8th ISSUE: 2018

MAGNUM OPUS

Spirit of Innovation

Department of Computer Science and Engineering

View PDF

ACHARYA

Acharya Institute of Technology

[Recognised by AICTE, NAAC Accredited, Affiliated to VTU Belgaum].
Acharya Doctor Sarvepalli Radhakrishnan Road, Bengaluru, Karnataka-560107.

Pragyan

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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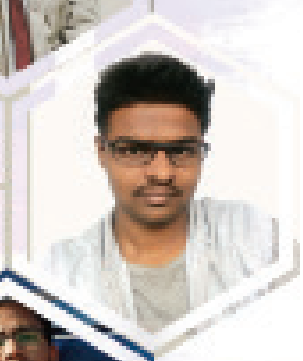

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4th Sem. CSE

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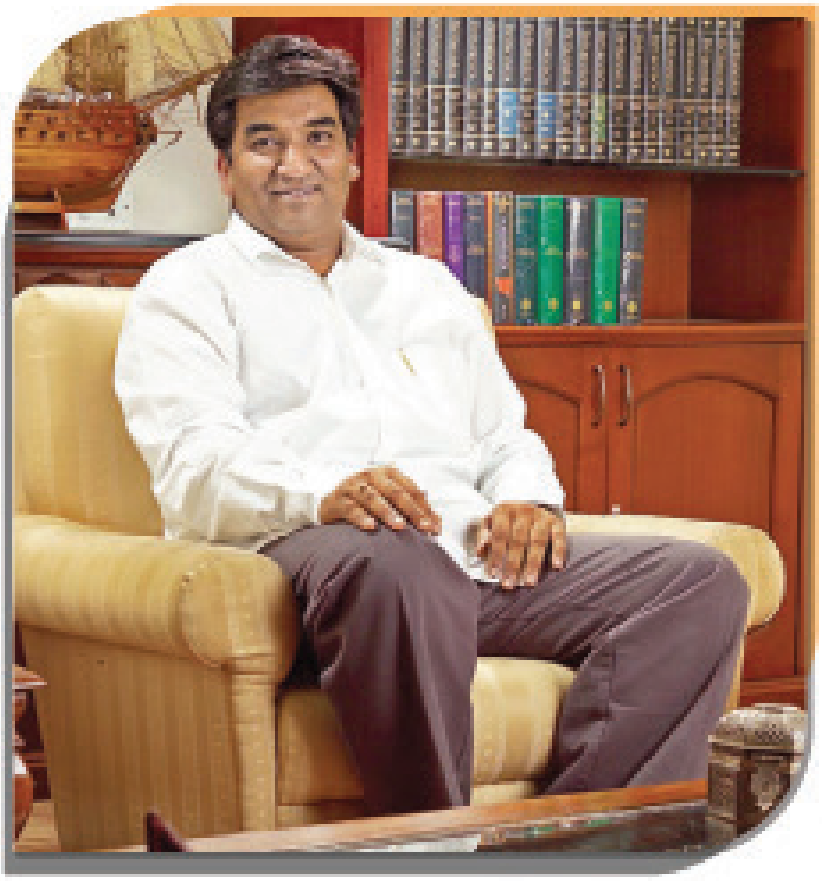
About 'MAGNUM OPUS'

Magnum opus in Latin means "great work." A magnum opus is a work on a large scale which is widely regarded as an artist's pinnacle of achievement, often reflecting a lifetime of work. It provides an opportunity to pay tribute in the field of engineering by its power and imagination. It sets to build a platform of techniques, skills and thoughts to discover new horizons in the field named innovation. This is not just a platform, but A TEST OF CHARACTER & TEST OF WILL!! It helps us to prove our mettle with FINESSE & SUBTLETY amidst exhilarating performances.

Objectives :

- The primary objective is to encourage young people to bring about positive change in their local and global communities.
- It aims to provide young people of today who care about their future carrier, community and culture for the generations of the future.
- To create awareness among faculty & students to
  - Know about the recent trends in the field of Computer Science.
  - Know about the various activities conducted in the department of computer Science and Engineering.
  - Know about the calendar of events.
- A key and continuing feature of the magazine is its preparation by young people themselves, providing faculty and students with a national and international forum for the exchange of ideas and a resource base.
- Apart from being the contributors of articles and other content, the students form a youth editorial board, and are part of the production team.

Chairman's Message



At the very outset please accept my congratulations on your efforts to bring out the 8th issue of **"MAGNUM OPUS- Spirit of Innovation"** of the department of Computer Science & Engineering which will provide a media for students to express their views and inculcate enthusiasm for creativity in writing.

My blessings will always be there in every venture the department wishes to take up for the benefit of the student community.

The Students should should bear in mind the motto of the JMJ Education Society - **"Truth, Joy & Service"** and direct their sincere and true efforts in providing service, which would benefit their fellow students, institution where they learn and for the development and progress of their country.

Shri B Premnath Reddy
Chairman
Acharya Institutes

Campus Director's Message

I am happy to know that Department of Computer Science and Engineering, AIT is bringing out **"MAGNUM OPUS"**, the Departmental Magazine for the year 2017-18.

MAGNUM OPUS magazine is a kind of platform extending valuable opportunities to young talents to express their creativity, I extend my greetings and best wishes to the HOD, faculty, staff and students, Department of Computer Science, Acharya Institute of Technology and wish their Endeavour's my very best.

This magazine mirrors of the different faces of development of the students in academics as well as co-curricular activities and thus it will be very rewarding experience for the students.

To the batch of 2017-18, I wish you all the very best... Go forth and do yourselves and Acharya Institutes proud!

Dr. Divakar Goli

Campus Director
Acharya Institutes

Principal's Message

I wish a great success for the team **"MAGNUM OPUS (SPIRIT OF INNOVATION)"** of the Department of Computer Science and Engineering for bringing out the Departmental Magazine. This magazine exemplifies the voyage transverse and exhibits the literacy skills of our students. This Departmental magazine is a forum which could aptly be used for recording events, fond memories and creative writing. I am sure that this magazine will be informative and resourceful.Further, it will be a platform for emerging students to showcase their talent. Discipline and hard work is the key to success. I congratulate the team for their hard work.

I wish good luck in all their Endeavours.

Dr. Sharanabasava C Pilli
Principal
Acharya Institute of Technology

HoD Message

I am extremely happy to note that, department of Computer Science & Engineering, which offers UG, PG and Ph.D programs, is bringing out 8th annual version of magazine "**Magnum Opus - 2018**". The department of CS&E strives to provide excellent platform to exhibit student's talents and holistic growth of the students. The academic year 2017-18 was very vibrant and we have had several curricular, co-curricular and extracurricular activities. I have witnessed, the editorial team led by Prof. Gayathri Kamath, working hard to capture/show case all the unforgettable moments of the year in a very systematic manner. I take this opportunity to congratulate them on my personal behalf and on behalf of students, faculty of Computer Science & Engineering. My best wishes to all the students for upcoming University examinations.

Dr. Prashanth C M
HoD of CSE
Acharya Institute of Technology

ACHARYA

Acharya Institute of Technology

Department of Computer Science and Engineering

Motto:

"Nurturing Aspirations Supporting Growth"

Vision:

Acharya Institute of Technology, committed to the cause of sustainable value-based education in all disciplines, envisions itself as a global fountainhead of innovative human enterprise, with inspirational initiatives for Academic Excellence.

Mission:

Acharya Institute of Technology strives to provide excellent academic ambiance to the students for achieving global standards of technical education, foster intellectual and personal development, meaningful research and ethical service to sustainable societal needs.

Program Educational Objectives

1. Sound knowledge in engineering discipline.
2. Are competent, creative, and highly valued ethical professionals in industry, academia, government, or entrepreneur.
3. Engage in life-long learning and professional development.
4. Become effective global collaborators, leading or participating to address technical, business, environmental and societal challenges.

Programme Outcomes (student outcomes):

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to identify, formulate, and solve engineering problems.
3. An ability to design and conduct experiments, as well as to analyze and interpret data.
4. An ability to design and build a component, system, or process to meet desired needs.
5. An ability to function on multidisciplinary teams
6. An understanding of professional and ethical responsibility.
7. An ability to communicate effectively.
8. An ability to use the techniques, skills, and engineering tools.
9. The broad education necessary to understand the impact of engineering solutions in global, economic, environmental, and societal context.
10. A recognition of the need for, and an ability to engage in life-long learning.
11. A knowledge of contemporary issues.
12. A knowledge of project management and it's financing.

Preface

The department of Computer Science & Engineering came into existence in the year 2000 with a small intake of 60 which has been increased gradually to 120 plus and has been imparting quality education ever since. In its 16 years of academic service, the department has shown phenomenal growth, and at present hosts under graduate & post graduate programmes, under the affiliation of Visvesvaraya Technological University, Belgaum. It has been accredited by NAAC.

The Computing facility of Department consists of a state-of-art network of computers with 5 seperate labs running on Linux Server & Windows Servers. The various labs are Project Lab, Graphics Lab, Hardware Lab, Programming Lab and the System Software Lab.

Under the aegis of Computer Society of India, the department started the CSI-Student chapter in the year 2008. Various activities like State Level Ethical hacking competition, workshops, seminars and guest lectures are conducted under this banner.

The CSE Department has its own student forum "LAKSHYA" in which every year students organize and participate in various Technical/Non- Technical events.The forum encourages participation amongst students and faculty at all levels. Department has MOU with Infosys Campus Connect Program, where the students of Pre-final year are trained to upgrade themselves for the industry standards.

The highly motivated and qualified faculty represents the core of the CSE department. They have a proven track record in the IT industry and academia and have specialized in the latest areas in Computer Science & Engineering , which include Computer Networks , Wireless Network Security, Cryptography, Wireless Sensor Networks, Image Processing, Big data, Cloud Computing and so on.

The Faculty is also actively involved in some of the joint research projects with industry. In addition to that, they organize workshops, seminars and invited talks from experts. Training programmes on advanced topics are conducted in the department for the benefit of students and faculty.

Besides guiding the students on technical aspects, addressing their personal or academic grievances and problems through an efficient proctorial system. Using the proctorial system each proctor monitors the student's academic performance and overall development on a regular basis. Proctors frequently communicate with parents regarding their wards performance.

The Students add on to the raw energy, enthusiasm and innovation in the department. Under the able guidance of the faculty placement of the students in the department is very encouraging wherein repute IT Companies like Infosys ,Tech-Mahindra, Cognizant, i-Gate, HP, and many more took part.

The Students are also selected to carry out research projects at Old Dominion University , Virginia, US which is known worldwide for its R&D projects.

The Students have also published research papers in leading scientific journals . Apart from the acdemics achievements, the students also work for social causes through the student formed and driven ICARE group.

Some of the Notable Achievements in the Department:

Department of **Computer Science & Engineering** in association with **C-DAC** is setting up **IOT lab** for the benefit of both the students and faculty to help in their research.

Dr Prashanth C M, Head Department of CSE has submitted the project proposal for **BIRAC-Immunize India** with project entitled **"Dynamic visualization of Immunization data and automatic vial tracking"** worth **Rs 2 crores** and has been shortlisted for the II round of presentation at BIRAC premises, New Delhi.

Prof Naidila Sadashiv received a grant under the **"SEED MONEY"** for young Scientist for research (SMYSR) for the year 2016-17 for the project proposal for **cloud computing based rural and mobile health care centre.**

Dr Surekha K B has been awarded **doctoral degree (Ph.D)** in the faculty of computer science and Engineering from JNTUH, Hyderabad for the research topic **"Techniques to improve the performance of energy efficient routing protocols in wireless sensor networks".**

Dr Deepak S S has been awarded **doctoral degree (Ph.D)** in the faculty of computer science and Engineering from JNTUH, Hyderabad for the research topic **"Designing the coverage and connectivity mechanism to enhance the life time in wireless sensor network".**

Yashwanth B of 8th semester CSE qaulified in GATE 2018 with a score of 370.

Aditya Das was selected as **most outstanding intern** at Old Dominion University, Virginia, United states

Mr. Nikhil Talwar of 6th Semester, Department of Computer Science & Engineering, Acharya Institute of Technology has won the **2nd prize** in the Hackathon conducted by DENSO and hosted by HackerEarth on 18th and 19th January 2018 with a cash prize of **Rs. 60,000/-** for the project titled ***"Universal Disease Diagnostic Kit"***.

Sayanthan Kar, Shikhar Chawra and Aaditya Rathod, 5th semester students of department of CSE under the CSI student branch presented an idea for the problem statement **"Design of a DRONE which can take off from a water body & safely land on a water body"** in Funnovation Event, which was a part of **11th National CONFERENCE ON IT IN DEFENCE 2017-18 under the Theme: Digital Battlefield** which was held on 11th and 12th January, 2018 at Vivanta Taj, M.G Road and won third place with a cash prize of Rs 10,000/-

Shikhar Chawara, Sai Tarun, Sayanthan Kar, Nikhil Talwar have been selected for an internship program at old Dominion University, Virginia, US.

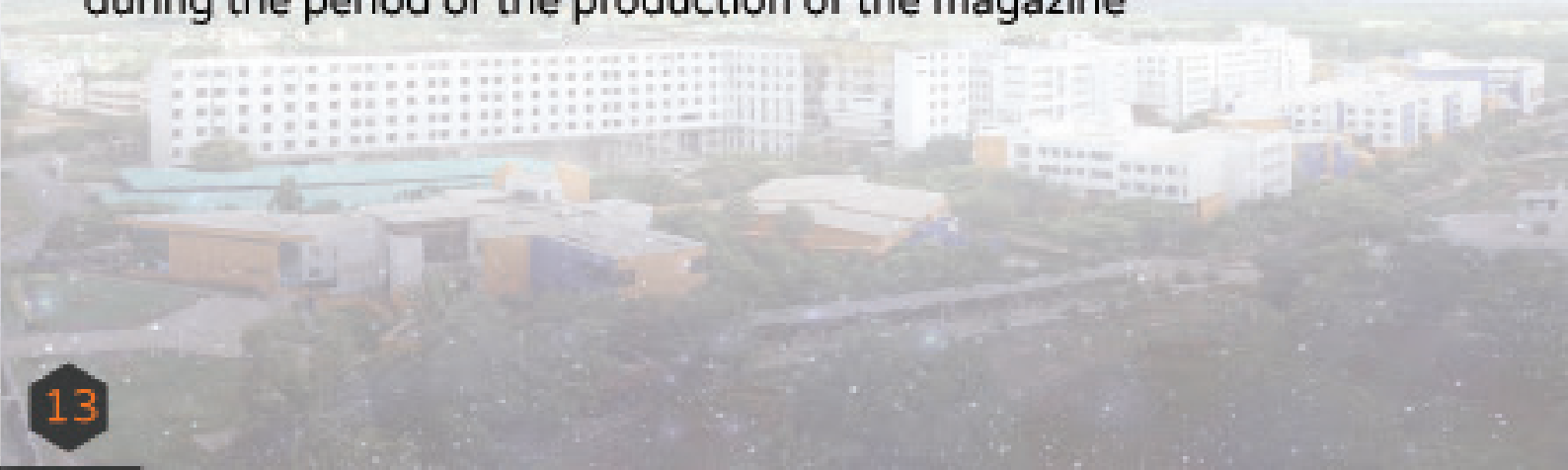
Acknowledgement

"Desire is the starting point of all achievements, not a hope, not a wish, but a keen pulsating desire which transcends everything" and it is the only beginning that opens an era of technological innovation and spirit. It gives us an immense pleasure to bring out the 8th issue of the departmental magazine **"MAGNUM OPUS – Spirit of Innovation"** before you

We are very much indebted for the constant help extended by our honorable Chairman, **Shri B Premanath Reddy, Smt. Shalini Reddy,** Executive Director, **Dr. Divakar Goli**, Campus Director, Acharya Institutes, **Dr. Sharanabasava C. Pilli**, Principal, Acharya Institute of Technology in bringing out this magazine

We would also like to warmly acknowledge **Dr. Prashanth C M**, Head of Department, CSE for his guidance and input in making of the magazine. Of the many people who have been enormously helpful in the preparation of magazine, Our Special thanks to forum coordinators **Prof. Varalakshmi B D , Prof. Manujakshi B C**, the faculty and students of CSE for their help and support in guiding us through to successful completion

We are obliged to faculty, for the valuable information provided by them in the respective fields. We are grateful for their co-operation during the period of the production of the magazine



Faculty Acheivements :

Prof Vani K S received the record of achievements for successful completion of course on "Touch IOT with SAP Leonardo" conducted by OpenSAP

Prof B Gayathri Kamath received the record of achievement for successful completion of course on SAP Cloud Platform Essentials (Update Q3/2017) conducted by OpenSAP

Prof B Gayathri Kamath received the record of achievement for successful completion of course on SAP Enterprise Deep Learning with TensorFlow conducted by OpenSAP

Prof Vani K S received the record of achievement for successful completion of course on SAP Enterprise Deep Learning with TensorFlow conducted by OpenSAP

Mr. Vaishak Sundaresh is certified by National Programme on Technology Enhanced Learning (NPTEL) on "Introduction to Internet of Things" in the month of October 2017 with "Elite" ranking.

Dr Nagaveni V has successfully completed the NPTEL course on Automata Theory.

Dr Nagaveni V chaired a session during the 2nd National Conference on "Recent Trends in Computer Science and Technology-(RTCSIT-2018)" at Sri Krishna Institute of Technology, Bangalore.

Dr Nagaveni V has enrolled 2 research scholars under VTU.

PUBLICATION DETAILS

SL NO.	Title of paper	Author	Name of journal/conference	Date of Publication
1	A Survey on Analysis of Service usage of application using multistage classifier for network traffic classification	Varalakshmi B D	International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056 Volume: 04 Issue: 05 | May -2017 www.irjet.net p-ISSN: 2395-0072	May -2017
2	A Study of Workflow Management Systems in Cloud Environment	Naidila Sadashiv	SKR-IEEE-ECDS-0734 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS 2017) sponsored by IEEE	August 2017
3	Protective and Efficacious Cloud Evaluating Schema	Dayanand Lal.N	IEEE Conference	August
4	An Insight into ICT in Indian Agriculture through Mobile Applications	B Gayathri Kamath	CSI Communications	Volume No 41, Issue -6 September 2017
5	Statistical Evaluation on Classifier Results Using Boosting	Dr. Prashanth C M	International Journal of Computer and Mathematical Sciences	Volume-6, Issue 9, ISSN 2347-8527 September 2017

PUBLICATION DETAILS

SL NO.	Title of paper	Author	Name of journal/conference	Date of Publication
6	IoT Based Health Monitoring using Fuzzy logic	Vani K S	IJCIR	November 017 ISSN 0973-873, Volume 13
7	An Improvised Ibkem Approach Using Multiple Key Distributed For Health Care Application	Dr. Nagaveni V	IJCIR	November 2017 ISSN 0973-1873 Volume 13
8	A Survey Of The Automated Irrigation System And The Proposal To Make The System Intelligent	Vani K S	IJCSE	January 2018 (ISSN: 2347-2693), Vol.6, Issue.1, January 2018, UGC Approved
9	Friedman and Wilcoxon evaluations comparing SVM , Bagging , Boosting,K-NN and Decision Tree Classifiers.	Dr. Prashanth C M	JACSM	February 2018 Vol. 9, No. 1, pp. 23 -47 10.1515/jacsm-2017-0002

Student Achievements

Toslim Arif , VIII SEM

- Attended workshop in Audio Visual Industry,CSI-BC
- Organized Awareness Program in IPR for faculty and student of Engineering, CIPRA.
- Attended Python Programming, Dept. of CSE
- Attended Android Application Development, CSI.
- Software Engineering Intern at AT&T (Jan 18 to present).
- Undergone Training Program in various platforms like Android Programing, Programing in C, Data Structure, Operating System, DBMS, Java and C++.
- Certifications in Modern React with Redux, AngularJS, JavaScript , Web Development, Android Development, Python Bootcamp, Photoshop.
- Worked with the Core Team in Acharya Habba 2017.
- Organized various events like Map the Snap, face Painting Mock-CID in Habba 17.
- Designer, Compiler, Editorial Member in Magnum Opus v6, v7, v8.
- Member of Box-Technical Business Incubator, Innovation Incubation Entrepreneur cell (IIEC).
- Donated blood to Blood Bank of Indian Red Cross Society, Karnataka State branch.
- Member of Computer Society of India.

Sanjay Kumar R, VIII SEM

- Winner of Group discussion 2017
- Second Runner-Up of Short Pitch Cricket 2015
- Runner-Up of T-Shirt Design 2017
- Winner of PCAssembly Race 2017
- Winner of Idea Presentation 2017
- Runner-Up of Treasure Hunt 2017
- Runner-Up of APL-3 2017
- Runner-Up of Treasure Hunt 2018
- Runner-Up of Mock CID 2017
- Awarded as Best Organizer for the year 2016
- Winner of Hour of Code 2017
- Title Winner of Mr. CSE 2017
- Finalists of Doodle It 2018
- Runner-Up of Fix The QWERTY 2018
- Runner-Up of Tech Dice 2018
- Second Runner-Up of Mad-Ads in AIT Habba 2015
- Finalist of General Quiz in NMIT "ANAADYANTA" 2016
- Runner-Up of Vices quiz NMIT "ANAADYANTA" 2016
- Winner of Mock IPL AIT Habba 2017
- Winner of Mock IPL AIT Habba 2018
- Winner of Essay writing MQI Degree College Confluence 2018

Chirag DK, VIII SEM

- Attended various workshop regarding IoT, Future of Mobile Application, PWA, ML and AI, Cyber Security, Entrepreneurship summit and International Meeting of Embedded Systems developers.
- Interned at ODU, USA
- Selected for internship at IIT-Bombay, Sprinklr, Happy-visitor, Gridlle Technologies, EYE-D, Clusterbean, Think201 and Digit88.
- Attended Android Development training program.
- Learning Tabla for 11 years.
- Passed Junior Level table examination conducted by Karnataka Secondary Education Board.
- Have given 6 stage programs with crowd of 10,000+
- Have given 50+ Solo performances at zonal, regional, State, National and International level.
- Won Several competitions under Dept. fest like Treasure Hunt, fastest Finger First, Blind Coding, Technical quiz, Hackathon, BUG-IT.
- Member of Go-Green Club.

Student Achievements

Shubham S Naik ,VI SEM:
- Internship in NPCIL,Kaiga
- Internship in RTTC,Mysuru
- Completed B-Cert in NCC with 'A' grade.
- Second prize in Blind Coding in COMPASS 17
- Workshop on BIG DATA & HADOOP organized by Finland Labs(IIT Roorkee)
- A member in a group to present project in ODU.
- Winners in Idea presentation in CSI event.

Rahul Pradeep, VI SEM:
- Workshop on BIG DATA & HADOOP organized by Finland Labs(IIT Roorkee)
- A member in a group to present project in ODU.
- Internship in RTTC,Mysuru.
- Winners in Idea presentation in CSI event.

Subhojit, VI SEM:
- Internship in TCS, Jamsedhpur
- Second prize in Blind Coding in COMPASS 17
- First prize in Coding Ninja in CRESCENDO 18

Shriom kalra, VI SEM:
- DJ ,Video editing for HABBA 18
- Played in Habba 17, Habba 18
- Workshop on Cyber security, Ethical hacking
- Workshop on BIG DATA & HADOOP organized by Finland Labs(IIT Roorkee)

Sowmyashree P, VI SEM:
- Workshop on BIG DATA & HADOOP organized by Finland Labs(IIT Roorkee)
- A member of Computer Society Of India(CSI)

Rajeev Ranjan, VI SEM:
- Workshop on BIG DATA & HADOOP organized by Finland Labs(IIT Roorkee)
- A member in a group to present project in ODU
- Workshop on Cyber security, Ethical hacking.

Hrushikesh Choudary, VI SEM
- Co-founder of Scryptonite.
- Web developer at showcase.
- Developed the Acharya Habba 18 App.
- Ranked 42nd out of 6400 in Coding Challenge of Sapient Triathlon (National Level)
And ranked overall 98th in the Sapient Triathlon
- Ranked among the top 10 teams in CISCO E-cell RVCE Ideathon(National Level)

Nikhil Talwar, VI SEM:
- Developed a project titled "Universal Disease Diagnostic Kit".
- Won the 2nd prize in the Hackathon conducted by DENSO and hosted by HackerEarth
- Won first place and Rs 50000 cash prize for his project proposal titled "Parking Lot Occupancy System" in the Honewell Indiastack.
- Co-founder of Scryptonite.
- Web developer at showcase.
- Developed the Acharya Habba 18 App.

Dhruva Kumar S, VI SEM
- Winner of Acharya Habba G-Quiz 2018

Manish J, VI SEM
- Winner of Acharya Habba G-Quiz 2018

Jimut B Aich,VI SEM:
- Co-founder of startup company named Texopanda (that develops website, develop application and graphic designing.
- Developed website for DTI,Habba 18
- Developed website for APL,Habba 18

Shikhar Chawra,VI SEM:
- Third prize in conference in DRDO presentation.
- A member in a group to present project in ODU

Student Achievements

Sai Tarun, VI SEM:
- Selected for internship in ODU
- Winners in Idea presentation in CSI event.

Ranjeet Singh, VI SEM:
- Internship in RTTC,Mysuru

Shiv Kailash Tiwari, VI SEM:
- Internship in RTTC,Mysuru

Nishant kumar, VI SEM:
- Completed B-Cert in NCC with 'A' grade

Rashmi Shastri, VI SEM:
- Completed B-Cert in NCC with 'A' grade

Aditya R, VI SEM:
- Third prize in conference in DRDO presentation.
- A member in a group to present project in ODU

Ananth Narayan Bhat, VIII SEM:
- Attended workshop on IOT by I3INDYA
- Attended workshop on Angular by Zenrays technologies.
- Attended workshop on Android and Adobe Photoshop in college.
- Technical presentation on Data mining.
- Intern at Cognizant as of 16.04.2018
- Certifications for the courses like HTML, CSS, JS, NODEJS, etc.
- Developed Acharya Habba app 2018
- Participated and conduced Lakshya forum activities like singing, coding competitions.

Vidya B S, VIII SEM
- Attended Android workshop
- Internship in Suprath technology.
- Certificate inn Introduction in Python.
- Course in JTMC level 1.
- Achieved 1st rank from 4th -7th SEM.

Aditya Das, VIII SEM
- Technical Seminar on Semantic image Segmentation using Convolutional neural Networks.
- Attended Android workshops.
- Selected for ODU internship 2017.
- Was awarded the most outstanding intern at ODU.
- Tech Team head ,Habba 18
- Co-founder of a Startup-Scryptonite.

Bhavana T S, VIII SEM
- Inplant Training Program at HAL.
- Internship at Knights Robo Corp.
- Placed and Intern at Infosys, Mysore

Sahil Debnath, VIII SEM
- Worked as In-plant trainee at HAL ARDC.
- Worked as Intern at Knights Robo Corp Ltd.
- Undergoing Internship in Infosys, Mysore.
- Part of iCare and did some social activities.
- Got placed in two MNC's-Infosys and Capgemini.

Aatish Kunal, VIII SEM
- Participated in North India Cyber Security Hackathon at IIT-Delhi.
- Certification of Intermediate Cloud Security with 80% score.
- NPTEL Online Certification on cloud Computing with 69% score.
- Certificate of Continuing Education Completion in Computer and Hacking Forensics.
- Certificate of Continuing Education Completion in Metasploit.
- Certificate of Continuing Education Completion in Penetration testing and Ethical Hacking.

Student Achievements

MANAS PRATAP THAKUR, IV SEM

- Participated in the 2018 Statewide Engineering IT Quiz Organized by BITES and TCS.
- Participated in Snackdown 2017 securing rank 3887 in the pre- elimination round .

JATIN PRAKASH JAIN, IV SEM

- Winner in Tech Dice held during Acharya Habba 2018.
- Participated In Qwerty, Cresendo 2018

DEEKSHITH MC, IV SEM (HOCKEY)

- Winners in the Inter collegiate Bengaluru North-Zone Hockey Tournament held at jalappa institute,Dodballapur in 2017.

ANJALI SINHA, IV SEM

- Winner in Tech Dice held during Acharya Habba 2018
- Participated in Qwerty, Cresendo 2018

ASHUTOSH ANAND, IV SEM (FOOTBALL)

- Runners up in the inter Engineering collegiate Football Tournament held at R.V College of Engineering from 22nd to 24th October 2016.
- Runners up in AFL-2 during Acharya Habba held on 13/03/2018 to 20/03/2018.

LAKSHYA

attaining CRESCENDO

At some point or the other in our life, we dream something. The definition of "something" however, varies for different individuals. For someone it's owning a huge Business Empire, for others, it might be being a Sports Superstar. Few might find their "something" in a Movie Celebrity or a Supermodel or helping the less fortunate one's or even simply doing something to make yourself feel better.

However, dreams don't come true unless you are motivated enough to work towards your goals and strive persistently until they are accomplished. As the road to success gets tougher, most people lose heart and soon give up on their dreams. That's the difficult part right here. Staying at the top of your game throughout. The initial enthusiasm and determination withers away and it becomes extremely challenging to re-motivate yourself again to pursue your dreams with renewed vigour. Maintaining the Crescendo throughout your journey to success. That's the real challenge.

Doesn't matter how hard working or talented or prodigal you are, the vicious creature, life, takes its toll. You need a source of motivate that reminds you what your peak performance is. What you are capable of. That's where the Computer Science Department forum, 'Lakshya' meaning 'ultimate goal' comes into action. We at Lakshya ensure that there's no deficiency of Vitamin 'Motivation' and Vitamin 'Dedication' in our students. The sole aim of Lakshya is to jog our student's memory to escalate and attain the summit.

The Wednesday afternoon of every week is reserved exclusively for forum activities. The faculty appoint the forum coordinator to control and coordinate the forum activity, who acts as a leader for the particular activity, thus shaping leadership and management skills. Different students are encouraged to join the forum as well as participate in the activities. Regular meetings are held to encourage all the students to come forth with different ideas and to plan different events. This helps the students to become more aware and acquire more exposure,, making them more knowledgeable and having more experience. The management supports the forum immensely by providing funds for various purposes related to the forum. Taking part in group activities also helps to bridge the gap between seniors and juniors and encourages them to work together as teams. Settling disputes amicably, persuading people and trying to compromise for the good of the team as a whole are also some of the lessons learnt while taking part in such activities We understand the need for extracurricular activities in the midst of academics. One of the objectives of the forum is to

ensure that students don't confine themselves within the four walls of the classroom and explore their potential beyond the curriculum prescribed by the university. And to facilitate this we have the annual department fest, Crescendo. Besides being fun and a great way to socialize with the fellow classmates, extracurricular activities can enhance students' time management and stress management skills, improving overall productivity. Extracurricular activities also increase a candidate's appeal when applying for jobs.

The department fest, Crescendo; serves as a platform to conduct both technical and non-technical events where the students can showcase their talents and skills to win attractive prizes. Let us highlight some of the technical events. The Technical Quiz was conducted which explores the technical knowledge, logic building skills and programming abilities of the students. Google It v2.0, an event which exhaustively evaluates one's ability to Google efficiently. Open Arena, a revamped form of Group Discussion where a student speaks in favour for a minute and then against, on a topic given on spot; this simulates the industry recruit environment to instil confidence and improve the communication and language skills of the students.

Lakshya Forum doesn't only focus on technical events; it also organises many fun-filled non-technical events. Mr and Ms Lakshya is a fascinating event in which a boy and a girl from a large group of participants are crowned Mr and Ms Lakshyaon the basis of several criteria such as talent, stage presence, confidence, dressing sense, glamour and communication skills.Photohunt++, an event where students were asked to collect snaps of certain clues given to them checking their awareness about the campus. Theme Quiz, where we analyse how accurately the student remembers the detail of their favourite TV series. The Dance Competition is an event in which competitors perform dances in any of several permitted dance styles—such as Hip-hop, Bollywood, Indian classical dance, Freestyle and Contemporary —before a common group of judges. Gaming is a treat for all gamers who are offered awesome games like Counter-Strike, NFS, FIFA, Mini Militia and Call of Duty to exhibit their play skills. Lakshya forum also has organised numerous sports events such as Mini Football Tournament, Lagori, Badminton, etc. Also, the forum has organised three industrial visits and five workshops.

Lakshya engages all the students by conducting useful workshops, seminars, technical talks and guest lectures about various technologies and innovations. It inculcates technical; skills, leadership skills, communication skills, courage, confidence and motivation in the students which are the pre-requisites for their professional life. It stresses the importance of overall personality development of an individual. Students must make use of such forums to test themselves and discover their talents and skills. The effectiveness of these college forums can only be realised when we step into the larger, ruthless and more competitive world.

Beat the flash :

The Event was to test participant's typing skills, mainly the speed and accuracy. The event was held in two rounds, the first being a simple elimination round where they just had to type the given content and the second round had a fun part where one hand of the participant was tied to the back of the chair.

Winner: Vikas
Runner Up: M.Arjun

Coding Ninja :

A technical event based on programming skills.
It had two rounds where the teams had to debug Each other's code in the given time limit. The Ones who made it to the second round had to write And execute a code for the given algorithm with them Monitors turned off.

Winner: Subhojit Dey
Runner Up: Hrushikesh Choudhary | Nivedh MD

Fix the QWERTY :

The keys and the board were separated and Given to the teams. They only had to fix it Back the right way. But before that, they went On a treasure hunt around the block to find The keys. It was simple and fun.

Winner: Kumar Prateek | Harsh Kukreja
Runner Up: Sharan Reddy Chilla | Sanjay R

Photohunt++ :

This Event was a combination of PhotoHunt& TechDice. While two team members went on a PhotoHunt around the campus , the third got a Chance to roll a dice in snakes and ladders only if they answered a question.

Winner: , Manoj R | Prasad P | Nikhil
Runner Up: Sai Sharan Reddy | Sanjay R, Sana

Google it :

It was an event to check the googling skills. It had two rounds. In the first round, participants were clues about various websites and they had to find the URL. The second was a Wikipedia based round in which they had to use only the wiki page hyperlinks to jump from the source to destination page.

Winner: Rajeev Ranjan
Runner Up: Sanjay R

Themed Quiz :

It was a themed based TV series trivia. The themes were Game of Thrones and Sherlock. It had three rounds – pen and paper, image round and a video round.

Theme 1 (GOT)
Winner: Nivedh M D | Hemkumar M
Runner Up: Subhojit Dey | Samhitha

Theme 2 (Sherlock)
Winner: Sana Aram | Rishav Kumar
Runner Up: Prashanth | Anjali

Technical Talk :

A technical talk on information technology was organized by Lakshya Forum of Department of Computer Science and Engineering, on 28/03/2018, at 11:00 a.m. for the 6th semester students of C.S.E.
The talk was held by Mr. Kishore P N, CEO Verican Technologies Pvt Limited. He addressed the students on "The rapid growth and change in information technology and how students can mould their careers accordingly".

Sports was organised on 5th May. It had mini cricket and mini football. The teams had fun playing matches for the complete day.

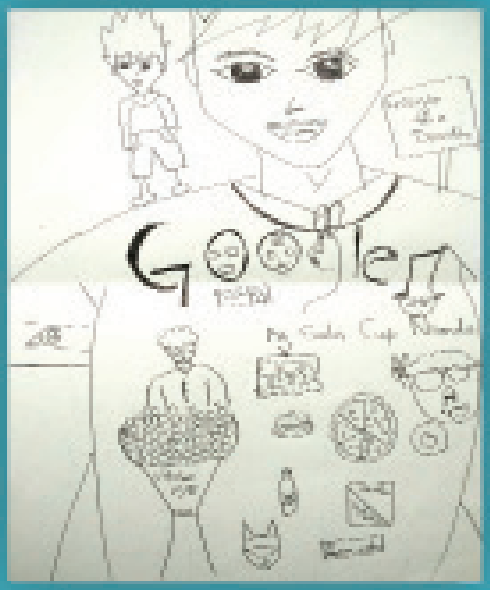
Doodle it...

My doodling art combines the topics such as bengaluru, VTU, cartoon, Google.

Sheethal pai

(4th sem CSE)

VTU stands for Visvesvaraya Technological University is the collegiate public state University in karnataka. It has prolonged process of examination and evaluation. I have depicted it by outlining or highlighting the phrase VTU with fire style. As we know, VTU is for karnataka state I tried to outline map of karnataka. On googling Karnataka we would come across the state's capital Bengaluru which is popularly known as swarga bengaluru which is loved by many people and it also stands as garden city hence there are flowers and leaves in my art.



Aditya Reddy V

(4th sem CSE)

The topics I chose were vtu Google cartoons/anime and food.

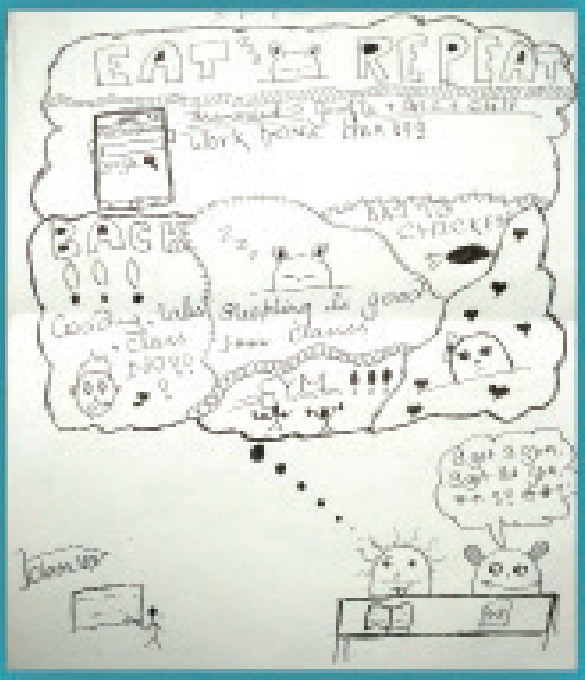
The doodle describes what goes on inside a vtu student's mind, the small guy on his shoulder is his friend as all the students take suggestions from their friends and he gives him suggestions.

Then I drew the Google symbol with some cartoons on the two 'o's' and the 'g' ,one 'o' is krillen from dragon ball z.

Coming to food there is pani puri seller burger pizza and sandwich with coke.

As it says vtu and being a banglorean there is the most trending phrase "ee sala cup namde", To depict that we always day dream I drew a TV with some trees in it because we'll be staring outside our window.

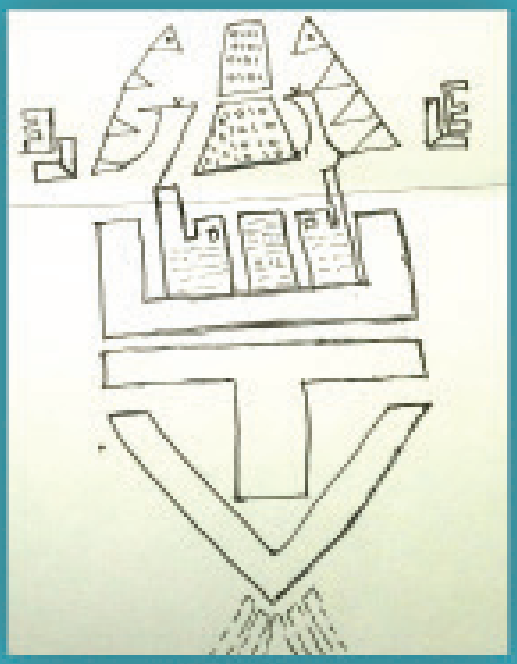
Taking a seat at last is an exception way to broaden mental skills in multitasking.I can't really say what is written on board not that I am sort sighed or anything but cause last bench are made of thoughts . Speaking of thoughts I really need to clear my backs .But I have 3 months before exams I should really enjoy some more ,So today what should I eat .Maybe be I should join a gym or something six pack in six months.



Murari aman

(4th sem CSE)

It's decided then next month onwards (that month never came).Oh,wait why is he writing an assignment I really need to complete that one as well but tomorrow, last day is the best day to do assignment after all.I have been in my thoughts for quite some time now it must have been like 30 minutes or so(looking at mobile 10 min only) Okay now concentrate on class good gpa=good life(starring intensely). Professor -guy on the last explain what is ttt, wait what me(Complete silence).



Sanjay

(8th sem CSE)

Two O's of GOOGLE contain 0 & 1 denoting the Binary Language of the Technical World, while two G's facing each other have lunch together... MAYBE Dinner I reckon!! The Anagram GOOGLE can be read from either ends {R.H.S or L.H.S} making its presence felt everywhere.

VTU is written vertically upside representing the standing tall "Sir M.Visvesvaraya" as a well wisher to all the students, teachers, colleges who are a part of this university.

While the architect enclosed within the letter "U" identifies "Bangalore Palace" built by the Maharaja Wadiyar known for its Tudor Style Architecture with Towers,Battlements,Turrets. The same symbol is also used as a gratitude to Bengaluru by Bangalore F.C Team.

The overall Doodle is outlined to picture the Iconic Trophy of IPL with the hash_tag trend over the net going with #escn [EE SALA CUP NAMDE].

DEPARTMENT Activities

ONE DAY WORKSHOP ON "PROGRESSIVE WEB APP"

The Department of Computer Science & Engineering & Information Science and Engineering under the banner of Computer Society of India-AIT-Student Branch conducted workshop on PROGRESSIVE WEB APP on 3rd March, 2018. The workshop was organized for the 30 CSI Student members who had registered for the workshop.The workshop was started with the welcome speech by Prof B Gayathri Kamath, CSI Coordinator, Dept of CSE wherein she addressed the students that objective of the workshop was spreading information about progressive web applications, their uses with the help of a guided hands on session. The session handled by Aakash Pandey.

The session was divided in two parts comprising of 3 hours each. The first half covered the introduction, approach and idea on the subject.In the later an implementation was carried out with a real world example.

At the end the majority of the participants were able to follow along and build their versions of the example applications, and everyone had a great learning experience.

FIVE DAY FDP ON "AUTOMATA THEORY IN COMPUTING & MOBILE APPLICATION DEVELOPMENT"

The Department of Computer Science & Engineering conducted Faculty Development Program on "AUTOMATA THEORY IN COMPUTING and MOBILE APPLICATION DEVELOPMENT" from 31/7/2017 to 4/8/2017. Participants from VTU affiliated colleges in and around Bangalore and from Mysore attended the FDP.

The program was started with the Inaugural function. Dr Prashanth C M, Head, Department of Computer Science &Engineering welcomed the participants, after which the dignitaries on the dais inaugurated the FDP by lightening the lamp. Dr V Nagaveni, Co-Convenor of the FDP highlighted the importance of the FDP. The Chief Guest was one of the resource person Prof A M Padma Reddy, Professor & Dean student affairs, SVIT.

The FDP was concluded by valedictory function, in which the participants shared experience about the FDP. Success of workshop was evident from the positive feedback given by the participants during Valedictory function.

Two Day workshop on "OBE-Implementation"

Dr. Rajanikanth K, delivering the lecture on Bloom's Taxonomy

The Departments of Computer Science and Engineering and Information Science and Engineering, Acharya Institute of Technology had organized a Two Day workshop on "OBE Implementation" during 7th and 8th of March 2018. The Objective of the workshop was to provide an insight for the teaching fraternity of the Engineering Education to enable the embracement of Outcome based education (OBE) to achieve international quality standards for technical education in India.

The Faculty members from various Engineering Colleges and the in-house faculty attended the workshop. The chief Guest for the inaugural function was Dr. Rajanikanth K, Former Principal, MSRIT, Bangalore. He provided an insight towards Outcome Based Education. He also threw light on Bloom's taxonomy and writing CO's to PO's.

The following session was handled by Dr. N Balasubramanya, IQAC Head, AIT. He spoke about Lesson Planning, Mapping of CO's, PO's and functioning of IQAC cell in Acharya. Dr. Madhu G M from MSRIT, Bangalore, Dr.Guruprasad H S from BMSCE, Dr. Mohan K G, from Presidency University enlightened the participants with Rubrics for evaluation, CO-PO attainment and hands on session to design CO's.

Presidential address by
Dr. S.C Pilli, Principal, AIT

Dr. Guruprasad H S
receiving the memento from
Dr. C M Prashanth

ACHARYA INSTITUTE OF TECHNOLOGY TEAMS BAG FIRST AND THIRD PRIZE AT FUNNAVATION EVENT

Winning teams with the organising committee members

Computer Society of India, Bangalore Chapter organised the 11th National Conference of "IT in Defence" which was supported by DRDO and Dept. Of IT, BT, S & T, Government of Karnataka on the 11 and 12 January 2018 at Vivanta Taj, Bangalore. As part of the conference, Centre of Artificial Intelligence and Robotics (CAIR) had organised the Funnavation event with the following Problem Statements:

1. Track and Survey an area using a DRONE. Generate an alarm if humans are detected.
2. Design a tethered DRONE which draws power from ground Robot via cable for long endurance on a fixed location.
3. Create a plan to develop an indoor DRONE with obstacle avoidance.
4. Design a Drone which can take off from a water body and safely land on a water body.

Questions being raised by The Expert Review Panel

Several teams from all over India submitted their abstracts based on which some of the teams were shortlisted and called for presentation. Finally four teams which qualified for the finals were asked to make their presentation at the National Conference on 12 January 2018 before a panel of expert judges drawn from CAIR and other defence and IT industries.

The first team was given a cash prize of Rs.25,000/- and the third team was given a cash prize of Rs.10,000/- along with certification from CSI and CAIR.

Industrial Visit to C-DAC

Report on Industrial visit to visit to C-DAC

(Center for Development of Advanced Computing)

Location: C-DAC, Bangaluru

Participated Students: 3rd Year, BE, CSE

The pre final year students of Computer Science and Engineering (AIT) had visited C-DAC, Byappanahalli, Bengaluru on 16/03/2018. The point of contact at C-DAC was Mr. Hari Babu P, Joint Director – IoT. Fifty six students and two faculty members Prof. Varalakshmi B D, Associate Professor, Dept. CS & E and Prof. Ancy Thomas, Assistant Professor, Dept. CS & E, Acharya Institute of Technology visited C-DAC.

Industrial Visit to C-DAC

About the visit

The students were taken to C-DAC to get familiarized with current technologies used in the Industry. The faculty members and students reached the C-DAC campus gate at 10:50 am and completed the formalities and entered the campus. The faculty and students were directed to seminar hall where two presentations were arranged by the C-DAC officials.

First presentation was delivered by Mr. Sangit Saha, Technical officer about "Internet of Things (IoT)". He gave introduction about IoT, networked devices, convergence of multiple technologies.

Second presentation was delivered by Mr. Aman Kale, Project Engineer about the "Applications of IoT" and demonstrated the IoT Lab kits comprising of Ubimote, BLE motes, Wi-Fi motes. After the presentation, Audio Visual of Param supercomputer series were played.

An effective interactive session was held between students and C-DAC faculty members. After the informative presentations and interaction session, students were taken to C-DAC's terascale supercomputer laboratory where PARAM series of supercomputers are housed. Students were given a brief description about the PARAM Padma supercomputer. On witnessing the architecture students got familiar to the server projects established in C-DAC.

Industrial Visit to HARIBON AERONAUTICS

Report on Industrial visit to visit to HARIBON AERONAUTICS
Location: Bangaluru
Participated Students: CSI Members

Department of CSE under the **CSI student branch** organized an Industrial Visit to **Haribon Aeronautics** on 8-12-2017 which was coordinated by Dr.Nagaveni V, Prof B Gayathri Kamath and Prof VarshiniVidyadhar.

Mr. Kiran Kulkarni Director - Haribon Aeronautics, who was working as Research Assistant at IISC,has done many contributions in CAD modelling for making production grade tools, mold setups for developing and producing FRP based UAV's. He then opened his own company by name Haribon Aeronautics which has now created many UAV's and Copter's that are being used in several domains including defense based applications, aerial monitoring based projects and research based projects.

In the technical Talk, Mr Kiran introduced himself and shared the details about the completed projects and on-going projects. Presently, few students are doing internships in his company which has a tie-up with IIHR and working on detection of diseases in major 5 crops which includes three fruits and two grains like papaya and wheat.

He motivated the CSE students to work on image processing instead of developing a drone. He guided the students to read at least 2 recent papers per day to get the complete knowledge of the existing scenario. Mr. Kiran has given the opportunity to work as intern for these students. He gave suggestions on the government agencies for raising funds to do the project. He also gave idea on the CSI proposal submission on development of drone for Human detection.

OLD DOMINION UNIVERSITY

Report on Industrial visit to visit to OLD DOMINION UNIVERSITY

Location: U.S.A

Participated Students: BE, CSE

"The officials want a report on the internship", the message on the phone blinked. Five pages would do. Jet-lagged, most of the people just ignored the message. "It's urgent, someone write it!", the phone's screen flashed again. People volunteered and a lovely 2 paged report was generated. But the summer internship couldn't have been justified with just two pages. It could take years to just scratch the surface of the multitude of feelings we Acharyan's had the chance to experience at the Old Dominion University.

OLD DOMINION UNIVERSITY

19th August 2017. Everyone reaches ODU, Norfolk, Virginia. A year of work finally pays off. But, the work had barely started. Professor Ajay Gupta is a strict Task master. With 15+ hours in the lab every day and very little wiggle space, there was absolutely no room for error. First day we were given the task to code a famous childhood pastime FLAMES in python. Most of us had no clue about Python, so learning from the basics and going on to code a decent little algorithm concreted our thoughts. This internship is going to test our limits.

A new day a new task. Create a robot that blinks on the click of a button using HTML and CSS. Back to the books again, learn-implement-repeat.

HTML, CSS, JavaScript, PHP, we learnt it all in that week. Assignment after assignment, language after language, it was grueling, it was tough, it was life.

Arrival of the BNMIT students-Humans have evolved because of their natural tendency to be curious.

We are curious to know everything. That's what gets us into trouble, that's what makes us different and that is what makes us better. So when new students arrived we had a natural tendency to be curious and know where they stand at their coding skills. Many more CS students in their posse meant a better average, but Acharyan's had survived 5 extra days of the internship. We knew how to deal when the going got tough.

We caught up!

Don't mistake competitiveness for enmity, no my friend, we all became good friends, but a new batch of people threatening the leaderboards, surely meant the rate at which we started learning just got a jolt of boost.

We were distributed into teams of 4 each, 2 from CS background and 2 non-CS, and given the main project, AGGRESSION DETECTION IN ALZHEIMER'S PATIENTS. We were supposed to detect patient on patient and patient on caregiver aggressive behavior before it happened.

We were encouraged to think outside the box and come up with innovative ideas and at the end of the internship a working prototype.

The memories from the beach were still fresh and yet again we were taken on another outing, An amusement park called Busch Gardens. It made all of us speechless, absolutely speechless. The park was beautiful, the roller coasters were madness and the enjoyment was fulfilling.

A new day, but the same old assignment. We were introduced to Android Studio as our IDE for our project.

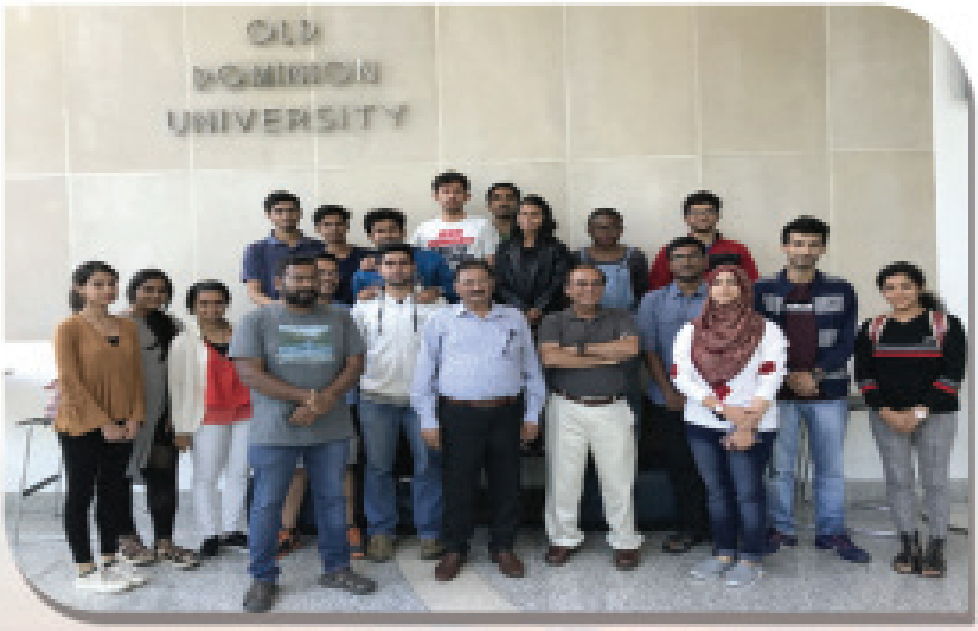
Nearly everyone after a brief presentation reached the conclusion of using Android Wear watches for monitoring purposes. And android studio was the way to go.

OLD DOMINION UNIVERSITY

Our skills as a team were tested. Most of us divided the team into two halves, front-end development and a back-end development. Learning new skills and implementing them instantly had now come easy to most of the teams. But ,it was not all hunky dory. There were skirmishes, and we now knew how a corporate life as a programmer would be, NOT EASY.

Programmers learn throughout their life. It can be interesting or mundane. If coding peaks your interest, it was option 1, else it was the latter.

It was funny seeing an entirely different way of learning in ODU. Nobody taught us, nobody monitored us 24/7. We were given a task and expected to finish it.



PRESENTATION DAY

All the teams came up with their prototypes and slides and did their absolute best. People were grilled, questions were asked whose answers was only silence, it was an absolute slaughter. But we learnt that it was not the end of the world. There was always room for improvement.

FINAL DAY

Half packed bags and absolutely no interest to leave. the 19 of us were sad. We were happy to return to India, but we knew deep inside that we would miss each other. Funny how all of us grew close.

Had a small see of party with dance music and Indian food. Prizes were given and mementos distributed.

It was finally over.

Computer Society of India
AIT Student Branch

Computer Society of India was formed in 1965 and has been instrumental in guiding the Indian IT industry down the right path since its formative years. Today, the CSI has 72 chapters all over India, 511 student branches out of which **Acharya Instiute of Technology – CSI Student branch** is one among them, and more than 100000 members including India's most famous IT industry leaders, brilliant scientists and dedicated academicians.

Acharya Instiute of Technology –CSI Student branch was started in the year 2008. Till date the CSI –student Branch has conducted many events like State level Builders' & Hackers Competition, National level workshop on Ethical Hacking, 23rd CSI Convention , Seminars, Technical talks and workshops under the banner of CSI Student Branch for the CSI Student members.

We are also proud to inform that Acharya Institute Of Technology-CSI Student Branch has received the "Best CSI Student Branch Award" in the year 2012. Till date CSI Student Branch consists of more than100 CSI student members.

Workshops conducted during the academic year 2016-17 :
"1 day Workshop on Progressive Web App" was organized by Department of Computer Science & Engineering and Information Science and Engineering, Acharya Institute of Technology, Bangalore under the banner of Computer Society of India- Student Chapter on 3/3/2018.

CSI Technical Symposium

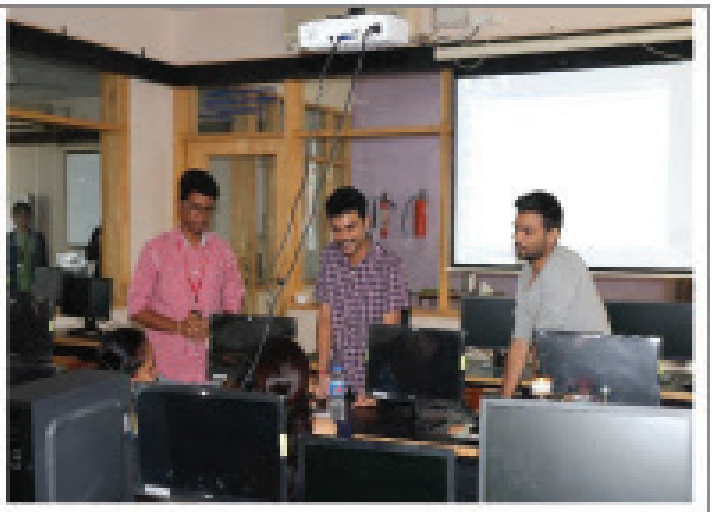
The Department of Computer Science & Engineering & Information Science and Engineering under the banner of Computer Society of India-AIT-Student Branch conducted 1-day CSI TECHNICAL SYMPOSIUM on 25/4/2018.The objective of the symposium is to set a platform for broadcasting the talent.

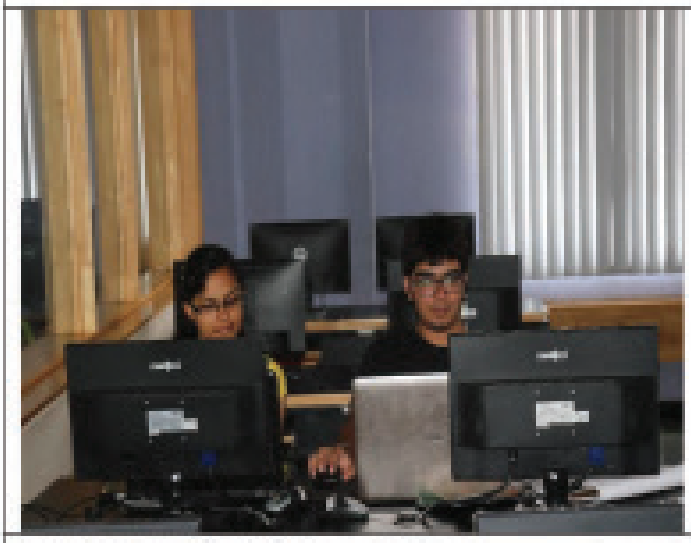
Events Conducted during the CSI Technical Symposium

Idea/ Project Exhibition :

The objective of the idea presentation was to test the students skill in expressing one's idea, creativity, feasibility of idea and also communication. Nearly 10 teams presented their idea.

First place: Sai Tarun | Shubham | Rahul Pradeep
Second Place: Amith S P | Sharvan K K | Raksha
Third Place: Himel Das | Manas Pratap





Website Development:

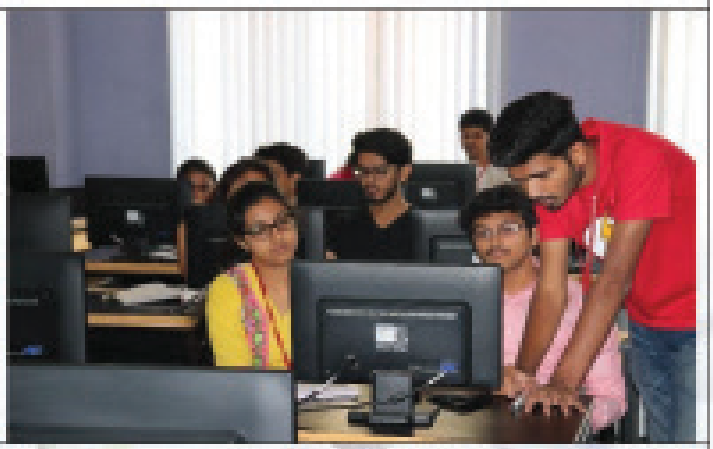
The theme was to develop the website for CSI-AIT student Branch.

Winners: Navin | Tikaram
Runners: Nikhil Talwar | Ameya Mathew

Programmer's Date:

The objective of this event is to test the programming skills. The questions where very challenging and there was tough competitions between the teams.

Winners: Nischal P | H S Sushmitha
Runners: Subhojit Dey | Aishwarya H R



Technical Quiz

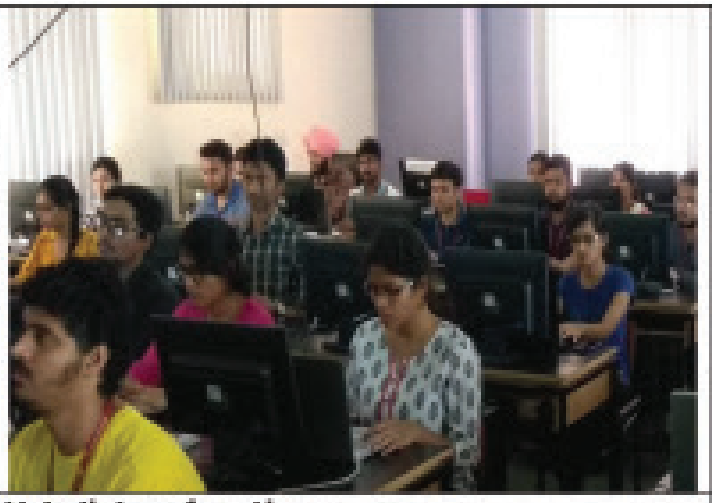
Technical quiz was conducted in 3 rounds. First round was MCQ's, Second round Q&A and third was the buzzer round.More than 40 teams participated in the event

First Place: Hrushikesh Choudary | Priyank Bhagat
Seond Place: Rishav Kumar | Imon Barua
Third Place: P Vishnu Preetham | Shubham Singh

Googler :

This event was the most interesting event and more than 60 students participated. This event was the web- based, Student coordinators had hosted the questions on the website and all the students found this event more interesting which checks the googling capacity of the students

Winners: Rithika Gupta
Runners: Imon Barua



Valedictory function :

Mr Iqbal Ahmed(Dy.Director-Training & CollaborationsAcharya Institutesand the former Chairman of the CSI- Bangalore Chapter) was the chief guest. Dr Prashanth C M, HOD, CSE and Dr Mahesh G, HOD, ISE were also present. He addressed the gathering about the benefits of CSI. Students shared their views about the symposium and insisted that it should be conducted every year.

The winners of various events were felicitated

Group photo with the chief guest and the coordinators

COMPUTER SCIENCE

Computer Science is a Science branch that deals with the studies of computers, it's machinery called hardware and it's vast array of programming opportunities. As we all know, computer is a machine that can be programmed to do certain tasks myriads of times without a need to take a sigh of relaxation! Invention of computers has certainly changed the world. In an inclusive sense, yes, it has made man lazy, however the job opportunities in making a computer work as per our needs have gone sky-rocketed. Yes we work for making computers "work" for us now and certainly get paid well as always the masters always get paid well!

The concept of computer engineering or rather the concept of programming of computers to work for human beings has undergone a Himalayan change over the last decade. Yes, we all need to be adapted to run behind the bus of moving world!! Otherwise, we may fall short of our aim. The world of databases, web programming, interfaces etc have undergone this change eventually or rather naturally. This natural change was a reflection of the requirements of human beings. We do not just need a database that could retrieve the pieces of memory stored in one place but to manage the memory, share it across the cloud, move it across the companies depending upon the requirements of the cloud. We just do not need a website that has got the basic moving names, colors etc asthe close to reality approach of website creation has taken over the human imagination. We do not just need the memory interfaces to retrieve the data from the storage places and send it across the destination but the self managing memory interfaces that could manage the data access without any human intervention or rather the requirement of another human being.

Depending upon, all the requirments

the world computers changes. Yes, the basic skill of programming is a matter of bygone age. The ageless approach of machine requirement is on the rise. Standing individual is a false idea just in case of a human being as is the case of computer world. This has brought up the world of Cloud Computing. Yes it is simply a platform to share the data and it's programming requirements; not to complicate to sell this idea just like biggies do. Complicating the simplicity would add the value to anything; all the requirements the world computers changes. Yes, the basic skill of programming is a matter of bygone age. The ageless approach of machine requirement is on the rise. Standing individual is a false idea just in case of a human being as is the case of computer world. This has brought up the world of Cloud Computing. Yes it is simply a platform to share the data and it's programming require- ments; not to complicate to sell this idea just like biggies do. Complica- ting the simplicity would add the value to anything;
perhaps a best selling human psychological element that is hidden in programming world. On a cloud platform, the data, programmes, services etc are shared in certain groups and it would ease the world to look for many to choose the best one! Yes, best is in the cloud

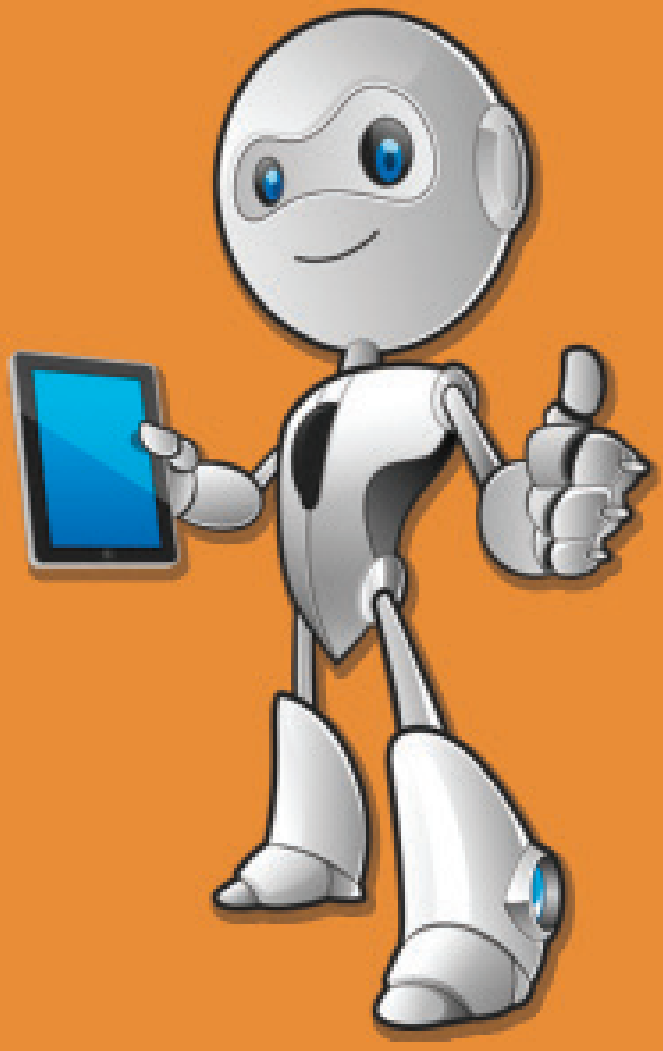
would tell a human being that we do not need your support for our survival. Not to scare, if taken positively, Man can be more lazy!. Industrial Revolution was the initial step to reduce the effort of human beings and depend on machines. Man was more of a local animal and this has obviously prompted him or sidelined him to take care of his hamlet well clean and organized. When the first locomotive train started running in England, staying in a particular area for a long time depending on certain crops became a past life event. Yes, exodus was always common in human beings' life however, it provoked man to depend on machines to go for a life long ride.

AI if well used, can be used for protecting human lives rather than paving a road for the competition between humans and machines. This competition would be like the competition that existed between humans and animals. And eventually, man took the road ahead by the support of the weapons.

and ENGINEERING

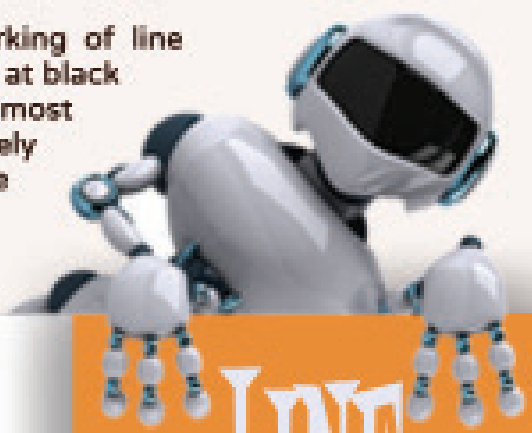
....

...For computer engineering to go forward, the existing ways must have more human emotion-based approaches rather than just business tactics-oriented ways that companies often tend to jump in when profit margins are the meat and bread to be attracted!! Yes, we need humans to manage and love machines not otherwise. If AI could help humans achieve it, there would be a cakewalk waiting for all computer scientists who are good to make machines work for human beings in return. Yes, we need humans first and then machines. Let Computer Science prevail this way.



- TINCY VARGHEESE 4th sem CSE

Concept of working of line follower is related to light. We use here the behavior of light at black and white surface. When light fall on a white surface it is almost full reflected and in case of black surface light is completely absorbed. This behavior of light is used in building a line follower robot. In this Arduino based line follower robot . We have used IR Transmitters and IR receivers also called photo diodes. They are used for sending and receiving light.



LINE FOLLOWER USING ARDUINO

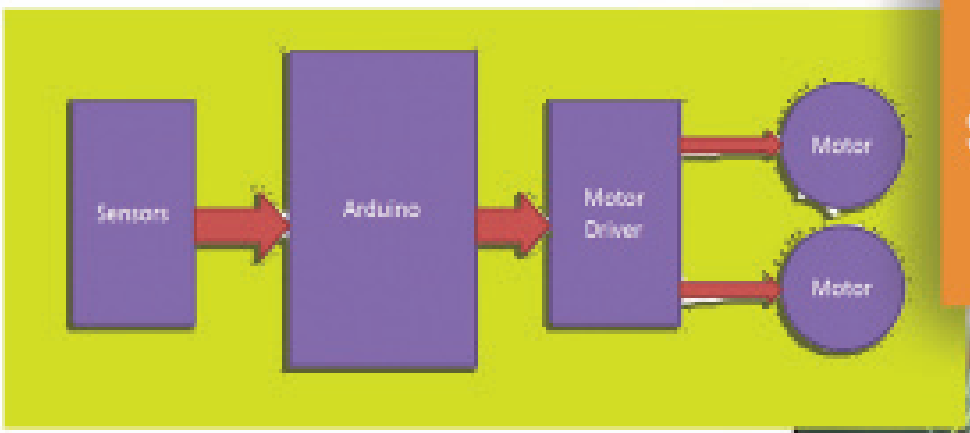
T.S.TARUN
SHUBHAM.S.NAIK
RAHULPRADEEP

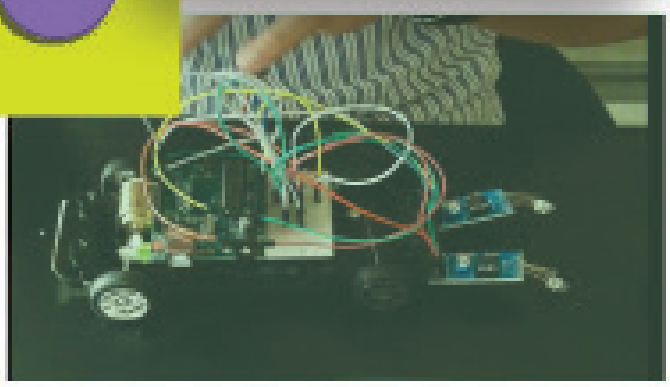
IR transmits infrared lights.

When infrared rays falls on white surface, it's reflected back and catch by photodiodes which generates some voltage changes. When IR light falls on a black surface, light is absorb by the black surface and no rays are reflected back, thus photo diode does not receive any light or rays. Here in this Arduino line follower robot when sensor senses white surface then Arduino gets 1 as input and when senses black line Arduino gets 0 as input.

ALGORITHM:

1. L= leftmost sensor which reads 0;
   R= rightmost sensor which reads 0.
   If no sensor on Left (or Right) is 0 then L (or R) equals 0;
2. If all sensors read 1 go to step 3,
   else,
   If L>R Move Left
   If L<R Move Right
   If L=R Move Forward Go to step 4
3. Move Clockwise if line was last seen on Right Move Counter Clockwise if line was last seen on Left Repeat step 3 till line is found.
4. Go to step 1.





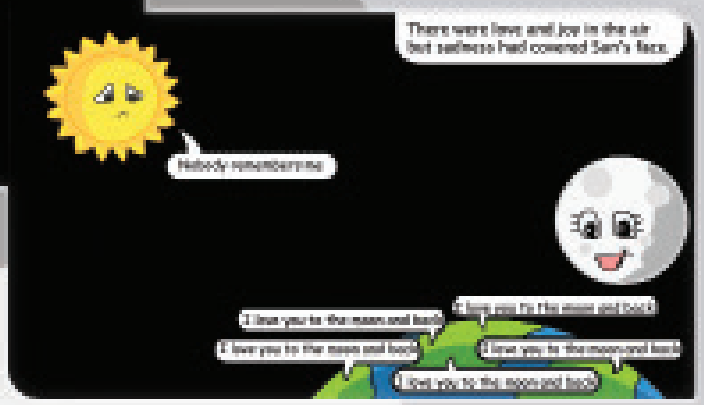
ENHANCMENTS :

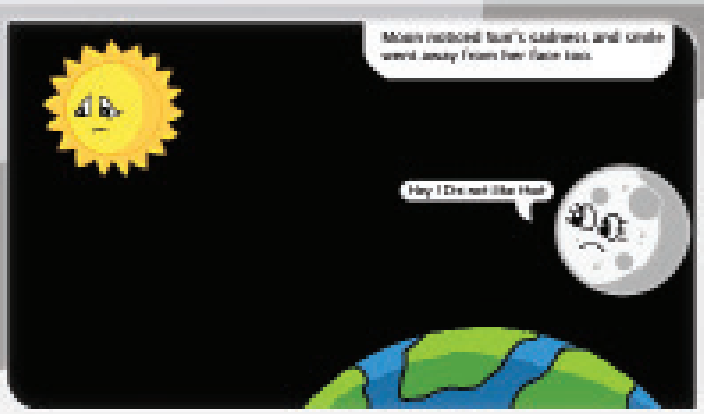
By voice recognition controllin of line follower bot.

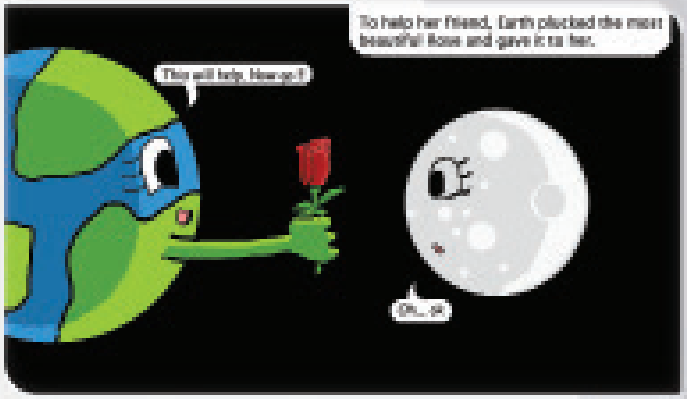
Morphological operations.

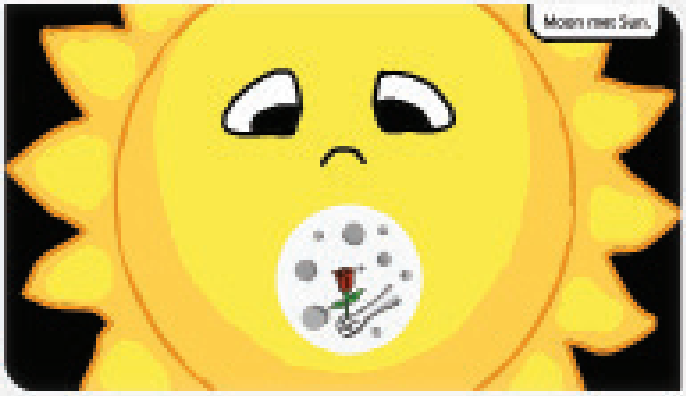
Contrast enhancement.

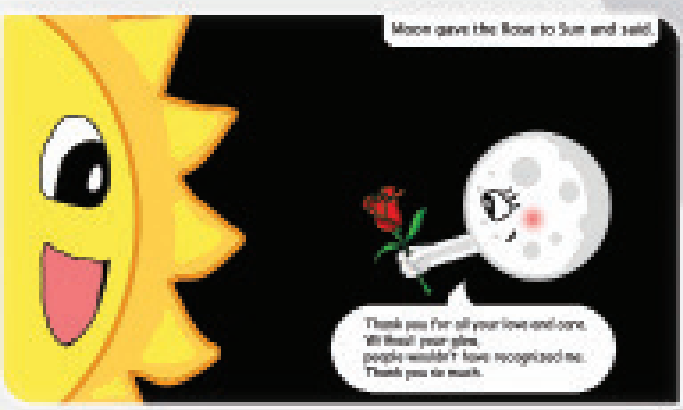
Once upon a time,

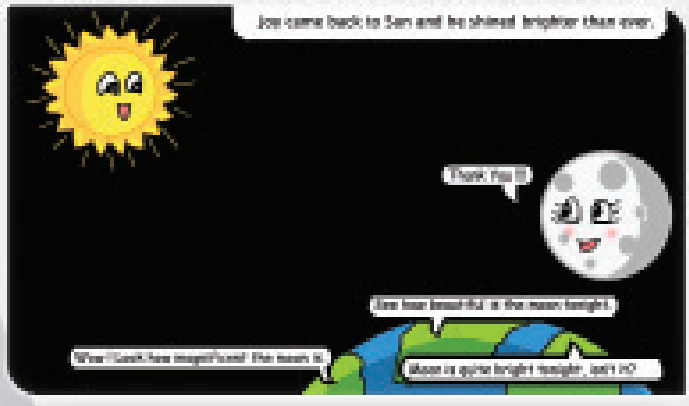












The End

Written and Created by

Rohan Singh Mahur

Different Types of Processors

-Vikas Yadav 6th sem CSE

Nowadays, the market is flooded with Smart phones. There's nearly a new improved smart phone every week. Apple, Samsung, OnePlus, Huawei, Xiaomi are trying their best to oust each other from the pole position. Even though the feature they offer are different from each other (that's what they claim), all of them nearly use the same processor. Now for those of you wondering what a processor is, seriously? Like seriously? No I won't tell you what it is. Google It!

Hope you didn't go, but in case you did, let's assume you're back. Back to the processors. There are mainly two processors, who actually, can be considered in a race against each other. Qualcomm's Snapdragon processor and MediaTek Processor.

MediaTek is a Taiwanese company. Their processors use more cores (like Octa core, Hexa core, Deca core). However on the other hand, Qualcomm Snapdragon- chipset are not only just CPU's but they incorporate many other processors in their chipsets. This is the main difference between Snapdragon and other chipsets.

But, but, what is the ground level difference? Which one's better? How do these two giants hold up against each other? Let's compare some of the major prospects 1v1.

1. PERFORMANCE

- Due to the availability of extra cores, MediaTek processors can handle intensive and heavy tasks. They are great at multi-tasking. But we can see all this practically if we have sufficient RAM. Yes, more cores demand more RAM to give best performance.

- Multi-tasking, gaming, handling heavy and intensive tasks; they are very good. Snapdragon processors somehow perform better when it comes to RAM management. Hence leaving out a decent amount of RAM for other processes.

2. BATTERY LIFE

- The MediaTek chipsets are known to be more power draining and results in less battery life. They've now started optimizing their processors to be more power efficient but still lags behind their competition in terms of battery life. However the newer Helio series has shown great results in terms of battery efficiency.

- Snapdragon chipsets are best in terms of power efficiency compared to all other chipsets. Snapdragon 625, 660, 845 are some of the most power efficient processors available.

3. HEATING

- "The Heating problem". All the processors deliver heat while performing tasks. However, MediaTek processors deliver more heat than others. Coz, of course, more cores=more heat.

- Snapdragon Processors generally deliver less heat compared to MediaTek, Intel Atom, Samsung Exynos etc (Except the Snapdragon 810 Chipset which faced many heating issues.)

4. GRAPHICS

- Coming to graphics,MediaTek employs Mali graphics which is a third party graphics vendor(So graphics architecture is different from CPU and its performance may not match with CPU). It is crucial to match the performances of CPU and GPU in for efficient and effective performance of the chipset.

- Snapdragon however, manufactures their own graphics called Adreno Graphics and incorporate them into their chips. So here the performance of CPU and GPU are matched.

Is Snapdragon better? Does MediaTek take the crown home? There is no simple Yes/No answer for this. It's really depend upon your usage, price willing to spend and in general overall phone software (Android version). So keep your phone updated &Cheers.

TRUE MEANING OF-LIFE

- JATIN PRAKASH JAIN
IV SEM CSE

To have loved for
A moment, an hour, or a day.
Is a personal experience
To be treasured through life.
A fleeting glance , a tender touch,
Is memorized in the mind
For it is important to love,
And be loved in return.
The gift of love is
The true meaning of life.

Art By
Shivangi Sharma
4th Sem CSE

VIRUSES-GOOD OR BAD?

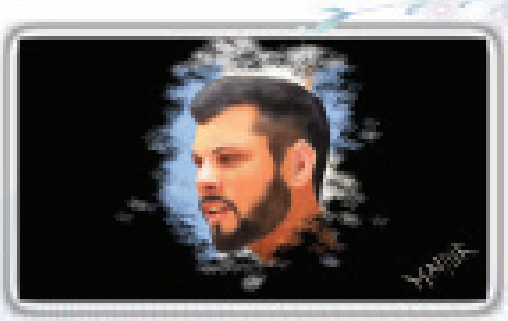
-ANJALI SINHA 4th sem CSE

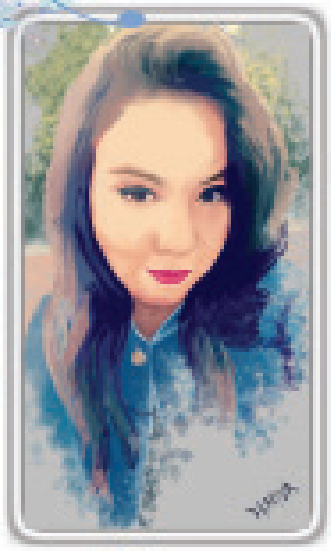
Are there any good viruses? The prospect of witnessing the gradual decay of one's computer system and one nagging symptom following the other. This is the scariest thing about virus. But computer viruses may help us realize the net potential of our computer system. Viruses are said to infect your program, alter the way your computer works or stop it from operating. New computer viruses are discovered every year. Some computer viruses are programmed to harm your computer by deleting files or reformatting the hard drive.

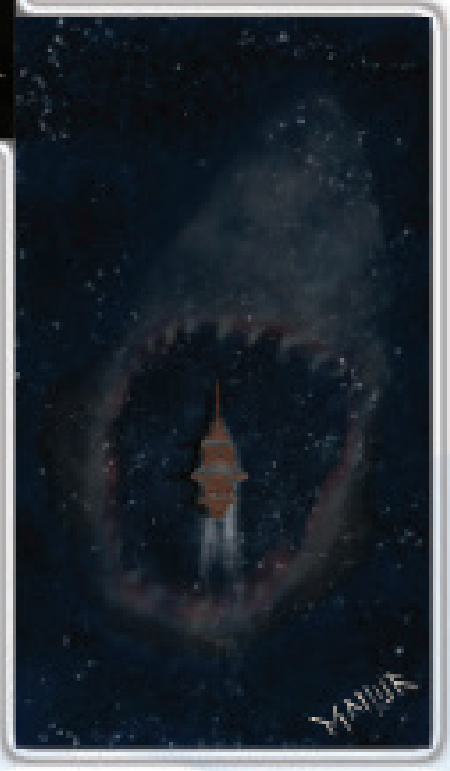
But overcoming our fear of computer viruses may be the most important step we can take toward the future of information processing. Someday the net will be the summation of the world's total computing resources. There can be a wide range use of free ranging, self replicating programs and autonomous Net agents. This coming net of distributed resources will be tremendously hard to harness.

Viruses are still now the scariest thing for all the people around the globe. But yes anti-viruses are acting like a medicine for our computers. What is necessary in this 21st century is that we face those risks otherwise it seems that all will lurk behind the urge to deny that viruses can be anything but lethally dangerous.

Digital Portraits & Illustrations







By

ROHAN SINGH MAHUR

(8th sem CSE)

ADVANCED SECURITY SOLUTIONS FOR SMART HOME

-Rajeev Ranjan Diwakar | Vishek Kumar 6th sem CSE

We're entering a new era of computing technology that many are calling the Internet of Things (IoT). Machine to machine, machine to infrastructure, machine to the environment, the Internet of Everything, the Internet of Intelligent Things, intelligent systems - call it what you want, but it's happening, and its potential is huge.

The IoT is comprised of smart machines interacting and communicating with other machines, objects, environments, and infrastructures. As a result, huge volumes of data are being generated, and that data is being processed into useful actions that can "command and control" things to make our lives much easier and safer—and to reduce our impact on the environment.

When IoT is augmented with sensors and actuators, the technology becomes an instance of the more general class of cyber-physical systems, which also encompasses technologies such as smart grids, smart homes, intelligent transportation and smart cities.

There are many applications related to the IoT. It has a wide scope of usage and can be used almost in any field because now we are mixing each and everything and want an easy life or which everything should be at our fingertip as well as can be controlled remotely. For that, we need to establish everything with the IOT.

With such advanced technology and massive data generation, there comes a great responsibility for its security.

Now the problem begins when we talk about the security of these IOT.
Securing the Internet of Things is a tricky business. Take the fact that IoT devices come in every shape, size, and function. This makes traditional end-point security models impractical.
On top of that, by their very nature, IoT devices are resource-constrained in terms of power, performance, and functionality. Many use very customized and non-standard operating systems.

With so many limited resource devices, it's nearly impossible for network administrators to know what's going on with all of the devices. Further complicating this issue is that many IoT devices have very long lifecycles and almost no security, i.e., a temperature sensor in a commercial or industrial setting.

Also, many IoT devices can't be easily patched or upgraded with the latest software due to their original design or limited resources such as memory and process.

Finally, many connected devices use non-standard and legacy communication protocols (think M2M) that aren't recognized by most security products.

As IoT security challenges continue to grow, so too does the need for technologies and processes to address the problems. The following lists eight key technology considerations to improve IoT security:

-------->

- Network Security
- Authentication
- Encryption
- Security side channel attack
- Security analysis and threat prediction
- Interface protection
- Delivery mechanism
- System development

There is no doubt in this that these are some of the best IOT securing technologies but even there is no harm in securing it more.
So, for doing so we can add up a firewall which will secure the IOT up to its best content.

EXISTING SECURITY SYSTEM AND ARCHITECTURE

With the development of the IOT, its security systems and architecture are also designed. Some companies and technology provide the security upto the organizational level and as per the date they are most secure but from the hackers point of views, nothing is secure enough to not to be hacked.
These security solutions and devices which provide security to the home IOT i.e., smart homes have some security flaws.

There are some points which will focus on the existing problems

- Security solutions are present which can provide security to the individual specifications and devices present in the smart home and they are evenwell maintained but if we talk about the complete security which makes the whole smart home impenetrable is not present.

- The proposed methods and existing systems are inefficient to control the security of the smart home up to the extent of some professional hackers.

- There are some devices that give security through the application present in the mobile or tablets or laptops but if the device having the application got hacked then the security of the smart home will be at stake.

- Other devices are also present that are cloud-based and interact through device present in the network through the cloud server and the screening of the data packets and analysis of the network are done through the cloud support, as a whole security it is secure but it lacks in security when we talk about protecting the individual end device from getting hacked.

- Few more devices are there which provide good security to the smart home and informs the user when the breach or some problem occurs, but they aren't enough smart to stop the attack or correct the flaw by themselves.

All these problems will make the smart home and its devices less secure, which in-turn will invoke the hackers to hack the smart home, and once it got hacked, then the hackers can easily gain access to each and everything related to the user.

One doesn't know where and how the attack will be done on him or on his security solutions, so it is better to be smart enough to keep the attackers out by keeping oneself up to date with the security measures and removing all possibility of the attack.

PROPOSED SECURITY SYSTEM

The proposed security system will be providing a secure connection with devices to the router and the user. The technology which will be the brain of the security architecture is the smart firewall. This will be areal-time IOT protection and prevention system, which will not only deal with the securing complete smart home but also it will protect the end user devices as well as it will secure the user's data from getting breached by the hackers.

For better understanding, let's take a scenario that we are having a smarthome and in this, there are some devices like fridge, printer, lights, TV, your health care system which are interconnected. Now if there is a security breach in your smart system then it may reveal your data or provide a security loophole that will let your whole smart home gethacked, or the scenario in which hackers can directly access your devices through man in the middle attack.

For securing all this type of faults many proposed system and security measures are there but still there is no harm in being extra secure.

In our proposed system a smart firewall will be added to the router or server(cloud) tosecure the end devices and smart home from getting hacked by the hackers.

Its working procedure and advantages
Procedure-

- A firewall will be installed on a local server or router which will only be dedicated for the purpose of data and packet exchange of the user with the smart devices.
- Every communication with the devices and the users will be done through this server which will be secured by that firewall, i.e., any irrelevant request, messages or data will be discarded and blocked which in turn will secure the devices.
- Even though somehow an end device may get hacked, then through that hacked device the hackers can try to hack and to take down whole smart home. So, if this case arises then that firewall will stop the hackers from doing so.
- The end devices will have to be smart enough to not respond to the requests which are not coming from the trusted source (i.e., through user passed and filtered by the firewall.)
- An extra layer of authentication and encryption will be there which will provide more security for the whole devices.

Advantages and extra features it may provide.

- This system will give strict security to the IoT devices and to the user's data.
- If somehow the end device is being hacked and through that a hacker is trying to compromise the whole smart home then the firewall will prevent it, even though some continuous harsh method is being applied through that device then the firewall will block that device from interacting with another device in the network and that can only be connected back again by the administrator of the system only through the process of authentication.
- If such scenario occurs then that firewall embedded system will alert the user about the hacking and breach part.

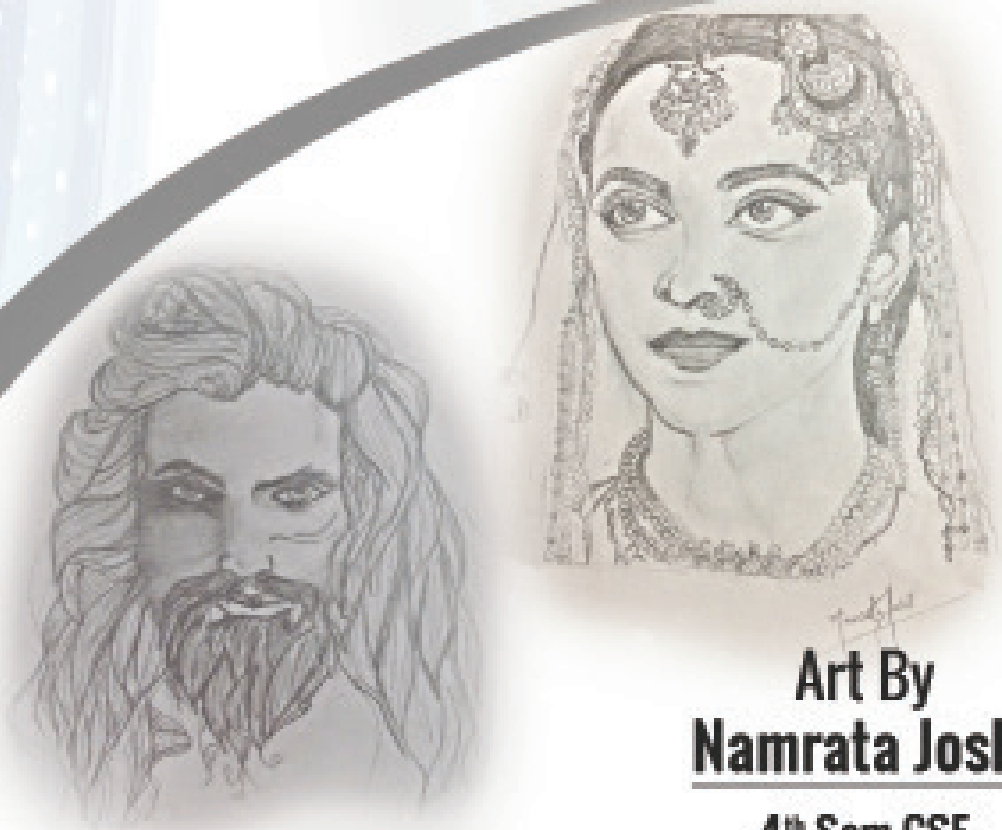
versa, if the request is coming from somewhere else then that request will be discarded.

• If the worst case occurs that by anyhow securing a smart home is going beyond the reach of the firewall then automatically it will shut down the whole system making it impossible to hack. (no doubt it will create some problem but ultimately it will save the whole system from being compromised.)

• All the data flow will be encrypted and each packet will be having the digital signature of the sending device, that will be helpful for the firewall and other device to know about the authentication of the packet.

This system is the basic features that will be provided, it has the capacity to indulge with other security features to give more strong protection in future.

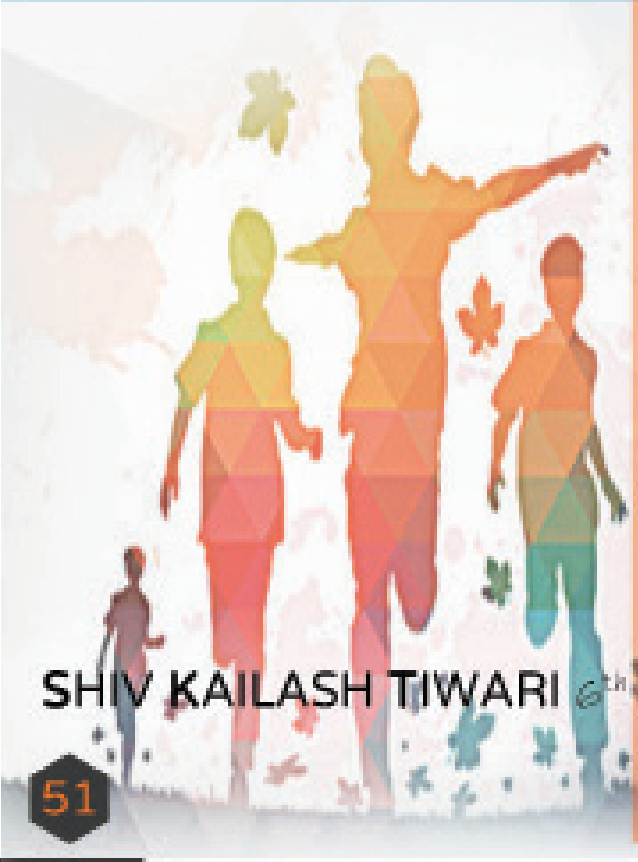
- Rajeev Ranjan,
& Vishek Kumar
6th Sem CSE



Art By
Namrata Joshi
4th Sem CSE

माँ

माँ! तेरी क्या बात करु मै...
है शब्द नही इन लब्जो मे...
ताकत हि नही इन कलमो मे..
जिनसे तेरा गुणगान करू मै ।
माँ तेरी क्या बात करू मै ।।
निच्छल निर्मल झरने से भी मिठा..
माँ प्यार तेरा....
धरती भी कम पड़ जाये...
माँ आँचल जितना चौड़ा तेरा ...
कम पड़ जाय माँ सागर की गहराई ...
जो डाल दे तु अपनी परछाई...
कर दे अगर मुनहार जो तु माँ ..
अम्बर भी झुक जाये...
माँ तेरी क्या बात करू मै ।
सारी उपमा कम पड़ जाये ।



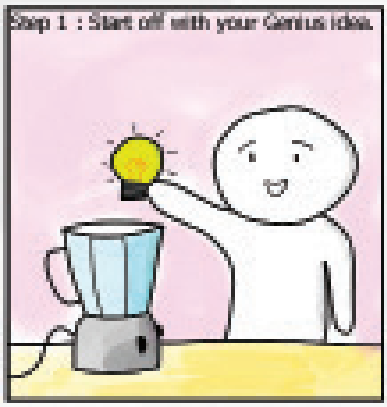
बचपन

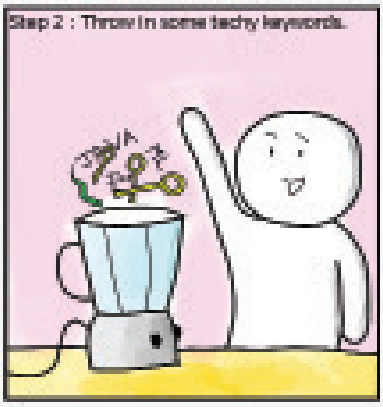
काश! वो बचपन फिर आ जाये।
जहां पर था , मै अपने मन का राजा।
चाहे कर लूं कितनी भी शैतानी ।।
जहां पर जिद्द था , बस पाने का ।
कभी ना डर था , कुछ खोने का ।।
जंहा पर हर परेशानी का हल था नादानी ।
और बस याद रह जाती थी ,
दादी नानी की कहानी ।।
कश!वो बचपन फिर आ जाये ।।

SHIV KAILASH TIWARI 6th Sem. CSE

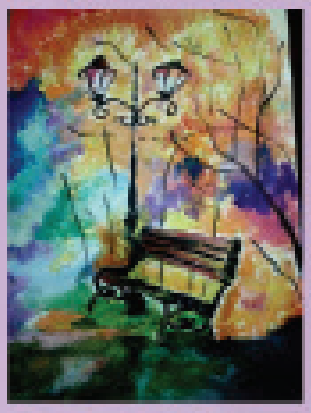
Final Year Project

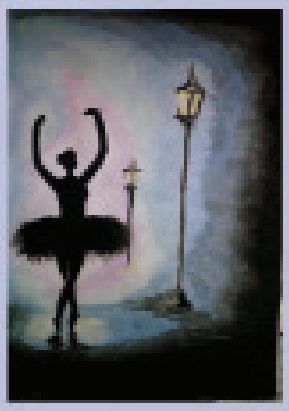
-ARJUN M 8th sem CSE





"It is through this black n white eyes we see this colorful world"
Wishing that would of yours to always be colorful here's 'a page of colors'.
A place to sit, a view so fit! Amidst the lamp light... Each n every moment goes so bright! A painting which dipicts the glory of moment!!





"Art is an expression"
Any form of art for that matter is a expression of an artist!
Dance is a live form wherein painting is the form which lives forever.. the blend of these two just on a sheet of paper is what makes an expression go speechless - the artists' and that of the viewers' !!

"Nature - the amazing creature"
Stones and trees, these looks makes us freeze, this colorful nature is the creater of our future!!
It's beauty not just limited to this sheet of paper(painting) instead it's unlimited to our eyes!!
Bliss of nature!!!

Shubham Naik 6th Sem CSE

An introduction to 5G networks and its Implementation using MatLab

-Dr V.Nagaveni

5G i.e, 5th generation mobile networks or 5th generation wireless systems is the next major phase of mobile telecommunications standards beyond the current 4G standards.5G technology needs to be specified, developed, and deployed by a variety of industry players including network equipment vendors, network operators, semiconductor vendors and device manufacturers.

Two major trends are behind the race to 5G: the explosive growth in demand for wireless broadband that can carry video and other content-rich services and the Internet of Things (IoT) where large numbers of smart devices communicate over the Internet.To help researchers and engineers studying and developing the 5G standard, MathWorks released a 5G library in September 2017.

The leap in 5G broadband speeds will be enabled by massive MIMO(multiple-input and multiple-output)communication in the millimeter wave (mmWave) frequency range and by new radio algorithms that achieve more efficient use of spectrum. New design architectures and algorithms will affect every aspect of 5G systems, from antennas to RF electronics to baseband algorithms. The performance of these subsystems is so tightly coupled that they must be designed and evaluated together.

Network equipment vendors and wireless operators have been conducting public field trials to demonstrate their 5G technology and characterize its operation in a real-world setting. In 5G field trials, many parameters ae measured and monitored dynamically, such as reference signal received power (RSRP) and reference signal received quality (RSRQ). System performance is recorded by capturing signals and sweeping across a large range of parameters.

For large-scale post processing of data and central management, system architects can deploy their 5G field testing software as applications on enterprise systems. These applications can be hosted on a dedicated server or cloud, so the system architects can remotely check the test data and centrally manage system updates. Using MATLAB application deployment tools, the development team can leverage their previous work, and everyone on the team (system architects and developers, field engineers, and management team) can remotely view and validate performance and analysis results.

We can implement enterprise applications with MATLAB Production Server, which lets us incorporate custom algorithms, tests, and analytics into web, database and production enterprise applications running on dedicated servers or a cloud.

ಆ ದಿನಗಳು

ಮುಗ್ಧತೆ ತುಂಬಿದ ಬದುಕಲ್ಲಿ
ಹಿಂದೆ ಸರಿಯುತಿದೆ ಕ್ಷಣಗಳು
ಬಾಲ್ಯವೆಂಬ ಸಣ್ಣ ಬಿಂದುವಿನಲ್ಲಿ
ಕ್ಷಣ ಹೊತ್ತು ಕಳೆದಂತೆ ಆ ದಿನಗಳು

ರಸದಿಂದ ರಸವು ಮಾಡಿದ ತುಂಟಾಟ
ಮನತುಂಬಿ ನಿಂತ ಕಂಗಳು
ಅನಿಸುತಿದೆ ಒಮ್ಮೊಮ್ಮೆ ಓಡಿ ಹೋಗಲೆ
ಸರಿಯುತಿದೆ ರಾತ್ರಿ ಬೆಳದಿಂಗಳು

ಪುಟ್ಟ ಹೆಜ್ಜೆಯ ನಿಟ್ಟ ಪ್ರೀತಿ ಲಜ್ಜೆ ಬಿಟ್ಟ
ಮಲಗಿ ದಿಟ್ಟಿಸಿದ ಆ ಸೂರುಗಳು
ಕಣ್ಣಿಗೆ ಕಟ್ಟಂತೆ ನೆನಪಿನಂಗಳದಲಿ
ತುಂಬಿ ಬರುತಿದೆ ಹೃನ್ಮನಗಳು

- KAVYA HEGDE 6th Sem. CSE

ಓ ಸಂಜೆಯ ಹೂವೆ

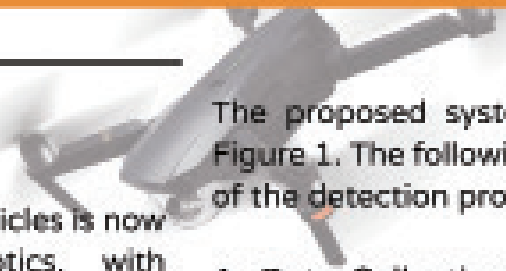
ಈ ತೀರದಲೆಗಳಿಗೂ ನಿನ್ನದೇ
ಖಯಾಲಿ,
ಎಷ್ಟು ಬೇಡವೆಂದರೂ ಮತ್ತೆ ಮತ್ತೆ ಸೋಕಿ
ಮುದ್ದಿಸಿ ಮುಗುಳ್ನಗುತ್ತದೆ ..

- RAGHU A S 6th Sem. CSE

DESIGN OF A DRONE

which can take off from water body and safely land on a water body

- Aaditya D. Rathod | Shikhar chawra | Sayantankar 6th sem CSE



INTRODUCTION

Development of Unmanned Aerial Vehicles is now a major research area in robotics, with applications in numerous fields such as defense, delivery systems, etc. A UAV (or a drone) is an aircraft without a human pilot aboard, whose flight may be controlled either autonomously through on-board computers or remotely by a pilot on ground.

A UAV is not operated for sport or hobby and does not transport passengers or crew. Since a drone operates autonomously or remotely, it eliminates risks such as pilot safety, and increases the effectiveness of the operation. Precision farming, Customs and Border Control, Firefighting, Emergency Relief, Emergency Landing of Aircrafts- are some of the applications that require landing of autonomous vehicles. This work can be adapted to meet the constraints of any of the above-mentioned applications which primarily deals with finding safe landing areas or take-off points.

Detection of surface water through multi-spectral data is an important topic in remote sensing. In recent years, various approaches have been developed to detect water on the ground, especially for small water bodies such as streams. Spectral index is one of the most popular directions in water detection, taking advantage of differences of land covers in spectral reflection.

On the other hand, machine learning methods are also frequently applied in identification of water bodies. Given appropriate and adequate training sample, supervised learning shows a good performance, for instance, support vector machine (SVM), neural network, and decision tree. However, unlike to other land covers, surface water could produce diverse spectral response from large rivers to small streams, which makes training samples be hard to find adequately.

The proposed system description is given in Figure 1. The following sections detail each step of the detection process.

A. Data Collection: We are using the images captured from the drone camera as our input images. From the collected dataset of images, of which 2/3 will be used for training, while the remaining will be used for testing.

B. Pre- Processing: The images obtained in the data collection stage will be pre-processed to better suit our problem. To ensure the uniformity among the images, we can resize the image to 256X256. The images will then be sampled into small square patches with an edge size of 16 pixels (standard value). Our system implements feature extraction on each extracted patch and classifies each image patch as either safe or unsafe.

C. Feature Extraction: For our proposed system, we will be using 5 individual features (RGB color model, HSV Color Model, Local Binary Pattern, Canny Edge Detection, Sobel Edge Detection) initially and analyze their results. Later, we will implement different combinations of these features to obtain significantly better results. The features used are explained briefly:

1. RGB and HSV Color Model: In the RGB color model, the images are represented using their red, green, and blue components, while in the HSV model, Hue, Saturation and Value (brightness) is calculated. Research has shown that since the HSV model is motivated by the human visual system, it is better suited for describing image colors as compared to the RGB representation. Further, experiments conducted has shown that the RGB model is quicker, but inaccurate, as compared to the HSV model. In our system, color features are calculated by averaging the RGB and HSV values and generating a color histogram.

2. Local Binary Patterns: Local Binary Patterns have proven to be effective texture descriptors in image classification. LBP is effective largely due to its low computational complexity and high robustness to variations. It is calculated by comparing each pixel with its neighbouring pixels.

3. Edge Density: For a given image patch, the edge density feature measures the average edge magnitude in that region of the image. The edges in the image will be calculated using two edge detection algorithms- Canny Edge Detection and Sobel Edge Detection. Thus the edge density of each patch will be calculated by counting the number of pixels in the patch that are part of edges. We will also consider the edge densities of surrounding patches while training the model.

D. Training: We will use the supervised model using Support Vector Machine (SVM) which includes two steps: the learning step and the classification step. In the learning step, data associated with already known label is utilized to train parameters in the model. The classification step allows to predict labels of new data based on the learning function. Large water bodies, such as rivers or lakes, are often easy to be detected, while smaller ones like streams tend to be confused with other land covers since not sufficient information is supported to represent their own spectral reflections. In this case, lacking information could increase imprecision and uncertainty of classification, causing unsatisfying results.

E. Expected Output: During this testing stage, each patch of the image is identified as safe or unsafe. The results for all 256 patches of each image are combined to provide a combined image output. The result expected after this combination is the final binary image that displays landing areas using 1 (White) and unsafe areas as 0 (Black).

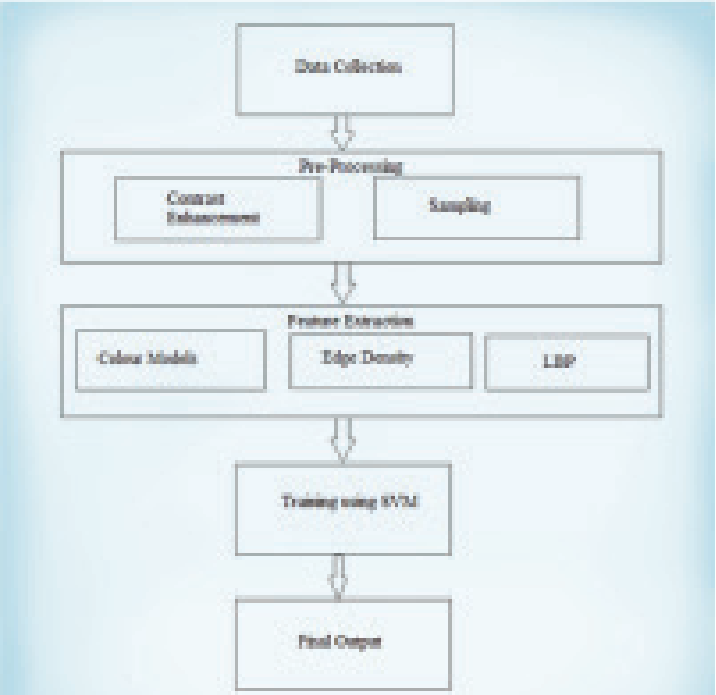


Figure 1. Flow-diagram of proposed method.

Implementation Strategy:

The design in figure 2 consists of 6 components:

1. Drone - A drone will be used to carry payload (like medicines, necessities etc.). It will be capable of carrying weight more than its own. It has four stands and a hydraulic attached to it.

2. Stand - It helps drone to land in ground surface.

3. Hydraulic - Attached to drone and boat this plays the most important part in this design. It is responsible to shift the center of gravity by making the boat go away and near the drone when needed.

4. Hex Boat - This is a unique design. It looks like a buoy. A hexagonal structure is given to resist the water current to some extent. It has a cap like shape in bottom to float efficiently. It is made of light weight balsa wood and is coated with waterproof paint to make it waterproof.

5. Pontoon balls - These floatable balls do not sink. Six of these balls are placed in the hexagonal edges of the Hex boat. It helps if excessive weight is applied.

6. Camera - to capture the images of water surface. We have planned to use HERO GoPro 6 (with 4k video recording capacity).

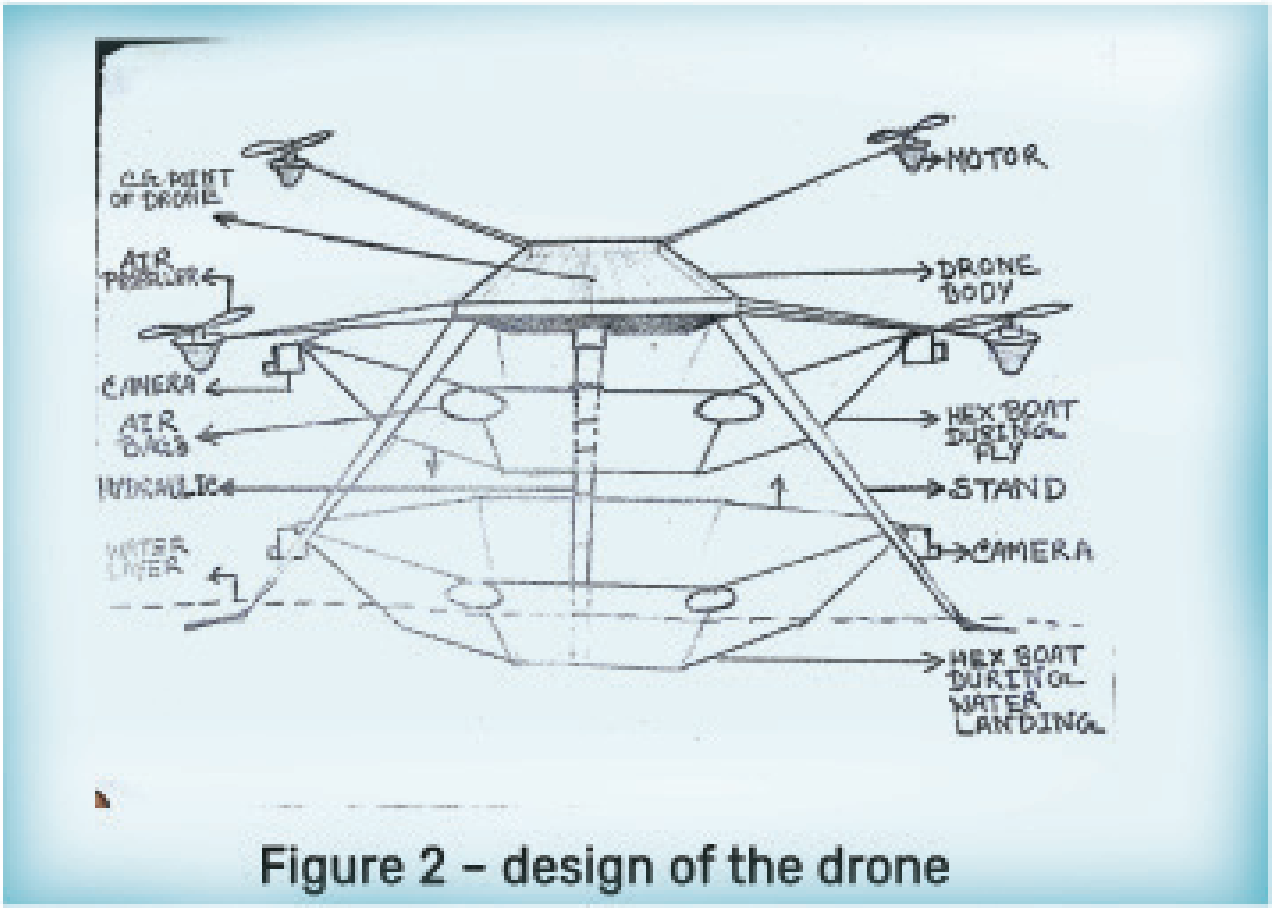


Figure 2 – design of the drone

After the drone is designed, system description given in figure 1 can be implemented by Anaconda which is a open source distribution of Python and R programming languages for large-scale data processing, predictive analytics, and scientific computing, that aims to simplify package management and deployment. Using Python we can implement the SVM for supervised machine learning which can predict the safe landing on water body.

When the drone is in air and preparing to land on water, it will first capture images of the water surface. Using those images it will first analyze and compute if the area is good for landing or not. It checks if the depth of water is sufficient to land the drone by support vector machine. When the drone finds an area to land, it shifts the Hex boat down using a hydraulic pump. Then slowly the drone lands in water.

The Hex boat is designed to maintain the stability of drone in severe conditions. When the drone needs to take off from the water, it is lift off to some height using the power of its rotor. Then the Hex boat is pulled up towards the drone with the help of hydraulic pump.

Aaditya D. Rathod
Shikhar chawra
Sayantankar
6th Sem CSE

CRY OF THE WISE

When you are in deep sleep,
You are forced and,
Sent along the crooked heap,
That's when I cry:
This is not what I need.

When you think something new,
People who understand are very few,
Feel like wrong farm with wrong seed,
That's when I cry:
This is not what I need.

When you are afraid to speak,
You know you belong to peak,
But ground is what people feed,
That's when I cry:
This is not what I need.

When you are forced to drink fear,
You can't find someone near,
Fear makes your mind bleed,
That's when I cry:
This is not what I need.

When you know people are fake,
They have nothing for your sake,
This is not the path I wanted to lead,
That's when I cry:
This is not what I need.

When you have to deal with old mentality,
They holding weapons demonstrating brutality,
World around you not running at your speed,
That's when I cry:
This is not what I need.

When people don't support good work,
They are locum of berserk,
Your mind is forced to be steed,
That's when I cry:
This is not what I need.

When you are meaninglessly scolded,
Put in the wrong mould and moulded,
You could have been an ideal screed,
That's when I cry:
This is not what I need.

When you are thought to be untrustworthy,
You are of not what they are of thirsty,
You know you are a different breed,
That's when I cry:
This is not what I need.

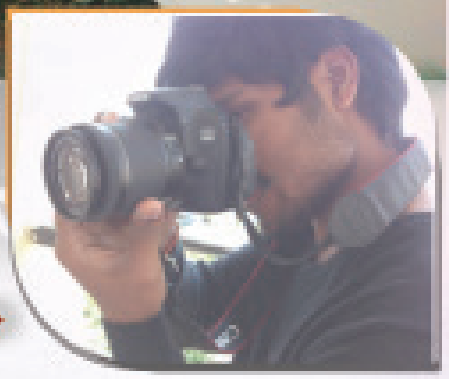
But the life is full of up and downs,
You will find witches as well as clowns,
You will be terrified,
People might demoralise.
But you need to stay energised.

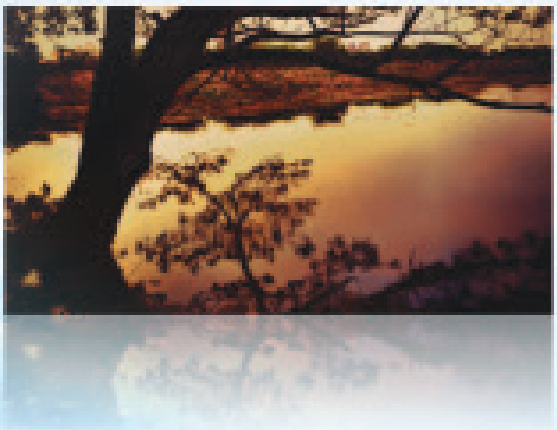
It's just a matter of perception
Positive or negative is only assertion
Assumptions flow in like ruthless river
If you overcome your mind set hindrance
You will be the ultimate winner!!!

By Shubham Mishra
4th Sem CSE

Photography

Just Clicks on a view...

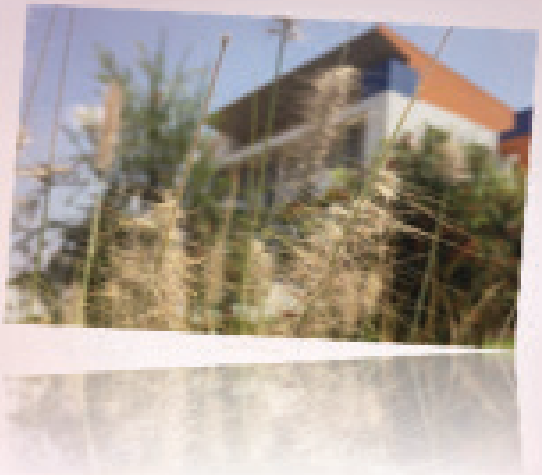




Photography

which can't be put in words....

photography its not only the 11 letters together, its all about making the picture which exhibits the soul not the smile .



"my eyes are shutters and my brain is the lens"

No one is a good photographee its just the way he/she look at the life or an object. So, it's just like learn to see the brighter side of life not to be in the darkness.

A good photographer always has an imagination of the picture before he shutters up the image on the mirror(capture)

According to me first image captured by me is when I enter this world after the struggle of 9 months by mom's patience.

As world changes day by day my best capture was tomorrow what I make. If we observe every picture in your gallery has a divine story.

We all learn lot from many things as such i learnt is negatives in our life makes you be the best similarly, like a film developed in a darkroom.

Its all about little things to do with what you see everything to do you see them.
"To Infinity & Beyond"

- *N.Venkat Revanth*
6th sem cse

"COLLEGE"

-ARJUN M 8th sem CSE

National Cadet Corps

-The Youth power

The National Cadet Corps is the Indian military cadet corps with its Headquarters at New Delhi, Delhi, India. National Cadet Corps is a Tri-Services Organization, comprising the Army, Navy and Air Force, engaged in grooming the youth of the country into disciplined and patriotic citizens. The National Cadet Corps in India is a voluntary organization which recruits cadets from high schools, colleges and universities all over India.

HISTORY:

The NCC in India was formed with the National Cadet Corps Act of 1948. It was raised on 15 July 1948. The origin of NCC can be traced back to the 'University Corps', which was created under the Indian Defence Act 1917, with the objective to make up the shortage of the Army.We celebrate NCC day on FOURTH SUNDAY of November every year.

MOTTO :

"UNITY AND DISCIPLINE"

"TO OBEY GOD'S ORDERS AS DELIVERED BY CONFIDENCE-THAT IS DUTY TO OBEY MAN'S ORDER AS ISSUED BY RIGHTFUL AUTHORITY-THAT IS DISCIPLINE.THEFOUNDTION OF BOTH ALIKE IS DENIAL OF SELF FOR HIGHER GOOD.UNLESS THE LESSON OF DUTY BE FIRST WELL LEARNT THE LESSON OF DISCIPLINE CAN BE BUT IMPERFECTLY UNDERSTOOD"

AIM:

1. To develop characters,comradeship, discipline, leadership, secular outlook, spirit of adventure and the ideals of selfless services amongs the youth of the country.To create a human resource of organised, trained and motivated youth to provide leadership in all walks of life and always available for the service of the nation.

2. To provide a suitable environment to motivate the youth to take up a career in the Armed Forces.

NCC FLAG:

In 1954 the existing tricolor flag was introduced. The three colours in the flag depict the three services in the Corps, red for Army, deep blue for Navy and light blue for the Air Force. The letters NCC and the NCC crest in gold in the middle of the flag encircled by a wreath of lotus, give the flag a colourful look and a distinct identity. Each lotus represents one NCC Directorate (Dte).The two dots represents Officer Training Academy's in India they are at Gwalior, Madhya Pradesh and Kamptee, Maharashtra.

Each year there are many activities such as camps are organized so that the cadets are exposed to the reliaty,to maintain a proper sychro in group and respect their rightful authority,

CORE VALUES:

The NCC is a responsive, learning and continuously evolving organization. Its activity is guided by certain core values that we endeavour to instill among all ranks of the NCC. These include the following:

(a) A sense of patriotic commitment to encourage cadets to contribute to national development.

(b) Respect for diversities in religion, language, culture, ethnicity, life style and habitat to instill a sense of National unity and social cohesion.

(c) Abiding commitment to learn and adhere to the norms and values enshrined in the Indian Constitution.

(d) Understanding the value of a just and impartial exercise of authority.

(e) Ability to participate in community development and other social programme.

(f) A healthy life style free of substance abuse and other unhealthy practices.

(g) Sensitivity to the needs of poor and socially disadvantaged fellow citizens.

(h) Inculcating habits of restraint and self-awareness.

(j) Understanding the values of honesty, truthfulness, self-sacrifice, perseverance and hard work.

(k) Respect for knowledge, wisdom and the power of ideas.

My Experience:

I joined this organization in my 2nd sem. Before joining this organization there was a physical test where I had to runs 5 rounds of the entire ground including 10 pushups and pull ups followed by it.On the first day of the new start, I was told the importance of it and disciplinary actions.The parades were conducted on every Saturday where I had to go in proper turn out of uniform,Before starting the parade our dress were properly seen ie"nirakshan" was done.

Many activities were conducted such as Trecking, Swach Bharath Abhiyan,Traffic rules Rally etc. Being a part of this orgnanisation I had a different face from others.In this, I could learn a lot of things which helped in every aspects of my life.

"YOU CANT CALM THE STORM, SO STOP TRYING. WHAT YOU CAN DO IS CALM YOURSELF, THE STORM WILL PASS"

I had attended 2 camps ie NIC-II Madikere and CATC where we all were divided in some activities.The NCC is of 3 years where we have to write B and C certificate.This actually covers both theory nd the practical knowledge of what we did in the entire 1-2 years.NCC is the second Indian Army which always helped me to build my personality, to increase self potential to do thing,build confidence.There should be passion to do something in life and in me that is the Indian Army which attracts me towards it to serve the mother land. This is a place where we can make our contacts all over the world as we attend the camps and get to know peoples,learn their cultures,tradiditions and spend some period of time with them.Atlast I would just say ony one thing "Respect the Indian soldiers and try to be one among them".

SUCCESS IS NEVER FINAL, FAILURE IS NEVER FATAL. IT'S COURAGE THAT COUNTS.

JAI HIND!

-SHUBHAM S NAIK, 3rd year, CSE -B

INTERNSHIP @ INFOSYS

Every year Infosys Ltd offers internship during the month of January to its campus recruited students. It is a 4 month long residential Final year summer internship offered at their Mysore DC campus.

Their Mysore campus is one of the largest & one of the most beautiful development centers that they possess. In the words of Dr. Vishal Sikka, Mysore DC is the Crown Jewel of Infosys as it mainly concentrates on training & nurturing the future Employees of the organization.

From the placements that happened at Acharya, I was lucky to get selected to Infosys. In the month of December, I received a letter from Infosys offering me their internship program. I did a 4 month internship at Infosys, Mysore during my last semester in college and I can say that it was fun throughout, our entire batch of interns(Feb 2017 Interns) had a great time. There were about 459 interns from all over India.

Our training was split into 3 parts – Generic, Stream & Project work. Each part had 3 modules. At the end of each module we had to face a test which had to be cleared with 65%. The test was no cake wake. Infosys is known for its world class training & standard tests. The tests included 50% weightage on Programming (hands on)& 50% weightage on objectives which had negative marking.

The initial 1.5 months were hectic, as it was sudden transition from our normal schooling to corporate world.In the Generic training we were taught Basic Python Programming, Object oriented concepts & RDBMS. Each day consisted of assignments which had to be completed. These assignments were carefully crafted to strengthen your basic concepts & hone your logical & programming skills. As computers were available only inside the training center, you had to sit back after class hours & finish your assignments & then go to your residence (Employee Care Center).

After Generic training came the Stream training for which our batch was divided into 3 groups and each group was trained on 3 different tracks, namely Java, .NET and Open Systems. Then came the project part, where we worked in a team of 5-6 people and had an Infy employee as a mentor, the projects were allocated at random(the projects are usually good and feasibility of completion is well researched) and we were given a time frame of 33 days to complete that. This part of our internship was the most fun, we had the luxury of flexible working hours, got a chance to interact with employees. This is the time we got to use the facilities at the campus (gym, swimming pool, multiplex, bowling alley etc)to the max. We literally exploited them.

We got the project titled "Payment Gateway" using Oracle ADF & SOA. The banking applications are generally the good way to learn a new framework as they include several types of components giving you a huge opportunity & need to explore more.

During our entire course of Internship, boarding was provided by Infosys and we use to get a nominal stipend which we could use for food. The internship program does not allow for much understanding of Infosys outside of the small scope of the project that each intern is assigned to work on.

Before my internship started my ideas did not match the experiences I have gained during my internship. There is a big difference in the school projects and the tasks and activities during the actual work. In

school we learn how to describe the work in projects, where in work you learn how to implement them in reality. This internship was definitely an introduction to the actual work field for me. I have learned to work in a business organization and apply my knowledge into practice.

The past months of my internship have been very instructive for me. I gained a lot of experience, especially in the event planning field. A lot of the tasks and activities that I have worked on during my internship are familiar with what I'm studying at the moment. I worked in many areas where I did different work. This gave me the chance to find out which areas I want work in after my education.

Infosys is a great learning company for interns. It helps interns improve and develops their skills. I would recommend this internship as a not to miss opportunity for those who get it. The opportunity to live & work among the employees sparked my imagination, shifted my perspective and push me to think beyond the academic horizon.

About Us :

TexoPanda is a startup firm based in Bangalore. We create and design websites and apps which are unique in style and exceptional in functionality. We provide digital marketing services such as search engine optimization (SEO), search engine marketing (SEM), content marketing and social media marketing etc. We also create original graphical content such logos, visiting cards, brochures, video animation etc. Essentially, TexoPanda is your one stop solution for all digital design, development and advertising needs. We are passionate about our work and our team is fully dedicated to providing on time conclusions to any projects we undertake.

Our Team :

TexoPanda is a LLP firm and has 4 partners namely Jimut Bahan Aich (Cse, 6thsem), Sachin Samuel, Syed Rizwan Umar and Umashankar.All 4 of us are prodigies of Acharya Institutes. Each of us has a designated role in the firm but we also work interchangeably. Jim is our lead designer and coder. He specializes in HTML, CSS, PHP and android development in JAVA. He also takes lead as a graphic designer. Sachin works as content manager. His work focuses on creating, editing, updating the content presented on websites / apps and advises on UI/UX and graphical content creation. Rizwan is our Digital Marketing Executive. He takes point on all the digital marketing services we provide and runs social media campaigns and advertising. Umashankar works as Sales & Marketing Head and also manages our firm's finances.

Motivation, Hardships and Commitment :

We love to code and create. Our motivation for starting our own firm was not only to create a successful business but also to be content with the work we do. To have control over the projects we handle, have creative freedom and to stay away from bureaucracy as far as possible. As a result, we are able to provide quality services to our customers at a comparatively reasonable price. Starting a firm is easy but running it sustainably is a on a whole other level. Finding a balance between studies, exams and firm responsibilities is a harrowing task. One cannot neglect any of these. The main problem we faced during our initial stage was managing our finances. The investment we made was huge but the return was low and uneven. It started affecting our company morale, we are startup after all and did not have unlimited resources to pour into it. But with a hard work, persistence and a lot of patience we have created a loyal customer base though we still have a long way to go. The most important for a sustainable business is to create a customer base and for that customer satisfaction should be a priority. Positive word of mouth is the best advertisement that you can get. No amount of flashy posters or money poured into big advertisements will be able to match it. Work with passion and persistence and never give up and eventually success will follow.

TexoPanda

Our Work :

TexoPanda is a new startup firm, howbeit we have worked on many different projects and a few of those are notable once which we are proud of and motivate us to be better creators. Our first project was for a website for U&M Precitech. They are the leading industrial fixtures designers in Bangalore. We have created a website for a photography company known as PK Photography based in Mumbai. We also designed the Acharya Premier League 2018's website. We are the official digital partners of Dance Trance India Volume 1, an inter-college dance competition whose finals were held on Habba 2018. We have also worked on many other graphic design projects for different companies and businesses.

Future Endeavors and Notions :

Currently, we are also working on our own startup app named Bufe which will be releasing on the play store by this year end. Being a new startup firm, we are working vigorously on various marketing and advertisement strategies for greater name recognition in the startup market space. Creating and maintaining a positive name recognition and outlook of our firm is our top priority right now. We are also planning to hire few developers/designers for future standalone projects.

Co-Founders :

Jimut Bahan Aich,
Sachin Samuel,
Syed Rizwan Umar,
Umashankar.All

The ODU Experience

Tell us about how your day was at the ODU?

The days usually used to begin at 9 am. We worked in massive labs, which were quite close to our residential hostel. We were working on a "Aggression detection in Alzheimer's patients". This was given by our ODU faculty in charge Prof. Ajay Gupta. We all were divided into teams 4 including a team leader. We (Aditya and Chirag) were two of 5 team leaders appointed. The day used to end at around 12 am usually, but we have pulled a lot of all nighters than we can remember. We would just snail to our dorms and sleep like a log as soon as we hit our bed. From an experience perspective, it was very enlightening. We had to work our ways with team members from various fields of engineering and find the most conducive way to finish a task.We are workaholics so, everyday was fun day. Sometimes it did take a toll when a certain snippet was throwing up errors. But the satisfaction of fixing it and running around celebrating was totally worth the effort.
One of us (Aditya Das) was awarded Best Outgoing Intern.

What did you learn at ODU?

The project that was assigned to us was based on smart wearable devices. We had to create a prototype that was not intrusive yet feature rich to give us enough data points. This was a research project that was being produced by ODU and we were given a chance to work on it and suggest any improvisations . We mainly worked on the LAMP stack, the front end for the website being developed in basic HTML css and Js whereas the Android wears used JAVA.
The machine learning part was done on the server. We used SVMs. Language used python.
Apart from all the technical skills, we learnt time management, leadership and management skills, and the most important one: how to survive in a new country.

How was the entire experience?

It wasn't easy. But it was worth the while. The day were long and we had immense loads of work to do, which was quite challenging for everyone. But being workaholics, we enjoyed the whole experience as we were doing what we do best and love the most – coding.
The weekdays were reserved for work, while the weekends were for sightseeing. The Virginia beach was quite close to the university, and we went there a couple of times. We also had a small trip to Washington. And a wonderful weekend at an amusement park. USA is a beautiful place, and going to ODU gave us a chance to experience the American dream.

Any message to the people who are working to get the ODU internship?

Just one important thing: never give up. Always keep in mind why you're working for it, and the rest will surely follow. When things get tough, the tough get going.

Interviewed by -
Maheer Ashraf Baba

Editorial Board Member.

Quick Tip

Hey!, everyone do you know that we can actually compress 1 GB file into 40-50 MB file using a common tool **'WinRAR'**.

well let's Configuring the *'Winrar'* settings to do so:

Step 1 : Make sure that winrar is installed on your PC.if not get it in "https://www.win-rar.com".
Step 2 : Open the winrar application.
Step 3 : Go to Settings in Options or just hold the Ctrl button and press S [Ctrl + S].
Step 4 : In the settings window go to the Compression tab and under compression profiles. click on the 'Create default' button.
Step 5 : Now under the Set default compression options click on the Compression method and select Best.
Step 6 : Under the Archiving options check Create solid archive and Lock archive.
Step 7 : Go to the advanced tab and click on the compression option.
Step 8 : Under the Text Compression option select Auto, set the Prediction order to 63 and Memory to use to 128 MB.
Step 9 : It's all done now just click on 'OK' button and close Winrar.

hmmm!, it's easy right. if you done with above steps then all you have to do is compress the file which you want to, using winrar.
To do so follow the below steps (Though you may already know how it's done XD):

>Right click on the file which you want to compress and select the Add to "file_name.rar".
>Wait for the compression to finish and once this is done you've finally got you're highly compressed file.

Tip by -
Ajay Kumar B C
Editorial Board Member

Note : Compression we be slow on *System having less than 4GB RAM.*

Faculties of C.S.E

Supporting Staff

1st Year

2nd Year

3rd Year

4th Year

M-Tech

2017 Batch

Graduation Day

Best out Going

Shiva Prasad K
A proud alumnus of AIT - CSE
2013-17

Things you learn from the syllabus during engineering may or may not help you out in your career, but the etiquette and good values you learn will help. Don't hesitate to take part in departmental activities, because they help you hone your leadership and managerial skills.

Even if you are not conducting any events, at least participate in events conducted by others, this will help you get the feel of competitive atmosphere.

Take help from the faculties for anything academic and project related, they won't say no to you. They are all very helpful.

Help your peers to help themselves, make them independent instead of making them dependent on you. All the best for your future endeavors.

Toppers

4th year, UG

01

V ANUSHA

78.00%

02

MALGI RASIKA VAMAN

77.21%

03

LAKSHMI DEVI K

76.06%

3rd year, UG

01

VIDYA B S

81.61%

02

PRIYANKA NAMDEO

77.78%

03

JAGMAN KAUR

77.72%

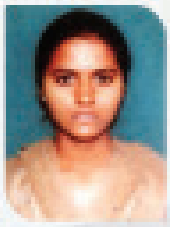
Toppers

2nd year, UG

01

INDUSHREE

8.395



02

SNEHA GHATAGI

8.36

02

SHEENA

8.36

03

SUSHMITHA C

8.105

1st year, UG

01

APPORVA S R

9.29

02

SRINIDHI K S

9.25

03

PRIYA J A

9.21

Placements

Dept. of CSE-2018 Batch

SL NO.	USN NUMBER	NAME	COMPANY	SALARY
1	1AY14CS010	ADITYA DAS	Infosys	3.28 LPA
2	1AY14CS018	ANANTH NARAYAN BHAT	Infosys	3.28 LPA
3	1AY14CS028	BHAVANA T S	Infosys	3.28 LPA
4	1AY14CS035	DEBANGSHU BANERJEE	Infosys	3.28 LPA
5	1AY14CS048	JAGM ANKAUR	Infosys	3.28 LPA
6	1AY14CS054	KEERTHI N	Infosys	3.28 LPA
7	1AY14CS060	M ARJUN	Infosys	3.28 LPA
8	1AY14CS062	MAHEER ASHRAFBABA	Infosys	3.28 LPA
9	1AY14CS076	NISCHITA R M	Infosys	3.28 LPA
10	1AY14CS080	PAVITHRA M	Infosys	3.28 LPA
11	1AY14CS089	ABHISHEK R	Infosys	3.28 LPA
12	1AY14CS108	SAHILDEBNATH	Infosys	3.28 LPA
13	1AY14CS112	SANJANA K	Infosys	3.28 LPA
14	1AY14CS136	VIVEK KUMAR ANAND	Infosys	3.28 LPA
15	1AY14CS089	ABHISHEK R	Mind tree	4-6 LPA
16	1AY14CS101	ROHAN AGARWAL	Mind tree	4-6 LPA

Placements

Dept. of CSE-2018 Batch

SL NO.	USN NUMBER	NAME	COMPANY	SALARY
17	1AY14CS126	SUSHMITHA R	Mind tree	4-6LPA
18	1AY14CS101	ROHANA G ARWAL	HashedIn Technologies	7LPA
19	1AY14CS108	SAHILDEBNATH	Capgemini	3.15LPA
20	1AY14CS022	ASHIK K	Capgemini	3.15LPA
21	1AY14CS054	KEERTHI N	Capgemini	3.15LPA
22	1AY14CS018	ANANTH NARAYAN BHAT	Capgemini	3.15LPA
23	1AY14CS033	CHIRAG D K	Capgemini	3.15LPA
24	1AY14CS112	SANJANA K	Capgemini	3.15LPA
25	1AY14CS076	NISCHITA R M	Capgemini	3.15LPA
26	1AY14CS067	MASHOOQMA	Capgemini	3.15LPA
27	1AY14CS126	SUSHMITHA R	INS Zoom Technologies	6.00LPA
28	1AY14CS129	TOSLIM ARIF	AT&T Technologies	4.32LPA
29	1AY14CS018	ANANTH NARAYAN BHAT	Cognizant	6.5LPA
30	1AY14CS050	K MANU SHANKAR NAIR	NTT Data	3.00LPA
31	1AY14CS069	MEGHANA B P	NTT Data	3.00LPA
32	1AY14CS120	SRI LAGNASANYAL	NTT Data	3.00LPA

Placements

Dept. of CSE-2018 Batch

SL NO.	USN NUMBER	NAME	COMPANY	SALARY
33	1AY14CS134	VINAY D	NTT Data	3.00LPA
34	1AY14CS034	DATTA KIRAN C S	Telerad Tech	5.00LPA
35	1AY14CS017	AMITH G SHETTY	Capital Via	3.03LPA
36	1AY14CS046	INDUSHREE K G	Capital Via	3.03LPA
37	1AY14CS052	KAVYA M K	Capital Via	3.03LPA
38	1AY14CS054	KEERTHI N	Capital Via	3.03LPA
39	1AY14CS070	MEGHANA U	Capital Via	3.03LPA
40	1AY13CS113	SHIVAM PANDEY	Sunrise Biz tech Systems Pvt Ltd	3.00LPA
41	1AY14CS070	MEGHANA U	Sunrise Biz tech Systems Pvt Ltd	3.00LPA
42	1AY14CS030	BINNU C	Byju's	4-6LPA
43	1AY14CS113	SANJAY KUMAR	Byju's	4-6LPA


MODERNISTS
IN SPIRIT OF INNOVATION

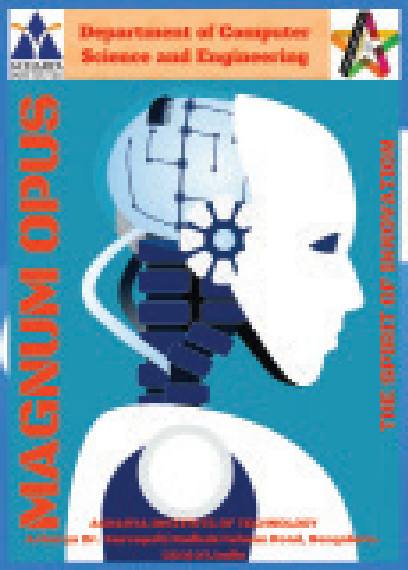
ALTERNATE DESIGNS

ROHAN SINGH MAHUR
4th year

ROHAN SINGH MAHUR
4th year

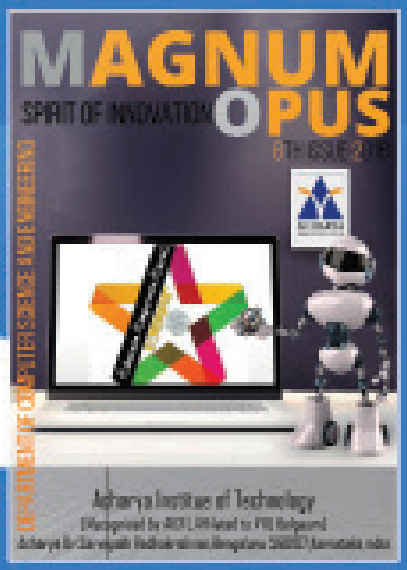
SHIV KAILASH TIWARI
3rd year

MANAS PRATAP THAKUR
2nd year



ABHISHEK DANGOL
2nd year

J S Ravi Theja
4th year



ACHARYA

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