MCET

InfoQuest

A Technical Magazine .

Department of
INFORMATION TECHNOLOGY .

Dr. Mahalingam College of Engineering and Technology. Pollachi-03.

CONTEXT

VISION & MISSION.

PROJECTS.

STAFF & STUDENT ACTIVITES .

TRAINING & PLACEMENT .

ARTICLE .

PHOTOGRAPHS.

Department of Information Technology

Vision

To become a Centre of Excellence in education and research in the field of Information Technology, to meet global challenges in computing industries.

Mission

To impart world-class knowledge in the field of Information Technology.
To support and facilitate research and development activities.
To promote industry-institute interactions to empower the faculty members and students.
To develop all round personality by inculcating the values and skills needed for students to upgrade themselves as IT professionals.

VISION

MISSION

Programme Educational Objectives (PEOs)
The graduates will:
PEO1. Technical Expertise: Have high level of technical competency to identify problems and to generate innovative solutions, which would conform to the needs of IT industry.
PEO2. Lifelong Learning: Successfully adapt to changes in roles and responsibilities, through lifelong learning, for collaborating professionally with various stakeholders.
PEO3. Ethical Knowledge: Ethically apply their computing knowledge and skills considering societal, economic and environmental factors.

Programme Outcomes (POs)
The graduates of Information Technology Programme will be able to:

PO 1. Engineering knowledge: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization in the field of Information Technology.

PO 2. Problem analysis: Identify, formulate, analyze and solve complex problems in computing industries using principles of mathematics, natural sciences and engineering sciences.

PO 3. Design/development of solutions: Design a software solution for complex engineering problems and design system processes to meet specific needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PO 4. Conduct investigations of complex problems: Conduct investigations of complex problems including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusion.

PO 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

MCET

PO 7. Environment and sustainability: Understanding the impact of engineering solutions in social environment and exhibit the knowledge for sustainable expansion.

PO 8. Ethics: Realize and bind to professional ethics and the norms of engineering practices.

PO 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.

PO 10 Communication: Communicate with engineers and society to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions related to IT Professionals.

PO 11. Project management and finance: Demonstrate and apply the knowledge of engineering and management principles to one's own work, as a team leader or a member to manage project in multidisciplinary environments.

PO 12. Life-long learning: Recognize the need for, and have the ability to engage in independent and life-long learning in the context of technological change.

PROGRAM SPECIFIC OUTCOMES

PSO 1 : Open Source Software
Able to develop customized solutions for real world problems using open source software.

PSO 2 : Data Science
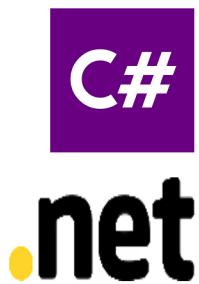Able to manage store retrieve and analyze the voluminous data efficiently

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FEBRUARY

PROJECTS.

ANDROID

Smart leave Management system

MCET Pioneer

Asset Management

Repository and retrieval of club Management System

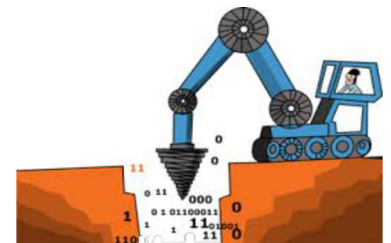SMS based student information system

MCET placement statistics

ASP.NET/.NET

Students skillset analysis for placement

Interact for information

Online bank Management system

DATA MINING

Faculty Monitoring system

Attendance Monitoring system

Mark Analysis system

WEB APPLICATIONS

Free Slot Identification

Complaint Registration

Digital Agriculture

ICT in Agriculture for social Modelization

Hunger arms

MCET

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FEBRUARY

STAFF & STUDENT ACTIVITES.

Workshop on PS4 course titled "Ethical & Moral Responsibility"

FACULTY MEMBERS :

Mr.A.S.Muthanantha Murugavel, AP(SG)

Mr.K.Kanagasabapathi, AP

Mr.S.Sasidharan, AP

Ms.D.Janani, AP

Ms.K.Keerthika, AP

VENUE: CS Hall, MCET, Pollachi. **DATE** : 20.12.2016 & 21.12.2016

CII Sponsored Conference on "Higher Education for Digital Natives"

FACULTY MEMBERS :

Ms.L.Meenachi, AP(SS)

VENUE : Hotel Radisson Blu, Coimbatore.

DATE : 02.12.2016 & 03.12.2016

Workshop on "Data Analytics using R Tool" by Mr. Soorya Narayan, Co-Founder & CEO, Eduseva Technologies, Coimbatore.

FACULTY CO-ORDINATORS :

Dr.S.Ramakrishnan,Prof. & Head

Mr.N.Praveen Sundra Kumar, AP

VENUE: Data Mining Lab, MCET, Pollachi.

DATE : 30.12.2016

No. Of Students Attended : 40 (III B>Tech IT)

Workshop on "Data Analytics using R Tool"

III'rd YEAR MEMBERS :

1. B.Preethi
2. K.B.Maheswari
3. N.Managala Priya
4. V.Karthikeyan
5. J.Nandhinipriya
6. T.Swathi
7. D.Janaani
8. S.Oviya
9. G.Varsha
10. P.Eswari
11. S.Praveen Kumar
12. P.Yuvarani
13. K.Madhumitha
14. J.Krishika
15. k.Krishnaveni
16. S.Santhiya
17. M.Sameena Banu
18. P.Shanmuga Priya
19. C.S.Sinduja
20. S.Muthu Kumar

21. M.Pugazhendhi
22. RT.Sahaana
23. M.Prakavi
24. S.S.Vinieth
25. P.Renuga Devi
26. B.Rajkumar
27. A.Dhamodaran
28. S.Madhu Nila
29. S.Archana
30. N.Subashri
31. P.Gowtham
32. K.Hemachandru
33. M.Preethi Vardhana
34. S.Anand
35. P.Hema
36. K.Dharshini
37. M.Muhamedhakkim
38. R.Sekar

VENUE: MCET, Pollachi.
DATE : 30.12.2016

In-Plant Training by the Students

II'nd YEAR MEMBERS :

Rahi P Shah
S.Saliha Parveen

VENUE: HCL Technologies, Coimbatore
DATE : 05.12.2016 to 07.12.2016

M.V.Kheethana

VENUE: UNIQ Technologies, Coimbatoree
DATE : 29.11.2016 to 01.12.2016

G.Nandhini
B.Punitha
S.Diwahar
S.Praveen
A.V.R.Srikanth

VENUE: UNIQ Technologies, Chennai
DATE : 28.11.2016 to 02.12.2016

B.M.Jailani
M.Navaneetha Krsihnan
S.Minu
S.Subiksha

VENUE: UNIQ Technologies, Chennai
DATE : 28.11.2016 to 02.12.2016

Workshop on "Map a Location"

II'nd YEAR MEMBERS :
1. Rahi P Shah
2. S.Saliha Parveen

VENUE: CIT, Coimbatore
DATE : 17.12.2016 & 18.12.2016
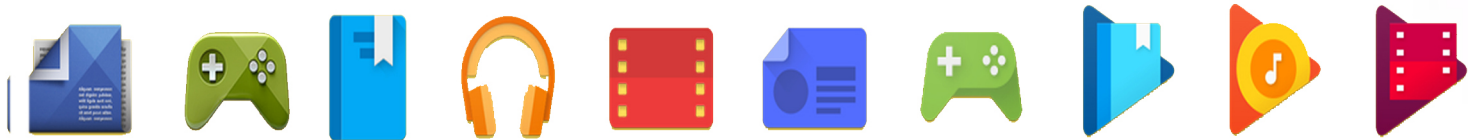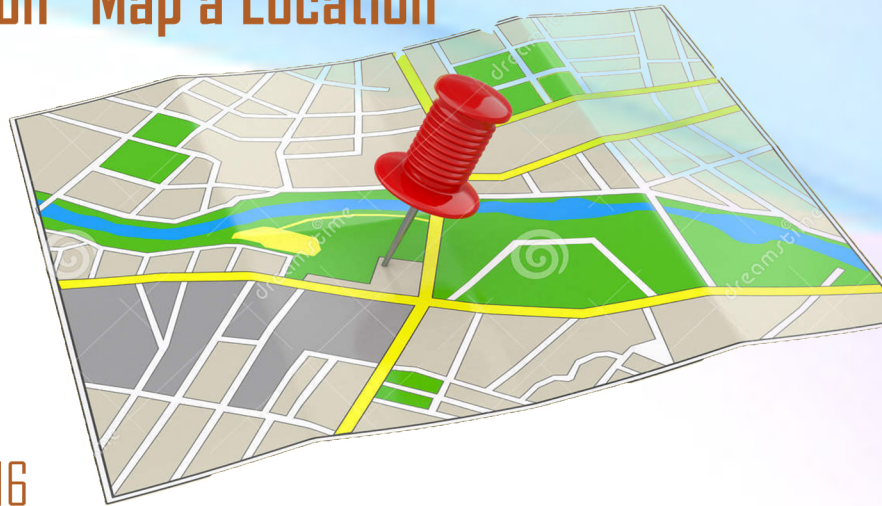
Workshop on "ANDROID"

II'nd YEAR MEMBERS :
1. T.Maaruthi
2. M.Swetha
3. S.L.Shalini
4. V.Ramya
5. R.Narayani
6. E.Mohan Prasath
7. R.Ashwin
8. M.Shyam

VENUE: UNIQ , Coimbatore
DATE : 29.11.2016

iOS   ANDROID   Windows 8 Phone

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In-Plant Training by the Students

RT.Maaruthi
M.Swetha
S.L.Shalini
V.Ramya
R.Narayani
E.Mohan Prasath
R.Ashwin
M.Shyam

VENUE: UNIQ Technologies, Coimbatore.
DATE : 25.11.2016 to 28.11.2016

Eclipse and Android Studio

A.Suba Karthikeyan
B.Ragul Prasath
M.Sivanesh Selvan
S.Afras Ali
K.Monash
M.Aswin Kumar
R.Joe Benjamin Samul
S Ramalingam
S Lakshmana Kumar

VENUE: UNIQ Technologies, Chennai
DATE : 25.11.2016 to 27.11.2016.

In-Plant Training by the Students

K.Pavithra

S.Sangeetha Priya

AG.Saranya

M.Anisha

R.Hemalatha

R.Priya

N.Kanimozhi

K.Nandhini

S.Abirami

S.Thaiyalneyaki

A.Aparna

V.Nivetha

S.Dabeenisha

M.Kousalya Nayagam

R.Vidhya

P.Dhivya Priya

S.RishwamAyeesha

S.Swathi

N.Revathi

B.Jenifer Stella

S.Vinitha Kamatchi

R.Juno Saffron

M.Abdul Rahman

VENUE: UNIQ Technologies, Coimbatore.
DATE : 25.11.2016 to 28.11.2016

S.Sairam

VENUE: HCL Career Development Centre,
-Coimbatore
DATE : 25.11.2016 to 27.11.2016

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February

Training and Placement

Placement Details

Excelacom Technologies	1
Infosys Pvt. Ltd.,	25
Hewlett Packard Pvt. Ltd.,	1
Financial Software and Systems Pvt. Ltd.,	3
NTT Data Pvt. Ltd.,	8
Tech Mahindra Pvt. Ltd	4
Ugam Technologies	3
Infinix Pvt. Ltd.,	2
Amachu Automation Systems	1
Amazon Pvt. Ltd.,	1

Details of Training imparted to Students
IV Year - IT Placement Training

Industry-Institute Interaction Activities
M.Ishwarya

R.Karthick

from IV – IT (A)

VENUE : Infinix Pvt. Ltd., Chennai.

DATE : 19.12.2016 to 31.12.2016

Name and Address of Important Visitors

Workshop on "Data Analytics using R Tool"
Mr. Soorya Narayan,
Co-Founder & CEO,
Eduseva Technologies, Coimbatore.
DATE OF VISIT : 30.12.2016

Board of Studies(BoS7) Meet
Dr. P.Uma Maheswari, (University Nominee)
Professor&Head,
Department of CSE,
Anna University Regional Centre Coimbatore,- 641046.

Dr. K. Baskaran,
Professor,
Government College of Technology,Coimbatore- 641013.

Mr. Mathar Badusha,
Director,
AssistanZ Networks Pvt. Ltd, Coimbatore – 641012.

Mr. Sivaramakrishnan,
Global Practice Head,
Tata Consultancy Services, Chennai.

Infonest

ARTICLES

A GROUP!! A TEAM !! NOW A NETWORK!!

On reading this topic what you understand guys!!?? Guessed what I am going cover in this article?? Its an article on how a small group entered the great silicon valley in the United States of America and now became the world's top netwotk!!......Yeah You are right if you guessed that it is FACEBOOK!!,Facebook a small team started in the year 2005 by the dropouts of HARVARD University in the US. A small plan started without even knowing that the people will accept the project or not!!

The cofounders of facebook are Mark Zuckerberg and Eduardo Saverin along with their roommates started to build this great social network in a small scale, At first they sat together and made a project for their college named FACEMASH a small network where photo's of students of Harvard are made like funny pics and posted!! This led Mark and Eduardo to be punished and suspended from the University for a while due to which they dropped the project. After few months they made a new project that acted as a alumini network for the students of Harvard , Standford , Cambridge, Berkeley, Oxford and many other reputed Universities in the United States of America that was a great success!! And along the course time Mark and Eduardo made a Music application like the iTunes by Apple, the application was used by Microsoft through which Mark and Eduadro came into the Real market, Mark had a dream of making a grand project in his lifetime, one night he and his friends started to work on a project called facebook!!Here came the dream to a real state of honour.

Initially they made the project as a small one combining the FACEMASH and the alumini network together.In few years by 2007 it had 5 million users and emerged as a new company in the IT market with CEO as Mark Zuckerberg, Once after entering into the silicon valley his friends moved out of FACEBOOK and started new networks like Quora,Zomato and many other stuffs, Eduardo also came out of facebook as he thought that he was not respected in the team as a Cofounder,Finally Mark started as a new team of facebook which was offered with 100 million cash for just 1.5% ownership, companies like Yahoo,Microsoft offered jobs for Mark and asked him to work on the same project under their company , but Mark had other ideas he brought the new space called NEWS FEED in facebook which was first opposed by people and Mark regreted for that action and later was accepted by the people!! Similary people started protesting against facebook that it reveals the secrets and personal identities of them in the social

network for which also Mark regreted and gave assurance by giving privacy settings for their profiles. Now facebook is the world's largest social network with more than 12 million users and even companies like google offer a great amount of 250 million dollars for just 1.6% ownership of the company...

Through this I insist students of Both IT and CSE

departments ,that even a small project may become a big one in the future , everything is useful in life, do not waste time, be addicted to technical projects ,do it joyfully and become future techies with flying colours!! Wish you guys all the best and thanks for making your time to read this small article.

SAIRAM S
15BIT042

SIMULATION ANALYSIS FOR OFDM USING MATLAB

INTRODUCTION:

Wireless communications is an emerging field, which has seen enormous growth in the last several years. The huge uptake rate of mobile phone technology, Wireless Local Area Networks (WLAN) and the exponential growth of the Internet have resulted in an increased demand for new methods of obtaining high capacity wireless networks. Most WLAN systems currently use this standard, which provides a maximum data rate of 11 Mbps. Newer WLAN standards such as HiperLAN2, are based on OFDM technology and provide a much higher data rate of 54 Mbps. However systems of the near future will require WLANs with data rates of greater than 100 Mbps, and so there is a need of technology which supports these higher data rates and maximum spectral efficiency. OFDM is most suitable techniques for these high data rate applications. OFDM is presently used in a number of wired and wireless communication systems. It is a special case of data transmission, where a single data stream is transmitted over a number of sub carriers (SCs) to increase robustness against frequency-selective fading or narrowband interference. OFDM is leading the engineers into a new era of digital transmission and is becoming the chosen modulation technique worldwide. This thesis investigates the performance of various modulation schemes by analyzing the transmitted and received OFDM frame, frequency spectrum and their constellation diagram for the removal of noise and inters signal interference.

ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS:

OFDM is referred as Multi-Carrier, Multi-Tone and Fourier Transform. The OFDM concept is based on spreading the data to be transmitted over a large number of carriers, each being modulated at a low rate the carriers are made orthogonal to each other by appropriately choosing the frequency spacing between them. A multicarrier system, such as FDM divides the total available bandwidth in the spectrum into sub-bands for multiple carriers to transmit in parallel. It combines a large number of low data rate carriers to construct a composite high data rate communication system. Orthogonality gives the carriers a valid reason to be closely spaced with overlapping

without ICI. Letx (t) is a function and its orthogonal function will be x*(t) so the condition of Orthogonality is and represented. Here different colors are for sine and cosine component. Here all the subcarriers are sine waves. The area under one period of a sine or cosine wave, or any other sinusoidal with some phase angle, is zero.

PERFORMANCE MEASUREMENT IN O.F.D.M. A.

Bit Error Rate Mathematically BER can be defined by

BER=no of error/total bit transferred.

 There are some more factors that affect on BER. If the transmission speed and transmission medium are good in a particular time but Signal-to-Noise (SNR) is high then BER will be very low. [6]

B. Signal to Noise Ratio(SNR) The SNR mathematically can be defined by

SNR=10 log signalpower/noisepower(db).

SNR is an indicator commonly used to evaluate the quality of a communication link. Higher value of SNR means better quality of the communication link.

OFDM MODELLING IN MATLAB:

The basic concept behind multi-tone modulation is to replace one wideband signal with many simultaneously transmitted narrowband signals with the same overall bandwidth as the original signal. To implement OFDM in Simulink, transmitters and receivers in discrete time, Inverse fast Fourier transform (IFFT) and Fast Fourier transform (FFT) methods are used respectively. OFDM transmit symbols that have a longer time duration, which is less or equal to the maximum delay spread. To combat ISI, guard intervals are used between OFDM symbols,which is showing the basic processing involved in OFDM system OFDM processing can be implemented through the communication block-set of Simulink.
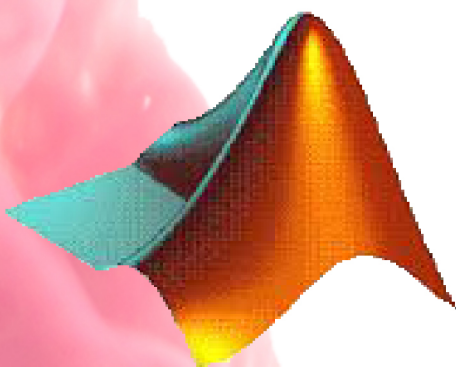
SIMULATION RESULTS:

The main objective of this paper is to implement a user interface for the study of OFDM processing. On the basis of model of BPSK techniques, Simulink models can be designed for other techniques also. This GUI enables us to examine the variation of Bit error rate against the different values of Signal to Noise ratio. Thus the purpose of this simulator has achieved. It makes the study of OFDM processing very easy. By simply taking the values of SNR, we can easily observe the BER variation on a graph. If we can move in details of Simulink models, then just by changing the values of FFT points, we can easily observe the effect on OFDM received frame. This simulator also enables us to monitor the change in OFDM processing by radio button with OFDM and no OFDM.

t is a function and its orthogonal function will be x*(t) so the condition of Orthogonality is and represented. Here different colors are for sine and cosine component. Here all the subcarriers are sine waves. The area under one period of a sine or cosine wave, or any other sinusoidal with some phase angle, is zero.

VIGNESH.Y
15BIT069

Industry Institute Partnership Conclave
Confluence of corporates and college for co-operation, Collaboration, Co-creation

The programme "Industry Institute Partnership Conclave" was conducted on 11.02.2017 at MCET, Pollachi. Prof.C.Ramaswamy was given the opening remarks about NIA Group of institutions and collaboration with different industries that is helpful for student's placement, internship, faculty training, and Curriculum design. He informed that during the year 2008 TVS collaboration education system is introduced with the help of Dr.Kovaiselvan, Director, TVS Motors, Coimbatore. There are 40+ industry experts were invited and attended. The objective of the programme is to minimize the gap between academia and industry. Dr.Kovaiselvan, Director, TVS Motors, Coimbatore context setter of the programme presided over the function. He delivered why and how conclave is? It gives employability status right from schools, colleges.

The panel discussion was happened by the departments. The industry experts for the IT

Ms.Sumukhi Jayaram
NTTData,Chennai

Mr.Srinivasan Ramasamy
Co-founder,
Clued In Technologies

Mr.Sundararaman
Oracle

Mr.Saravanan Velrajan
Director,Verizon

Mr.Manomozhi Gopal
DGM,
Caresoft Global

Mr.Bharathan Prahalad,
Global head,TPF Softwares

Mr. Roy Antony
Lead Education, Training and Assessment,
Infosys

MCET

Ms.Sumukhi Jayaram

She shared about, the experience with MCET over past 10+ years. The general expectations from fresh graduates are described. She informed that, Institute teaches the students about technology, whereas Industry trains them to adapt for a company requirement.

The results for the work done have to be measured in a time to time. The performance of the individual and outcome of the work will be known only when there is a measurement

Mr.Sundararaman

The competitions in job market

Skillset required getting into a product and service based companies.

A new application can be developed and it shall be put into market via cloud since, cloud is a forum to implement global network in the world.

Campus2 Corporate

Mr.Bharathan Prahalad

The person should be passionate on the profession. Passion leads to attain a desired goal. He shared about what an engineer do?. The engineer can create own patents for the new creation/innovation. He also informed that, continuous learning with a passion will achieve the goal effectively.

Mr.Saravanan Velrajan

He initiated his speech, by saying technology growth in the current world day by day. In an IT industry, communication is one of the important factors. Around the world, it can done through,

1) Open source community-It is a platform to enrich the knowledge on open source technologies. The latest inventions in the open source domain are also available in a forum.
2) Meetups groups-Different domains are available globally and the users can group it based on their interest.
3) E-lance platform- It is geographically diverse and way to earn money.

Mr.Manomozhi Gopal

The collaboration overcomes the industry problem that, difficulty facing in training fresher with industry need. He also informed that, students can learn new and latest technologies that are available in the world. In addition with this, the individual can relate the technology with industry needs.

Mr. Roy Antony

The speech begins with, "Be flexible and adaptable to the environment". Being in the IT profession the job location may change the place to place often. He also stated that, "Teach the mind to think" to get a success out of problem.

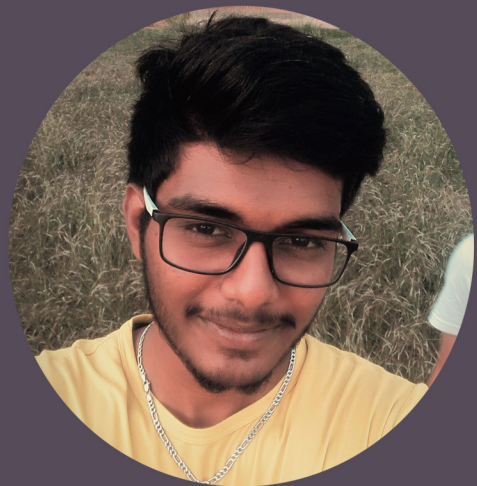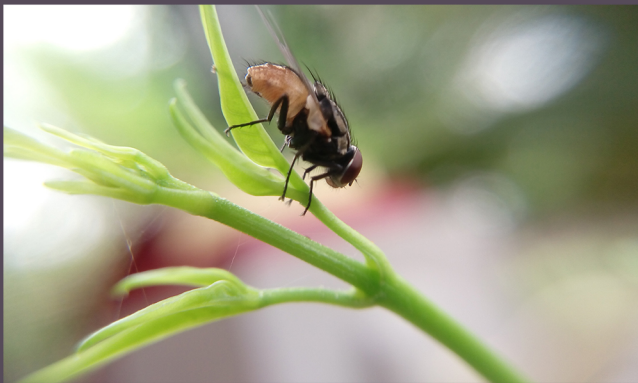Interaction Session- Students were clarified their doubts related to IT industry.

Valediction-Valedictory function was happened on the evening by thanking all the industry experts for their presence over here.
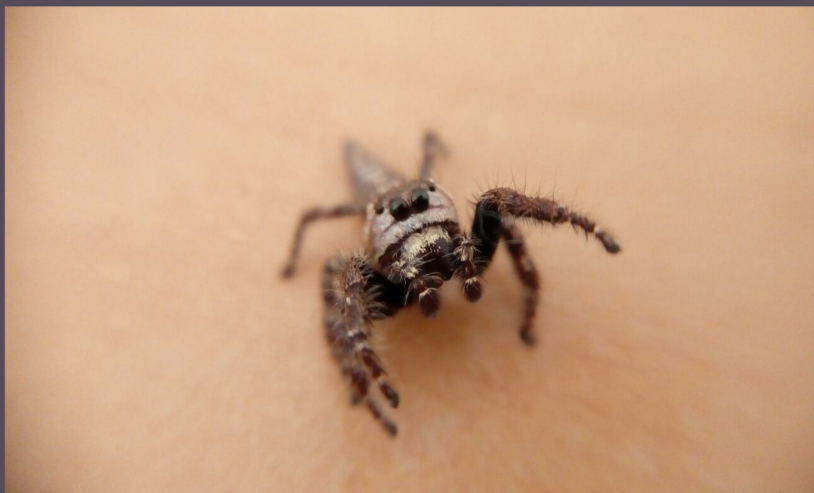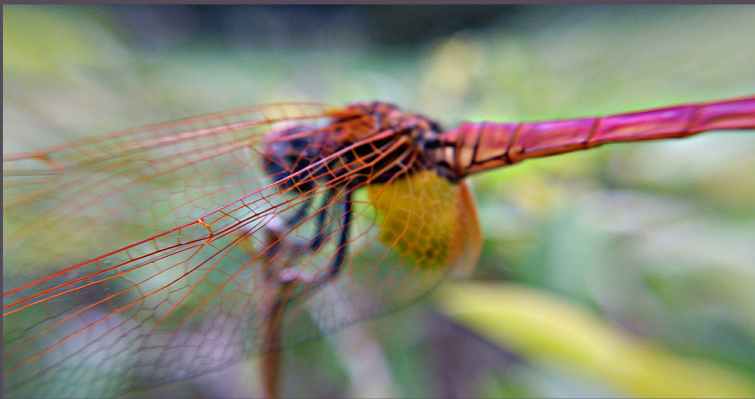
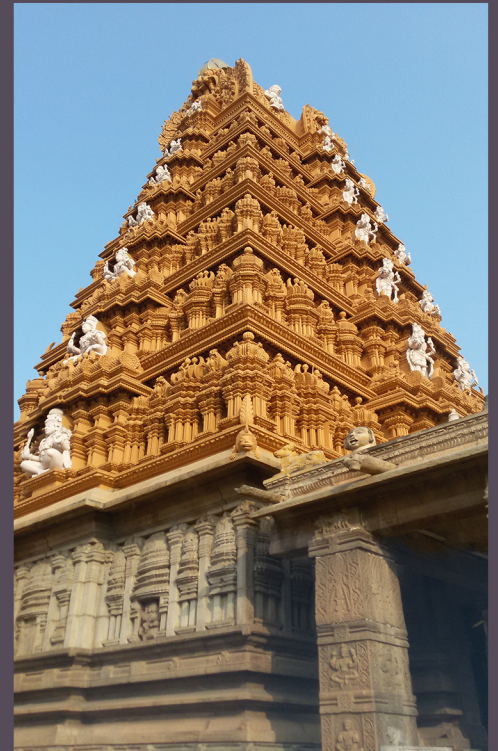# Interest

FEBRUARY

PHOTOGRAPHS

M.Abdul Rahman
IInd year IT-B, 15BIT004

S.Afras Ali

IInd year IT-B, 15BIT094

B.Ragul Prasath

IInd year IT-B

M.Sivanesh selvan
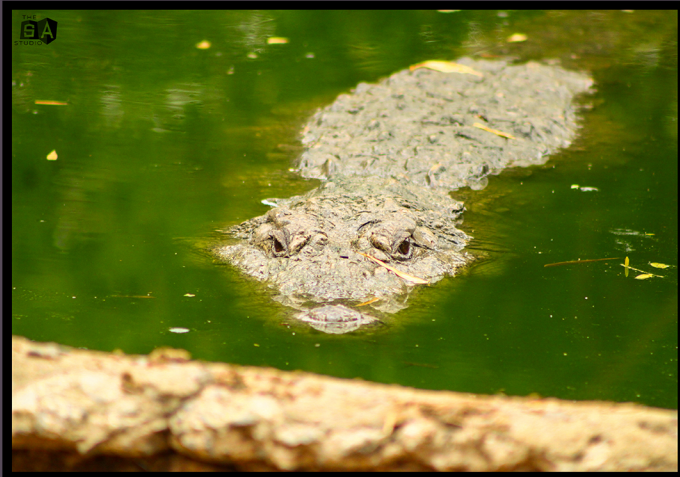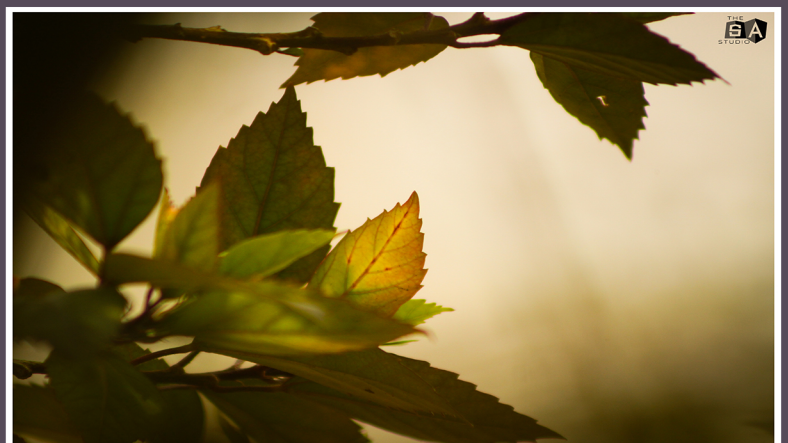
IInd year IT-B, 15BIT062

Srik Aanth.A.U.R

IInd year IT-B, 15BIT028

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SAIRAM . S

REAVATHI . N