inform you that a team of 5 third year students led by **Mr.S.Abinash, our Joint Secretary**, participated in Cornerstone challenge and won ₹ 20,000/-  
The outcome of the competition is an app developed using flutter and firebase. It is hosted in play store also.  
App link : <https://play.google.com/store/apps/details?id=com.teama3.PotLuck>



Flutter



Firebase



ARUL PRASATH V,  
TECH LEADER.



AJAY R,  
FACILITATOR.



ABINASH S,  
TEAM LEADER.



DIVAKAR S S,  
FLUTTER ENGINEER.



GOWTHAMKRISHNAN S,  
QA/TESTER.

**LEADERSHIP AND LEARNING  
ARE INDISPENSABLE  
TO EACH OTHER**

VURAM



RAMYA P  
(17CSR168)



VIGNESH S  
(17CSR226)



HARIPRAKASH K  
(17CSR055)

Qubercomm Technologies



NANDHINI M  
(17CSR131)

 Enlighten yourself

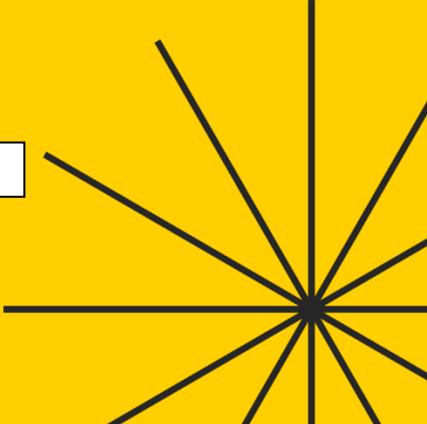
## QUIZ FOR YOU

 **Guess What!!**  
 **We have a little QUIZ session for you,**  
 **Spare time and Get recognised!!!**  
 



<http://bit.ly/csea-quiz-nov>

**SCAN THE QR CODE TO ATTEND THE QUIZ**



### PREVIOUS QUIZ LEADERBOARD

	<b>HariPrakash K</b> 17CSR055	
<b>Mounika K</b> 17CSR124	 <b>I</b>	<b>Arul Prasath V</b> 18CSR015
 <b>II</b>		 <b>III</b>

Published by,  
**Department of Computer Science and Engineering**  
School of Communication and Computer Sciences  
Kongu Engineering College.

Drop your suggestions at [csea@kongu.ac.in](mailto:csea@kongu.ac.in) to make our "Newsletter" to a greater extent!

with Regards,  
✦ Newsletter Team ✦