



Accredited by



Saranathan College of Engineering

(Affiliated to Anna University Chennai)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
E magazine 8.0
COMSCEWAVE 2020

About us

The Department of Computer Science and Engineering was established in the year 1998 with the intake of 40 students initially. It was increased to 60 in 2000 and 120 in the year 2011. This program is affiliated to Anna University, Chennai. This immense growth is due to the efficient working of staff members and students. The department has the pride in showcasing its 100% of admission. With relentless efforts, the department has accomplished Accreditations by the **Institution of Engineers (IEI)** in the year 2015 and **National Board of Accreditation (NBA)** in the year 2018.

The department library is strategically placed to access to all the students. It spreads over an area of 100 sq. ft. It acts as a storehouse of knowledge with over 604 books including books with various domains in Computer Science and Engineering. Reference books are added to the Library every year. The department with its cohesive team of faculty members offers a sound program at the UG level. It shapes the students to keep up with the growing demands and changing trends of the software industry and research laboratories.

Apart from curriculum, the active participation of students in inter and intra college technical contests are being encouraged by the department to develop their interpersonal skills and the students have won many Best Project awards, Mobile App, Web Applications and Coder awards. Students are also

actively participating in Infosys Foundation Programs(FP), TCS campus commune, TATA crucible project competition, and CSI Project Contests, etc.

VISION OF THE INSTITUTION

Impart an inclusive engineering education that beyond being a facilitator for a career and rudimentary skills, equips the students to offer ethically & environmentally conscious solutions to societal issues.

MISSION OF THE INSTITUTION

Develop the Institution into a Model Self Financing College of Engineering and Technology. Deliver Professional Training to our students with state-of-the-art Laboratories and convert them into Technocrats of international repute.

1. Create a nurturing, holistic environment of engineering education to facilitate every student realize their full potential.
2. Strive to make the students strong in basic concepts armed with appropriate skills to enhance one's ability to apply the knowledge and provide solutions to real time issues.
3. Maintain an ambience that facilitates the students to strengthen their ethical value systems.
4. Actively promote R&D and institute-industry interaction.

VISION OF THE DEPARTMENT

To evolve as a centre of academic excellence and advanced research in Computer Science and Engineering discipline.

MISSION OF THE DEPARTMENT

1. To inculcate in students a profound understanding of fundamentals related to discipline.
2. To inculcate skills, attitudes and their applications in solving real world problems with an inclination towards societal issues and research.
3. To promote research in the emerging areas of computer science and technology

PROGRAMME EDUCATIONAL OBJECTIVE

PEO1: Acquire strong foundation in the mathematical, scientific and engineering fundamentals necessary to formulate, solve and analyse engineering problems.

PEO2: Develop the ability to analyse the requirements of the software, understand the technical specifications, design and provide novel engineering solutions and efficient software/hardware designs.

PEO3: Have exposure to emerging cutting edge technologies, adequate training & opportunities to work as teams on multidisciplinary projects with effective communication skills and leadership qualities.

PEO4: Have awareness on the life-long learning and prepare them for research development and consultancy.

PEO5: Have a successful career and work with values & social concern bridging the digital divide and meet the requirements of Indian and multinational companies

From the desk of the Principal



It is our effort to make SCE of Computer Science a top educational institution that can create IT professionals, who blend effectively, technological skills with management perspectives and to impart an inherent discipline that will help them face challenges in the future.

Consequently the true education should deepen our insight, widen our horizon and create a meaningful outlook. Equally the students are fortunate enough to have born in a free nation, with all the facilities to shape their career in such a way, that they should be part of a good and healthy society with progressive attitude towards divinity.

Dr. D.Valavan
Principal

From the desk of HoD



It gives me immense pleasure to lead the department of CSE. The department has well qualified and eminent faculty. The main objective of department is to develop the students both personally and professionally to achieve successful career in Industry, Research and Academics. Consequently, great advances have taken place in the field of computer science and engineering, bringing together the understanding of the scientific and technological foundations of computing, the concepts of software and hardware as well as those of communication technologies. The Department of Computer Science and Engineering endeavors to contribute to these advances through teaching and research in this field. The E magazine attempts to present the Department and its activities for general information to all concerned.

Dr. S.A.Sahaaya Arul Mary
HoD/CSE

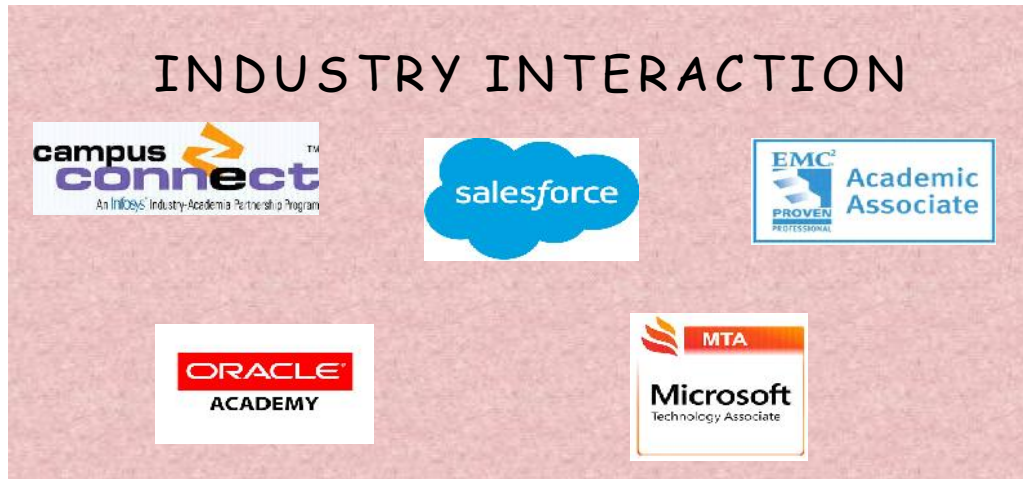
Editor's Message

It gives us a great contentment to bring it to you the department magazine of CSE. This magazine is a platform to exhibit the innovative ideas of teachers and students. *COMSCEWAVE* presents the achievements of students and the contribution of staffs. We would like to extend our heartfelt gratitude to all those who have contributed to make this a success. We are thankful to all the authors who have sent their articles. We truly hope that the following pages will keep you attached to this magazine.

K.Mohanappriya AP/CSE

**Student Representative : Vishnu C
Sanjay S P**

Industry Interaction



Students Certification Programs

Name of Certificate programs offered	Number of students enrolled in the year
MTA –Microsoft Technology Associate	
Database Fundamentals Python Fundamentals	50
Oracle Academy	
JAVA Programming Database Programming	97
InfyTQ (Self Learning) Python Programming	
Database Fundamentals OOPS & DS Algorithms	120
QIC Spoken Tutorial (IIT Bombay)	
Python C and C++	113
NPTEL Course	113

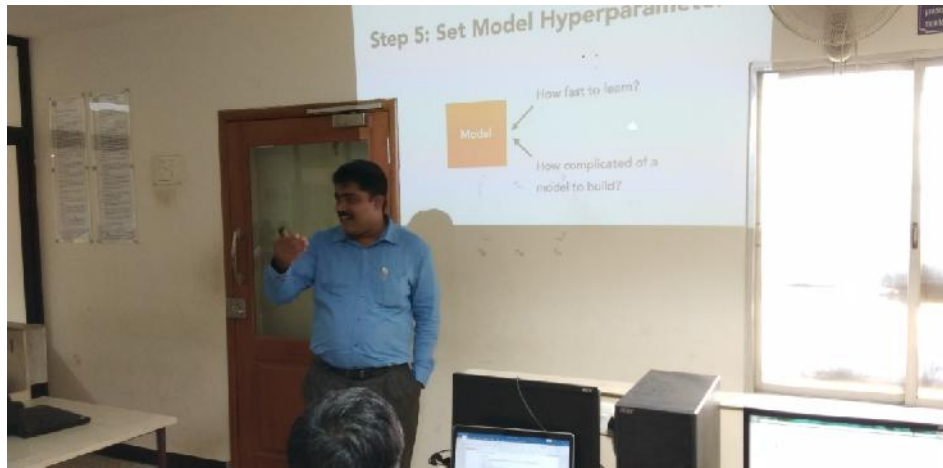
Departments Events



FACULTY DEVELOPMENT PROGRAMME

Machine Learning Techniques

The Department of CSE & IT jointly organized a FDP on "Machine learning Techniques" on 12th & 13th June 2019. [Dr.AnandKumar Prakasham - Director](#) and [Dr.AkilaAnadkumar - Co-Director of Root-IT Learning Center, Trichy](#) handled the session. The session started with the introduction to Data Analytics, Statistics of Data Science and how to analyze & visualize data that is being collected.



Session being handled by Dr.AnandKumar-Director, Root-IT



Active Participation of faculty both in theory and Hands-on session

Seminar on "Software Testing and Agile"

A Technical Seminar on "Software Testing and Agile" on 25th July 2019. Mr. Mukesh Sekar, Member - Education, Training & Assessment, Infosys Campus Connect Program, Mahindra City Development Centre, Infosys Ltd., Chennai, has handled the sessions. Nearly 100 pre-final year students of CSE and IT took active participation. Mr. Mukesh Sekar, insisted strongly on the different types of software requirements that are needed to analyze the process of Software Testing. He suggested having the requirements in .xls (MSExcel) format so that it will be easy for the tester who will be testing the software in near future. He explained the statistics of employability in Development and Testing. Finally, he concluded by feeding tips to frame a resume of our own to appear for an interview and to succeed.



Seminar on "Software Testing and Agile" - Mr. Mukesh Sekar

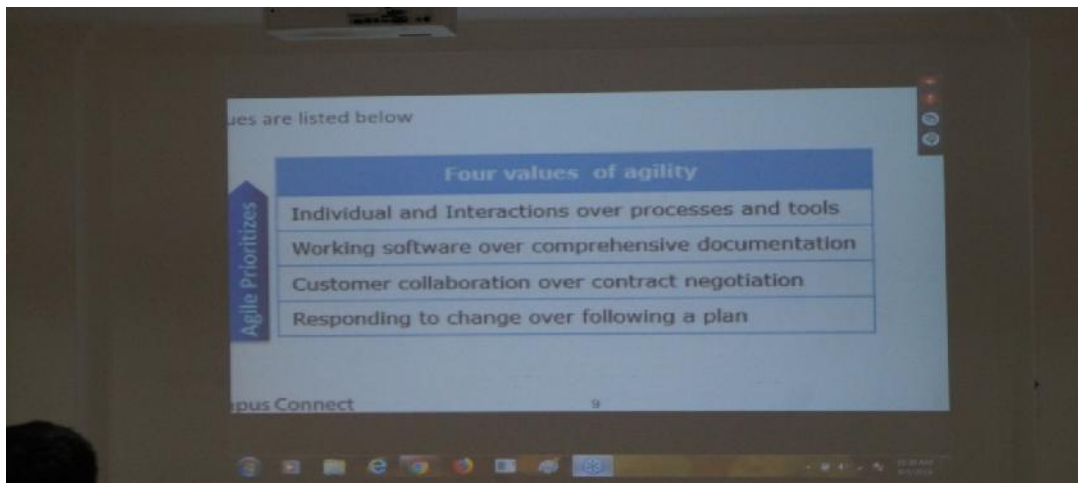
Webinar series on "ABCD : New Foundations of IT"

The Infosys Campus connect team organized webinar series on "ABCD : New Foundations of IT" from 5th Aug to 14th Aug 2019 . In this webseries various quizzes were conducted by the presenter under different topics and our college students actively participated in them.

Resource Person: **Mr. Roy Antony Arnold George Charles (Senior Member, ETA, MCTC, Infosys Ltd., Chennai.)**

The details regarding in this event:

Agile Methodology in Software Industries
Block chain Technologies



Active participation of students in the Webinar

Seminar on "Way to Byju"

Mr.S.Ranjithkumar & Mr.Krishna M Bajaj, alumni of CSE department & Member of Technical Staff of Byju's Learning App addressed the students on 27th August 2019. BYJU'S app is one among the best app which helps students by providing complete assistance in their studies. Students across the globe can avail these apps by visiting BYJU'S website or by downloading BYJU'S-The Learning App either in their computer, laptops, in tablets or on their mobile phones.



Students interacting with the Resource Persons (Alumini of CSE)

Guest Lecture on "Way to MAD Street Den"

Mr. R. Vinaysastha, Department of computer Science and Engineering, Alumni our institution gave a guest lecture on "Way to MAD Street Den" to prefinal year and final year students of CSE on 31.08.2019 from 10.05 am to 10.55 am at CSE Seminar Hall. Mr. R. Vinaysastha, at present works as a creative core member in User Interface Designing at Mad Street Den, Chennai.



Project Expo



- Project competition has been organised for II and III year students to exhibit their talents in app development and mini projects on 13.9.2019 & 14.9.2019
- There was only one round and the best project was chosen by the judges and the respective prizes were given away. The aim of the expo was solely to enhance the analytical and logical thinking of the students and to implement the same in their projects.

S.No	Name of the Student	Year/Sec	Project Title
1	V.Harish Y.Basheer Ahmed M.Mohamed Omar Jafran A.J. Adaikalraj C.Vishnu (II CSE B)	II CSE A	OD Eligibility Checker
2	V.Krishna Kumar S.Akshay R.AkashKumar S.Arun Kumar	II CSE A	Pixel Packing
3	S.Kavikumaran M.A.Abarjitha Varman G.ArunKumar R.Dhanush Kumar D.Abinandhan	II CSE A	Business Intelligence for Micro Entrepreneurs
4	K.SakthiSubramaniam S.Srivatsan K.Vignesh Muthu M.Vishnu	II CSE B	Personal Assistant
5	R.KesavaPradha U.Arivarasan D.Akilandesawri M.BalaMuruga Prasad	III CSE A	Appointment Management

6	R.Abinash M.JeevaRamanathan G.Keshore K.Muruganandham G.MuthuKumar	III CSE A	Automatic Time Table Generator
7	S.VigneshRaj B.Vigneshwaran N.SanjaiDarshan S.Sriram P.Shalini	III CSE B	Fall Detection
8	B.Raja Ram M.SheikMagdhoom B.SheikAbdullasha V.Srihari J.Infant Remi	III CSE B	Image to text documentation





Students Awards and Participations

Students Achievements

✓ **R Vatsala and Rohit raj** of final year CSE - B has participated in the event RYLA 2019 was organised by ROTARY INTERNATIONAL DISTRICT 3000 at KODAIKANAL from 13th sep to 15th sep 2019



✓ **V.Akilandeswari P.Krithiga R.Kesavpradha** of III CSE has participated in Paper Presentation and Technical event organized by Dept of Computer Science and Engineering at Kongunadu College of Engineering and Technology on 9th Aug 2019 and won third Prize with the cash award of Rs 500



✓ **R.Dharshini ,M.I.Hidhayarth Nisha** of II CSE has participated and won First prize in Paper Presentation organized by Dept of Computer Science and Engineering at K.Ramakrishnan College of Engineering Trichy on 28th Aug 2019

✓ **V. Varshini** of **III CSE** has participated and won Second prize in Bug Breaker organized by Dept of Computer Science and Engineering at Coimbatore Institute of Technology on 28th Aug 2019

✓ **Vishnu C, Harish V of II CSE** has participated and secured First prize in Code Fest organized by Dept of Computer Science and Engineering at Coimbatore Institute of Technology on 28th Aug 2019



✓ **S.P.Sanjay ,V.Krishnakumar** has participated and secured First prize in Mask Coding organized by Dept of Computer Science and Engineering at Coimbatore Institute of Technology on 28th Aug 2019

✓ **Vishnu C , Harish V** has participated and secured First prize in Project Expo organized by Dept of Computer Science and Engineering at Saranathan College of Engineering on 13th & 14th Sep 2019

Students Participation in Technical Events

S.NO	Student Name	Event Name	From date	To date	Organized by (dept name / org. name)	Conducted at (college name / location)
1	R.Kesava Pradha	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
2	S.P Sanjay	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
3	Vigneshwaran B	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
4	S.Sudarsan	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
5	M.Veeraharish	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
6	S.Vigneshraj	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore

7	Vigneshwaran B	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
8	N.Vignesh	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
9	M.Veeraharish	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
10	Vishnu C	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
11	Harish V	Technical Events & Non Technical Events	28/8/2019	29/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
12	J.Infant Remi	Technical Fest Events	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Coimbatore Institute of Technology, Coimbatore
13	S.Shriharini	Paper Presentation	28/8/2019	28/8/2019	Dept of Computer Science and Engineering	Kongunadu College of Engineering and Technology

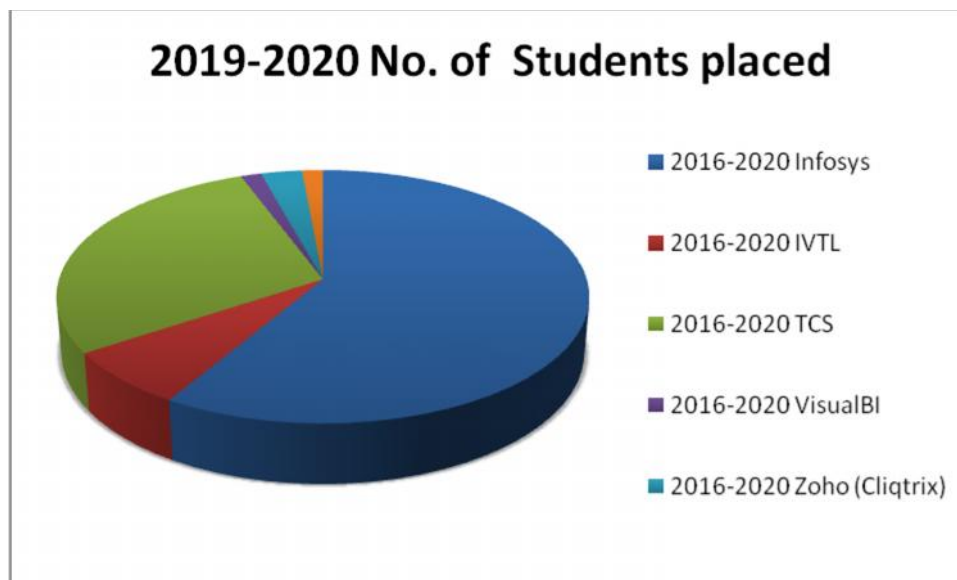
14	S.Suvetha	Paper Presentation	8/9/2019	8/9/2019	Dept of Computer Science and Engineering	Kongunadu College of Engineering and Technology
15	Akila	Paper Presentation	8/9/2019	8/9/2019	Dept of Computer Science and Engineering	Kongunadu College of Engineering and Technology

Our Recruiters

Infosys



Placement Details



2019-2020		
Students Batch	Company Name	No. of Students placed
2016-2020	Infosys	41
	IVTL	5
	TCS	20
	VisualBI	1
	Zoho (Cliqtrix)	2
	Zoho(marketing)	1

Faculty Contributions

**Faculty
Development
Programme**

FACULTY PUBLICATIONS



Faculty Contributions

NPTEL Certification

- Dr.S.Mohana successfully completed the 4-week online course "Java Programming Computing" conducted by NPTEL and IIT-Madras during Jul-Nov 2019 and received "ELITE" Certification
- Mr.S.Venkatasubramanian has successfully completed the NPTEL certification course in Networking conducted by NPTEL during Jul-Nov 2019 and received "ELITE + SILVER" Certification.
- Ms.R.Thillaikarasi has successfully completed the 4-week online course "Programming in C " conducted by NPTEL and IIT-Madras during Jul-Nov 2019 and received "ELITE" Certification
- Mr. R.Mohankumar has successfully completed the 4-week online course "Python for Data Science" conducted by NPTEL and IIT-Madras during Jul-Nov 2019 and received "ELITE + SILVER" Certification.
- Mr.P.Dineshkumar has successfully completed the 4-week online course "Python for Data Science" conducted by NPTEL and IIT-Madras during Jul-Nov 2019 and received "ELITE" Certification.

- Mr.A.T.Baranivijayakumar has successfully completed the 4-week online course "Cloud Computing" conducted by NPTEL and IIT-Madras during Jul-Nov 2019 and received "ELITE" Certification
- Ms. N.Kavitha has successfully completed the 4-week online course "Joy of Computing " conducted by NPTEL and IIT-Madras during Jul-Nov 2019 and received "ELITE + SILVER" Certification
- Ms.R.Senthamilselvi has successfully completed the 4-week online course "Cloud Computing" conducted by NPTEL and IIT-Madras during Jul-Nov 2019 and received "ELITE" Certification

KNOWLEDGE ENRICHMENT THROUGH FDP

- Mr.S.Venkatasubramanian has attended "AICTE-ATAL FDP on 'Internet of Things'" organized by AICTE at Government college of Engg, Srirangam from 04-08 Nov 2019
- Mr.K.S.Chandrasekaran has attended "FDP on Practitioners Course in Descriptive, Predictive and Prescriptive Analytics" organized by IIT KANPUR from 01-08-2019 to 31-10-2019
- Mr.K.S.Chandrasekaran "Data Base Management Systems" organized by IIT KHARAGPUR from has attended FDP on 01-07-2019 to 30-09-2019

- Ms.J.Sathiaparkavi has attended "AICTE-ATAL-FDP on Internet of Things" organized by Government College of Engineering, Srirangam from 04-11-2019 to 08-11-2019
- Mr.P.Dineshkumar has attended "Python for Data Science" organized by NPTEL-AICTE from 26-08-2019 - 25-09-2019

Publications of Faculty

- S.Venkatasubramanian, Dr.A.Suhasini, Dr.C. Vennila, "A Review on achine Learning Techniques for QoS in WSN", International Journal of Advanced science and Technology, pp. 169-178, Vol. 28, Issue. 9, 2019, SCOPUS, Impact factor 0.13
- R.Thillaikarasi, "Detection of packet dropping nodes in Wireless Mesh Networks" in the proceedings of "Proceedings of Detection of packet dropping nodes in Wireless Mesh Networks" Organized by IIIT, Trivandrum on 2019. ISBN 978-981-15-3852-0, Springer, Singapore
- K.S.Chandrasekaran, "Measuring Performance Reliability of a system using DataMining" in the proceedings of "Proceeding of 11th International Conference on advanced computing (ICoAC 2019)". ISBM: 978-1-7281-5286-8
- R.Senthamil Selvi, "Enabling Data security in data using vertical split with parallel feature selection using meta heuristic algorithms", Concurrency and

Computation: Practice and Experience, Issue. Special Issue, 2019, Impact Factor:1.114

- N.KAVITHA, K.RUBA SOUNДАР,V.BALASUBRAMANIAM, "Intellectual Human-Object Classification Using Genetic Algorithm", Ieee Explorer, 2019 Advances In Science And Engineering Technology International Conferences, pp. 01-Jun, Vol. 1, Issue. 1, 2019

- M. Anbazhgan and Michael Arock, "Review rating prediction using combined latent topics and associated sentiments: an empirical review", Service Oriented Computing and Applications (Springer - ESCI), pp. 19-34, Vol. 14, Issue. 1, Nov 2019

- Dr.PL.Rajarajeswari, "Fair Adaptive Cross-Layer Resource Allocation Scheme for IEEE 802.16 Broadband Wireless Networks", Wireless Personal Communications, pp. 1-22, Vol. 1, Issue. 1, NOV 2019

- Dr. PL.Rajarajaeswari, "A Smart Patient Monitoring System Implementation Towards Iot Connected Healthcare Applications", International Journal Of Creative Research Thoughts, pp. 01-Jun, Vol. 7, Issue. 1, 2019

TECHNICAL ARTICLES

Technical jokes

- Two bytes meet. The first byte asks, "Are you ill?"
The second byte replies, "No, just feeling a bit off."



- ~~~~~
- Eight bytes walk into a bar. The bartender asks, "Can I get you anything?"
"Yeah," reply the bytes. "Make us a double."
- ~~~~~
- Q. How did the programmer die in the shower?
A. He read the shampoo bottle instructions: Lather. Rinse. Repeat.
- ~~~~~
- How many programmers does it take to change a light bulb?
None - It's a hardware problem
- ~~~~~

- Why do programmers always mix up Halloween and Christmas?
Because Oct 31 equals Dec 25.
- ~~~~~
- There are only 10 kinds of people in this world: those who know binary and those who don't.
- ~~~~~
- A programmer walks to the butcher shop and buys a kilo of meat. An hour later he comes back upset that the butcher shortchanged him by 24 grams.
- ~~~~~
- "Knock, knock."
"Who's there?"
very long pause....
"Java."
- ~~~~~
- Programming is 10% science, 20% ingenuity, and 70% getting the ingenuity to work with the science.

Funny Error message



Bluejacking

Bluejacking is used for sending unauthorized messages to another Bluetooth device. Bluetooth is a high-speed but very short-range wireless technology for exchanging data between desktop and mobile computers and other devices.

Bluetooth has a very small range so only when a person is within 10 (highly location dependent) meters distance of a bluejacker and his Bluetooth enabled in his device, does bluejacking happen. Bluejacking involves sending unsolicited business cards, messages, or pictures. The bluejacker discovers the recipient's phone via doing a scan of Bluetooth devices. He would then select any device, craft a message as is allowed within the body of the phone's contact interface. He stays near the receiver to monitor his reactions.

The messages are anonymous to the recipient as only the mobile name and model number of the bluejacker's phone are displayed in the message. The only exception to the 10 meters distance is the involvement of a laptop, which can be done within a 100-meter range of the recipient. Although there is an infringement of territory of the recipient, bluejacking is not illegal, as it does not access the resources of the recipient device and does not steal anything either.

Steps To Bluejack A Device

1. Bluejacker opens his contacts and creates a new contact.
2. He does not save a name and number rather he saves the message in place of the contact and does not need to save a number (It is optional if he wants to send a business card, he can save the number).
3. He would scan for nearby Bluetooth devices.
4. He would then share the contact with the Bluetooth device connected.
5. The message will reach the recipient and he will have no clue as to who had sent the message



5G Wireless Technology

The search engine major Google has already confirmed that smartphone userbase has surpassed desktop userbase. If we go back a few years, the maximum RAM in a smartphone was in a few MBs only but now, even the smartphone configurations are competing with personal computers. It is evident that smartphone usage without the internet is barely minimum. With the increased dependency on IoT, internet speed plays a pivotal role.

The majority of companies think of future needs, innovations, services that could give a better life to mankind. Keeping this in mind, 5G thoughts were rolled a decade back even before the 4G technology was in place. Of course, the 4G has been a base to implement 5G. We will discuss about countrywide 5G rollout further in this article.

5G simply refers to the next and newest mobile wireless standard based on the IEEE 802.11ac standard of broadband technology. Rather than faster Internet connection speeds, 5G aims at a higher capacity than current 4G LTE, allowing a higher number of mobile broadband users per area unit, and allowing consumption of data quantities in gigabyte per second. This would make it feasible for a large portion of the population to consume high-quality streaming media many hours per day on their mobile devices, also when out of reach of wifi hotspots. 5G research and development also aim at the improved support of machine to machine communication, also known as the Internet of things, aiming at a lower cost, lower battery consumption, and lower latency and to increase the security and connectivity for a large community.



Thank You