

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE (AUTONOMOUS)

[Affiliated to University of Madras - Linguistic Minority Institution]

#833, E.V.R Periyar High Road, Arumbakkam, Chennai - 600 106
DEPARTMENT OF COMPUTER APPLICATIONS (BCA)



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MESSAGE FROM THE SECRETARY

My heartily greetings. It gives me a great pleasure to release first edition of *InfoVision* newsletter of department of computer applications. This newsletter share information of department related activities and helps students to express their creativity. Our institute provides high standards of education and enabling students to achieve professional competence in their chosen field. We encourage our students to not only have a great



academic career but also in extracurricular activities and sports. I congratulate department of computer applications for making this newsletter and wishing them all success in their future work.

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MESSAGE FROM THE PRINCIPAL



I am very delighted to release *InfoVision* the first edition of newsletter of Department of Computer Applications. This newsletter will provide the ongoing and forthcoming activities of the department and opportunity for students and

faculty members to share their knowledge on recent trends in computer science and technologies. Our curriculum and practices are consistently reviewed and students are helped to focus on confidence building, while nurturing a strong sense of social and environmental responsibility through academic and co-curricular activities. I congratulate the department of computer application for taking initiative to bring out this newsletter and would like to see them soar to new heights and success in all their endeavors.

MESSAGE FROM THE ADVISOR & HEAD



Todays modern world run on technology includes Machine Learning, Artificial Intelligence, Network Security and Internet of Things. To fill this recent era its is necessary to find new IT related techniques using innovative ideas of research. This will lead as technology growth as well as visualize our country, number one in the world.

The department of computer applications (BCA) of this great institution have an aim to promote its students and staff to carryout and concentrate in the area of research. To achieve this, the department news letter named as "InfoVision" will help for the same. Through the every year edition of the news letter, it is planned to publish innovative information which used for the real life of all humans. Let us contribute a small amount of technology oriented information via this magazine. In future, more such editions to be published.

ABOUT THE DEPARTMENT

The Department of Computer Applications (BCA) was started in the year 1998 with an aim of providing conductive ambience for learning Management & Career oriented subjects, keeping in view the changing trends in education. In the year 2009 the college has attained autonomous status which helped the department to introduce specialization subjects also come out with innovative papers to meet the current requirement of the industry.

We are also proud of our alumni. Most of them are well placed in reputed organizations and hold key positions. Institutional training is also a part of academics which student undergoes every year to get exposure of the corporate world. The department has been revising the syllabus regularly under the choice based system. Students every year take part in various cultural and extracurricular activities and win many prizes and bring laurels to the department and the college

VISION AND MISSION

VISION

Imparting quality education, equipping students with latest tools and technologies of computer science to face in computer industry and society.

MISSION

- Provide the ambience for learning.
- Provide the team-sprit and leadership qualities.
- Strengthen the competence level in computer science through analytical learning

Faculty Profile



Associate Professor in the PG and Research Department of Computer Science and Applications, D.G Vaishnav College, Chennai—106, India. Also, he is the Head of the Department of Computer Application (BCA). He has 27 years of teaching experience and guided more than 300 M.Phil.,

Research Scholars in the field of Computer Science. He also guided 13 Ph.D scholars. He has published more than 100 articles in journals indexed in the web of science—Journal Citation Reports and in SCOPUS. He also acted as a chair person and key note speaker in various international conference. He is an editorial board member of many International Journals. He is also a reviewer in many peer reviewed journals like Elsevier, Springers, IOSPress Journals etc.















Faculty Profile (Contd...)



Ms. S. Sivaranjani, M.C.A., M.B.A., M.Phil., SET Assistant Professor

Twelve years of experience in teaching and area of interest includes operating system, image processing and language processing.



Mr. N. Jagadeesan M.Sc., M.Phil. Assistant Professor

Having 10 years of experience in teaching and currently doing Ph.D in university of madras. His area of interest is web designing.



Dr. U. Latha M.Sc., M.C.A., M.Phil., Ph.D. Assistant Professor

Having 11 Years of experience and completed Ph.D. in the field of Text Mining. Her area of interest is Text Mining and Neural Network.



Ms. S. Kavitha M.C.A., M.Phil., SET Assistant Professor

Having 20 plus years of sound experience in teaching and currently doing Ph.D in Bharathiar University. Published her research work in 8 journals including two Scopus.



Ms. L. Meena M.C.A., M.Phil., SET Assistant Processor

Having 10 years of experience in teaching and her areas of interest are programming Languages, operations research, Data Mining and Artificial Intelligence.



Ms. K. Ramya M.C.A., M.Phil., SET Assistant Professor

Having 8 years of experience in teaching and her area of interest includes programming, data mining and language processing.



Ms. M. Archana M.Sc., M.Phil. Assistant Professor

Nine years of experience in teaching and her area of interest includes software engineering, python, image processing and data mining.



Mr. E. Panneer Selvam M.C.A., M.Phil., NET, SET Assistant Professor

Joined on 1-Dec-2020. He has two years of teaching experience form Sir Theagaraya College, Chennai.



Ms. G. Divya M.C.A., NET Assistant Professor

Joined on 18-Jan-2021 and also an alumni of this college. She has cleared NET in Computer Science and Application Discipline held on June 2020.



DEPARTMENT ACTIVITES WORKSHOPS / SEMINARS/ WEBINARS/ EVENTS ORGANIZED



What is Indexing/Abstracting?

- An abstracting service is a service that provides abstracts of publications, often on a subject or group of related subjects, usually on a subscription basis.
- An indexing service is a service that assigns descriptors and other kinds of access points to documents.
- The word indexing service is today mostly used for computer programs, but may also cover services providing back-of-the-book indexes, journal indexes, and related kinds of indexes.
- An indexing and abstracting service is a service that provides shortening or summarizing of documents and assigning of descriptors for referencing documents

A webinar titled "How to add SCOPUS papers to ORCID database?" by Dr. T. Velumurugan, was conducted on 28-Jun-2020 The program was live streamed on both Google Meet and YouTube with around 100 participants. It was highly helpful for researchers and faculties to add values to their papers.



Webinar on Android Apps

Development - An Introduction

was held on 11-July-2020 by

Program Coordinators Ms. S. Kavitha
and Ms.L.Meena with resource

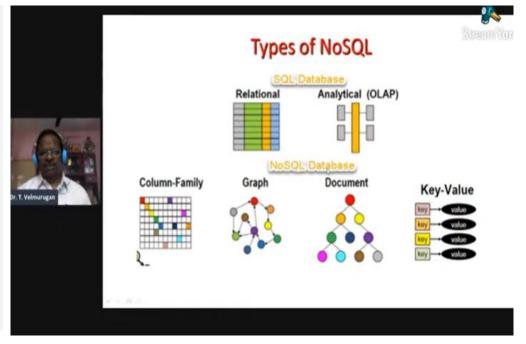
person Ms.G.Sri Pradha, Free Lance

Trainer. The objective of the webinar

was to help students to gain knowledge on android basics. This program

has more than 3k views in YouTube.

A National Level Webinar "NoSQL—Emerging on **Technologies for Big Data** Processing" was conducted 12-Aug-2020 on bу Dr.T. Velmurugan and coordinated by Dr.U.Latha, Ms. K. Ramya Ms. Archana.. This webinar was conducted in two phase. In the first phase it helps everyone to understand about the basics of NoSQL and its role in Big Data.





WEBINARS (Contd...)

Dr. T. Velmurugan

Advantages of schemaless

- · Speed for whole document requests
- · Ability to store any format or data including documents with missing fields
- Most technologies (e.g. Cassandra, Hadoop, Mondo) allow for rapid and easy scaling of servers (sharding/ clustering).
- Some technologies allow for indexing but at that point you are not really schemaless so you can
 have a nearly schemaless design with one primary key (say a document id) and required fields (like
 a timestamp) ... and still allow nearly anything else to be loaded in.
- · Great, solution for collecting logs (See Splunk)

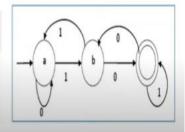
 A developer can build their own objects (schema) easily and change them on the fly (think Agile) without engaging a DBA. National Webinar on NoSQL Databases - The future of Big Data Analytics was conducted on 19-Aug-2020 by Dr. T. Velmurugan in continuation to the previous webinar. This program gives more detailed information on NoSQL relation in Big Data and helps participants to gain knowledge on NoSQL

National Level Webinar on "Lexical Analysis in Compiler Design" was held on 23-Aug-2020 by Dr. T. Velmurugan and coordinated by Dr. U. Latha and Ms. Archana. In this webinar, Regular Expression, Transition Diagrams, Finite Automata, conversion of NFA to DFA were discussed.



Let a deterministic finite automaton be \Rightarrow Q = {a, b, c}, \sum = {0, 1}, q_0 = {a}, F = {c}, and

Present State	Next State for Input 0	Next State for Input 1
		b
b	E	
¢	b	

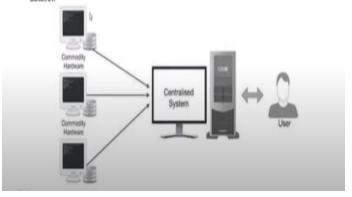




Webinar on "Hive Tool in Big Data" was conducted on 5-Oct-2020 by Dr. T. Velmurugan and coordinated by Dr. U. Latha. More than 100 participants were participated in this webinar including both G-Meet and YouTube. It gives knowledge on Hive Tool basics and its uses in Big Data

Why MapReduce?

- Google solved this bottleneck issue using an algorithm called MapReduce.
- · MapReduce divides a task into small parts and assigns them to many computers.
- Later, the results are collected at one place and integrated to form the result dataset.



"Map Reduce in Hadoop" webinar was held on 10-Oct-2020 by Dr.T. Velmurugan and coordinated by Dr. U. Latha. In this webinar MapReduce applications, MapReduce workflows, Unit test with MR Unit, Classic Map Reduce and other features of MapReduce were discussed.

WEBINARS (Contd...)

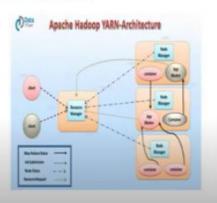
Components of YARN

Resource Manager: Runs on a master daemon and manages the resource allocation in the cluster.

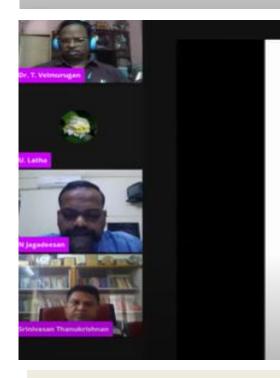
Node Manager: They run on the slave daemons and are responsible for the execution of a task on every single Data Node.

Application Master: Manages the user job lifecycle and resource needs of individual applications. It works along with the Node Manager and monitors the execution of tasks.

Container: Package of resources including RAM, CPU, Network, HDD etc on a single node.



Webinar on YARN in Hadoop was held on 12-Oct-2020 by Dr. T. Velmurugan and coordinated by Dr. U. Latha. This webinar gives knowledge on role of YARN in Hadoop, Architecture of YARN and Application of YARN.



Developing Machine Learning Applications using Python Framework

Presented by

Srinivasan Thanukrishnan
Founder & CEO
Glosys Technology Solutions Pvt. Ltd.
www.glosys.co.in, www.glosyslearning.in
tsglosys@gmail.com

National Level Webinar on "Developing Machine Learning Applications using Python Framework" was conducted on 25-Jan-2021 coordinated by Mr. N. Jagadeesan, Dr.U.Latha, Ms. S. Kavitha with resource person Mr. Srinivasan Thanukrishnan, Founder & CEO, Glosys Technology Solutions Pvt. Ltd., Chennai.



National level seminar on "Creativity with passion leads to success" was held on 18-Feb-2021 coordinated by department faculties with resource person Mr. Kishore Srinivasan, Life Coach, RJ, All India Radio. The event was also live streamed in YouTube. It was very interactive and the session is filled with lot of joys.

ESSENTIALS OF RESEARCH IN HIGHER EDUCATIONAL INSTITUTIONS

Research in Higher Education publishes empirical studies that enhance our understanding of an educational institution or allow comparison among institutions. NAAC and NIRF gives an important role for Research in Higher Education. It says that the institution has to promote research culture among students and faculty members. Research is one of the mandatory factors to score high mark in NAAC to get accreditation. The essential of research in an academic institution is major significant for its sustainability and development. It is an imperative to have knowledge driven growth based on innovation.

The quality of research work directly translates to the quality of teaching and learning in the classroom. It is benefiting the students, the society and the country .The promotion of research in a huge and various countries like India will help the country develop as knowledge pool in the international arena. Our education system focuses on a number of constraints and challenges; one of them is quality research. Barring a small number of prestigious institutes, most display a miserable image in terms of qualitative and quantitative research.





Not many institutions have mandatory research goals for individual faculty and most do not have sufficient systems or infrastructure for quality research. The need of an encouraging academic environment, ill-equipped libraries, labs and equipment, inadequate infrastructure, lack of funds, faculty crunch etc. are some of the factors contributing to the miserable image of research in Indian academic institutions. The structure needs to commit itself to both research and teaching excellence.

In this fact, that Indian possesses globally-acclaimed brain-

power, the need of the hour is to create an encouraging environment for academic research in all institutions of higher education. All this leads us to have the right policy framework, which is missing as of now, to be able to develop an appropriate research mechanism for finding solutions to multifarious issues facing our society.

Thus, every higher educational institution must give a greater importance in the area of facilitating and encouraging the research activities among its students, research scholars and faculty members. This will automatically improve the institutional H index and other parameters for its accreditation.





Dr. T. Velmurugan
Advisor and Head
Department of Computer Applications



IMPACT OF ONLINE LEARNING ON STUDENTS

The lockdown and pandemic have affected the students conventional learning method. But the virtual learning and hands on training method has change the attitude of students learning and made tremendous impact on their learning skills, but initially, it took some time to adopt this technology. The students from HEIs have affected psychologically in the world. Before the pandemic some inequalities existed like half of the students not an expertise and have equal access to digital technologies, later on the students have accepted and adopted this current scenario

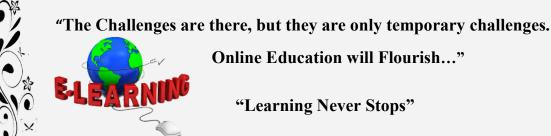


Online education has been on the fringe for a long time. The lockdown and pandemic made it the mainstream. Online training programs are helping teachers/educators advance their skills in curriculum implementation, policy, education systems and leadership, both independently and with the support of their institutions. It lets them collaborate with their peers and learn new instructional skills that are relevant to their career.

These programs can help them develop new skills and capabilities in their students with the help of technology and interdisciplinary approaches The students also felt the online assessments are properly evaluate their skills and knowledge. At the same time the online education occupies the excessive screen time and more use of digital technologies.

Online courses call for a greater amount motivation and self-discipline than a classroom-based course. A classroom has one or more instructors and peers, who can hold a student accountable for their course-work. In contrast, online courses involve setting our own goals, tracking progress and meeting deadlines. One does not learn effectively in isolation so online courses do offer discussion forums, email and one-on-one support

The post pandemic for a finer learning in the innovative methods. Individual learning can be a blessing for a student that don't feel comfortable in conventional class rooms. While social interaction can be a vital for some, it can be a big burden for introverts. Most of the time they feel pressured to interact with other students and professors, while they would rather study on their own in the comfort of their home. The online learning provides to the students in terms of affordability, efficiency and ease of access



Ms. S. Kavitha
Assistant Professor
Department of Computer Applications



FINANCIAL ACCOUNTING & COMPUTER APPLICATIONS

<u>Definition of Accounting:</u> Accounting is the process of collecting, recording, classifying and summarising financial data for the needs of management, share holders, creditors, Employees, Bankers and Government.

<u>Purpose of Financial Accounting:</u> The main purpose of financial accounting is to ascertain profit or loss and to indicate financial position of an enterprise. Two fundamentals of financial statements of financial accounting are (i) Profit and Loss Account and ((ii) Balance Sheet

Application of Accounting into Computers: Both profit and loss account and balance sheet otherwise called as financial statements can be prepared and generated by the computer system itself. Here, we have to carefully design the format of profit and loss account according to the codification of expenses / income as the primary function, secondly loss/gain should be considered and codified in a sequence arrangement. Some of the expenses of profit and loss account can be arranged like this:

Main Classification of Codes	Main Heads of Accounts	
1	Capital	
2	Current Labilities	
3	Resource & Surplus / Contingency Resource etc.,	
4	Current Asserts	
5	Fixed (or) Long Term Assets	
6	Sales Revenue	
7	Incomes and Gains	
8	General and Administrative Expenses	
9		



Under 1 ,,,,10,,,,100 Broad category of

capitals. We can classify capitals of various natures till 199 .. Likewise 2,..,,20..,200., we can classify current liabilities and long term liabilities, resources and surplus, contingency resources, Outstanding expenses to be paid like. Salary, Insurance premium, Rates and Taxes etc., 4,..,40,...400.., we can classify current assets of various nature., cash/bank, bills receivable, stock, prepaid expenses etc., 5,..50,..500... we can classify & codify furniture, lease hold premises, land & buildings, loose tools, plant & machinery etc., Likewise 6,7,8,9 has its classification. With the help of the above successfully codification in computer applications with modern and latest programming techniques, we can successfully generate financial statement analysing from the computer system with short span of time and make the financial accounting system useful to all as well as unique one.

"Computer Technology is so built into our lives that it's part of the

surround of every Artist"

Dr.P.Sathyanarayanan Assistant Professor Department of Commerce





INTERNET OF THINGS (IoT)

The term " Internet of things " was coined by Kevin Ashton of Procter & Gamble . IoT describes the network of physical objects that are embedded with sensors, software and other technologies for the purpose of connecting and exchanging data with other devices and systems over the internet. The main concept of a

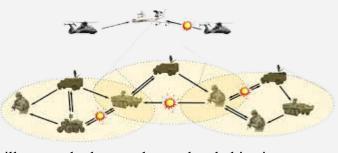
network of smart devices was discussed as early as **1982**, with a modified Coca-Cola vending machine at Carnegie Mellon University becoming the first internet - connected appliances

Extensive set of applications for **IoT** devices is divided into consumer, commercial, industrial and infrastructure spaces . **IoT** devices are a part of the larger concept of the home automation which includes lighting, heating and air conditioning media and security systems and camera systems. Using Apple's home kit, manufactures can have their home products and accessories



controlled by application in **IOS** devices. **IoT** can assist in the integration of communications , control and information processing across various transportation systems (i.e.)The vehicle, the infrastructure and the driver or user

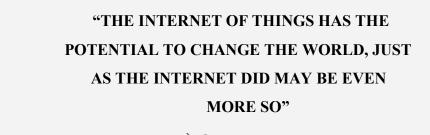
- Internet of Medical Things (IoMT) is an application of the IoT for medical and health related purposes, data collection and analysis for research and monitoring. It refers to "SMART HEALTHCARE"
- IIoT, Industrial IoT devices acquires and analyze data from connected equipment, operational technology OT, locations and people
- ◆ Internet of Military Things (IoMT) or (IoBT) Internet of Battlefield Things is a project initiated and executed by ARL. Application of IoT technologies in the military domain for the





purpose of reconnaissance, surveillance and other combat - related objectives.

The main source of society and back bone of a every country is *Agriculture* where ,there are numerous **IoT** applications in farming such as collecting data on temperature, rainfall, humidity, wind speed, and soil content; **IoT** Technologies pose potential dangers to your internet safety. News reports have ranged from an *IoT botnet* taking down portions of the internet to hackers exploiting baby monitors.





Manoj Kumar S

II Year, BCA B Section

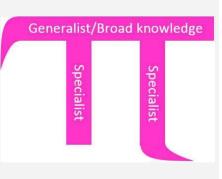




COMPUTER COURSES FOR TECHNICAL SKILLS DEVELOPMENT

Computer Education is now a days being a highly important for every learners of various streams, as the growth of technology enables the students enforced to learn some new technologies to pursue in a career at high prioritized level. Looking to the Computer Science Engineering and their related streams, the fact always lies that it is mandatory for students to specialize in any one of the programming languages or frameworks or any other computational tools when they go for jobs

Although students aware of the former fact, many people couldn't able to learn something stronger in those specializations either in or beyond the syllabus prescribed by the institutions, as the company expects during the recruitment process. This is why additional computer courses are introduced externally to bring aid to students bring strong foundation on any specialization that they choose for. But still many students couldn't make their way to learn additional technologies and programming languages Learning courses online than in private institutes, is more



economical friendly, time-friendly and portable. There are some recommended online platforms that describes below.,

Udemy

Through this, you can learn not only technical skills but also in non- technical courses. Through this, you can learn at the lower costs (starting from 500 INR) and at final module, you can earn certificate by involving in hands-in guided projects and weekly assignment. You may get coupons to learn at free cost, but cannot get the certificates

coursera

It is one of the most popular and most recommended platforms to learn something, as it is dealing up with foreign universities. This online website follows the same process as discussed in Udemy regarding certifications. The resource person for all courses mostly will be the lecturers, professors

of universities of foreign countries and their teaching level is so awesome., but only cons in this is that it is not much financial-friendly as compared to Udemy

It is the online educational program run by MHRD of India, in which it produces more than 500 courses from UG to PG level at free of cost. The enrolment and participation is absolutely free, but If you want to be certified with chosen courses, you need to pay 1000 INR (before 3-4 weeks from end course exam) and pass in an End Course Examination



(either proctored or un-proctored) . Unlike Coursera, the resource persons will be from various branches of Indian Institute of Technology, where they will produce a certificate for those who have completed and passed in that exam. The lectures in this online platform will be in college level basis, so you need to have some specified pre-required knowledge to understand and learn the concepts better.



Harish Elangumaran III BCA, A Section

INTRODUCTION TO ARTIFICIAL INTELLIGENCE (AI)

Machine Learning is a subset of Artificial Intelligence which uses algorithms to parse and learn from data and then apply what has been learned to make informed decisions. Deep Learning is a subset of Machine Learning that uses layered structure of algorithms called artificial neural network. It's design is inspired from the biological neural network that human brain uses

Applications of Artificial Intelligence

• Smartphone and Social Media Feeds:

If you are using a smartphone, you are interacting with AI whether you know it or not. AI features such as built- in -smart assistants whether it is Google assistant, Apple's Siri, Amazon's Alexa, that these assistant are based on AI that help users perform various tasks, from checking their schedules and searching for something on the web, to sending commands to another app. Most of your decisions are being impacted by artificial intelligence. From the feeds that you see in your timeline to the notifications that you receive from these apps, everything is created by AI.



• Navigation and Travel:



whether you are using Google or Apple Maps for navigating, or calling an Uber, or booking a flight ticket, you are using AI? Both Google and Apple along with other navigation services use artificial intelligence to interpret hundreds of thousands of data point that they receive to give you real-time traffic data. When you are calling an Uber, both the pricing and the car that matches your ride request is decided by AI

Banking and Finance:

The banking and finance industry heavily relies on artificial intelligence for things like customer service, fraud protection, investment, and more? A simple example is the automated emails that you receive from banks whenever you do an out of the ordinary transaction. Well, that's AI watching over your account and trying to warn you of any fraud. If you have chat with bank's customer service, chances are that you are chatting with an AI bot



• Security and Surveillance:

Technologies like object recognition and facial recognition getting better and better every day, it won't be long when all the security camera feeds are being monitored by an AI and not a human. While there's still time before. It is essential to realize that AI is meant to make our lives better. We will need to be equipped skill wise and knowledge wise on how to handle and prosper in a world that is continuously changing and improving as days move on.



G. Janaki II BCA, A Section





IMPORTANCE OF MOBILE APPLICATION IN EVERY DAY LIFE

The importance of Mobile phones in our every day life and activities is undeniable and unending. Because there is ongoing tremendous transformation in Mobile phones are no longer but ordinary communications devices it used to be. It has become the colossal point of attention for individuals and business for various incredible features and opportunities for mobile phones offer.

The Mobile technology, were availability and access to high speed internet and the remarkable communicative interface in these devices results. It is made possible through the development of Mobile applications Today, the availability of Mobile apps is on the increase such that it is produce a noticeable change in the human feels. Few years ago, we use to access the internet in computer to check emails and read emails.

But today has changed because computing is now carried everywhere. Buying a train ticket on the go, and not going to bank but still transfers money to family and friends. All thanks to app developers and top app development companies.





In present days, the use of mobile apps can be seen in areas such as communications, education, cooking, social media, shopping, business (money making), matrimony and banking. In terms of communication app such as Skype, Telegram, we chat, WhatsApp and Facebook. This is kind of social media used to easy and better communication with your families and all. In computer and laptop for Skype calls for exuberant charges involving long distance

Game apps are on the increase in mobile phones because of their uniqueness as they have revolutionized from the childish games to sophisticated ones. E.g. candy crush, subway suffers and angry birds these are the children are used to play the games. And adults were used to play the games like PUBG and free fires in android phones. For music

lovers, music apps were users can listen to live music or play downloaded music

Therefore, it is without reasonable doubts that the industry of Mobile app development is an flourishing side especially with daily emergence of superior add developers and development companies are willing to ready required satisfaction and needs of Mobile apps users

"The future of mobile is the future of online. It is how people access online content now"

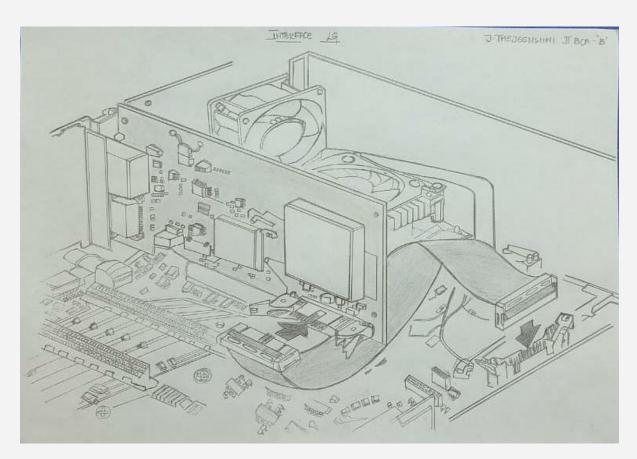
" MOBILE APPS ARE AMONG THE
BEST FORM OF
PERFORMANCE SUPPORT AVAILABLE TODAY"



R. Sridhar
III BCA, B – Section



TECHNICAL DRAWING



TITLE : INTERFACE LG

Thejeshwini J

II BCA , B Section



TITLE: Man in the Moon

PRABATH M

I BCA, B Section



CYBERFEST & INFOTRAN

CYBERFEST is a department cultural event which organized for every year since 2015. It helps students to improve their leadership skills, team work and also fun to their education life. Some of the beautiful











"INFOTRAN" was inaugurated on 26-Aug-2019 with chief guest Dr. M. Sornam, Professor, Department of Computer Science, University of Madras. Infotran integrates all the department activities. Various seminars and webinars are conducted under Infotran since its commencement. The objective of Infotran is to share knowledge on recent advances in the field of computer science



















PLACEMENT

S.NO	NAME	CLASS	COMPANY]
1	SHRI HARIHARAN	III BCA	DELOITTE	
2	SRIDHAR ARULKUMAR	III BCA		
3	JESSY VINITHA	III BCA	COGNIZANT	WIDDO
4	GAYATHRI G	III BCA		Applying Thought
5	MONO J	III BCA		
6	SATHIS KUMAR	III BCA		HCL
7	HARINI S	III BCA		
8	NIRANJAN SHRI	III BCA		Deloitte.
9	SRIRAAM LNU	III BCA		
10	PRADEEP S	III BCA		
11	RAKESH KUMAR S	III BCA		Cognizant
12	AKILESH B	III BCA		
13	NAREN HARINARAYAN	III BCA	INFOSYS	B
14	PAVAN B	III BCA	INFOSTS	
15	ASWINEE KESAVAN	III BCA		
16	HARISHKUMAR	III BCA		Marie Anna
17	PRATISH	III BCA		TATA CONSULTANCE
18	AKILESH	III BCA		SERVICES
19	SURYA	III BCA		
20	SRIDAR	III BCA	TATA CONSULTANCY	>
21	SHRIHARI	III BCA	SERVICES	accenture
22	SUSIBALAN	III BCA		
23	PADMANABAN	III BCA		
24	LAKSMAN	III BCA		

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Ms. L. Meena

