DEPARTMENT OF INFORMATION TECHNOLOGY PRESENTS HALF-YEARLY NEWSLETTER

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SSN

INDEX

IEEEXTREME 13.0

IEEEXtreme 13.0 – A 24-Hour programming competition is a global challenge in which teams of IEEE Student members – advised and proctored by an IEEE member, and often supported by an IEEE Student Branch – compete in a 24-hour time span against each other to solve a set of programming problems.

The department of Information Technology in association with SSN IEEE Student Branch hosted IEEEXtreme 13.0 for the third consecutive year on 19 October, 2019 (05:30 am) – 20 October, 2019 (05:30 am). Dr. T. Sree Sharmila, ASP, IT and Dr. V. Thanikachalam, ASP, IT coordinated the event. The event witnessed participation of 24 teams comprising IEEE Student members from various colleges in Madras section. The event started with registration of the teams at 05:00 AM at the career development centre. Participants were then provided Wi-Fi enabled rooms to collaborate with teammates during the competition along with food and refreshments through the span of 24 hours.

Previous year winners and our alumni students Mr. S. Murugappan and Mr. M. S. Vignesh from IT, SSNCE were invited to speak to the students to inspire them to do well during the competition. Ice breaking activities took place at night to keep participants awake during the competition.

The competition came to an end at 5.30 AM on the 20 October, 2019. This was followed by cash prize distribution for the best 4 teams that participated in SSNCE. The whole event at SSNCE ended with a small celebration after the successful completion of the event.

The details of the winning teams are as follows:

Team Name	Team Members	Institu-tion	Interna-tional Rank	National Rank	Madras Section Rank
IC3	Hemnath Dhananjayan, Anand Saminathan, Anish Badri R S	SSNCE	33	3	1
Enigmatrix	Harrison Vijay J, Akarvin Raja Prajan S A J, Aadhithya B. Kailash	SSNCE	188	16	2
TresSicarios	Abhishek Satapathy, Shreyansh Saha, Nikhil John	VIT, Chennai	261	23	3
PiedPipers	Jothika Raja, Aishwarya Vaikundam,	SSNCE	413	47	4

RAMCO HACKATHON

Ramco hackathon, true as it sounds the first thing that came into our minds was Ramco Cement for no reason. It was our first company level hackathon and we were pretty excited to just be a part of it. The whole experience was altogether a new one and it was like a direct slap to the college students on how perfect should a hackathon be organised.

We were given 4 industrial level problem statements and were asked to come up with a solution within 24hours of the hackathon. We started discussing on what problem statement to choose and researched on all possible means that could be done. We dedicatedly spent 5 hours for research alone.

We interestingly came up with some cool ideas for all 4 problem statements. Not self praising here. But yeah, even those reading this would term it cool. Now the real argument was to choose the problem statement to solve which went for another 2 hours. The hackathon started at 12pm and by 8pm we made 0% progress. We finally zeroed in on one problem statement which was to provide frictionless customer experience for the customers in retail outlet.

Once we decided on doing this, we now kept pestering the volunteers and staffs by asking silly doubts which actually would have been irritating. We came up with a okayish solution at first which as said was okayish for us as well as our mentors who set the problem statement. On a lighter note, we got free snacks, beverages throughout the event.

We felt that it made us more happier than actually bagging a place. We don't want to discuss the process that went on to become Runners, that's "Thozhil Ragasiyam". Fast-forwarding to the prize ceremony, we literally had no hopes as our final presentation had no arguments or questions from our jury panel which lowered our expectations. And those reading the article know what happened next. Yes, we were titled as the "Runners" of the event. The only worry for us was "From next week onwards UT macha, we wouldn't be allowed to skip them and attend a few more". We are definitely not exaggerating here. Irrespective of the prizes, win or lose, the experience is definitely worth it

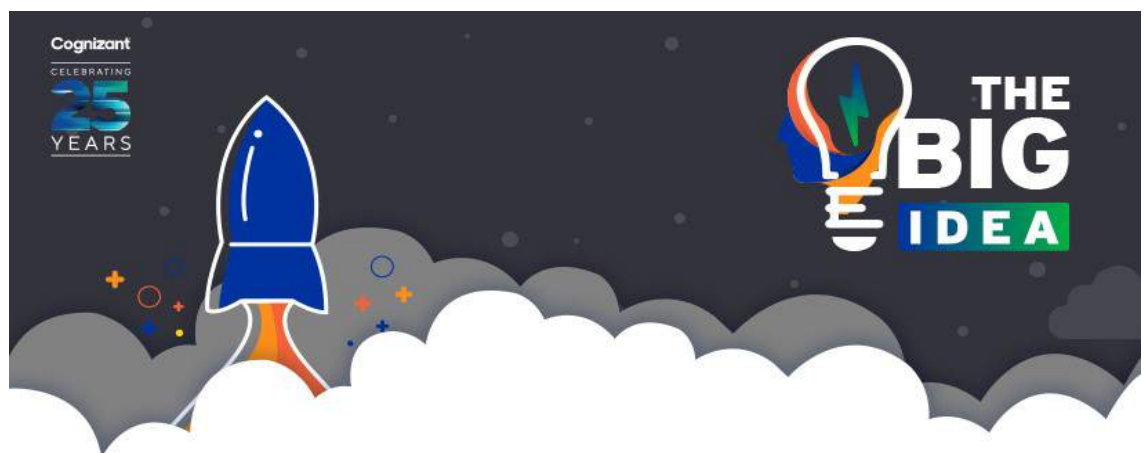**-DEVANATHAN NG**

- KESHAV BALACHANDER

- NAVEEN KUMAR

III YEAR
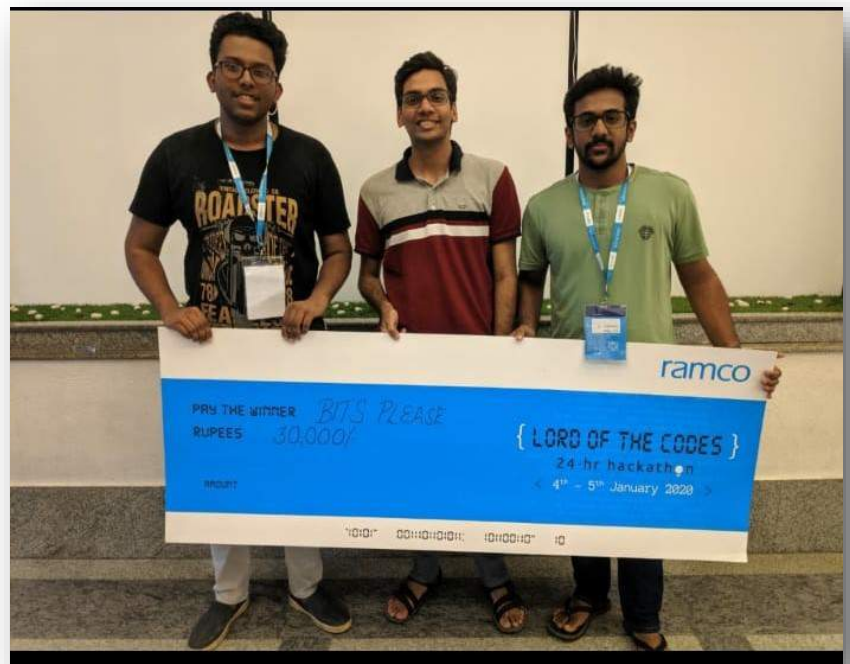
COGNIZANT
BIG IDEA CHALLENGE

Oviyaa M and **Renvitha P** from IV year **won the Cognizant Big Idea Contest 2019** and were awarded with a cash prize of Rs 1 Lakh

PLACEMENT INSIGHTS
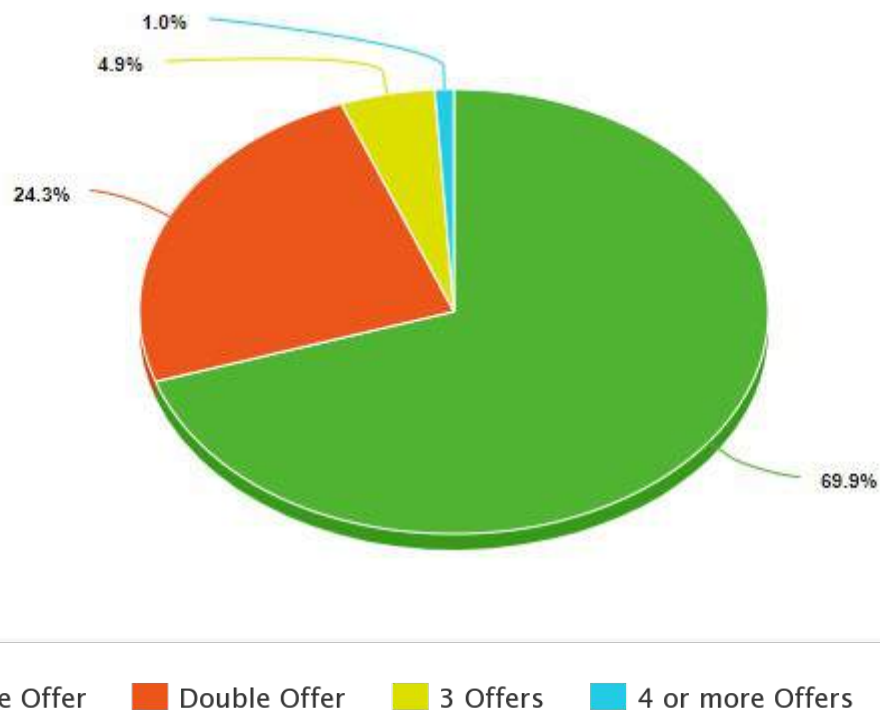
A total of 103 students from the batch of 2016-2020 were placed successfully during the campus recruitment drive. 31 students received multiple offers in the course of the recruitment drive.

SSN was visited by renowned companies including PayPal, IBM, CitiBank , Barclays among others.

PLACEMENT INSIGHTS
A STUDENT PERSPECTIVE

"How was your interview experience?" Having attended more than 15 interviews and now with two offers in hand one in IBM and the other in Antworks , I guess I'm qualified to answer this question. Rather than a boring explanation of my interview process I would like to point out the DOs and DON'Ts in an interview.

Okay! Where do I start ? This had been a roller coaster ride for me. Before the 8th Semester began I was hyped up , excited and mostly nervous. I was doubtful of my potential and was yet to establish my strong zones. Anyways as my life motto goes "On the fly with the flow" , I had my first interview with TCS Digital.

Believe it or not , it was the first interview in my life and I was the first person to be called. Very nervous ,I wasn't able to do even the basic questions concretely. In my mind , I knew the answer ! I had gone through the solutions hundreds of times but nevertheless I failed to perform. It was a complete under performance.

 But guys, listen up! If you are ever in a situation as such , IT'S OKAY. I was dejected but I understood what went wrong. So before you go into the interview room do this thing ESTABLISH YOUR STRONG ZONES".

So I sat down jotted down my areas of interest and what's my expertise level in it. Came up with data structures , DBMS and as for programming skills Java, C++ and C. In a span of two days I got shortlisted for my next interview with Navis. Navis was a tough one. But this time I went well prepared and managed to clear the first two rounds of interviews and went on to the HR.

Going to HR is like almost placed but that's where the twist which I didn't expect came up. I naively told them about my higher studies plan. ! "NEVER TELL THEM THAT YOU ARE INTERESTED IN HIGHER STUDIES". Just tell them that you are interested to work.

Then came Mr.Cooper. I cleared my Online test , then there was a round you have to provide solutions for a problem statement. First they have to accept your class diagrams and then you have to code them. Then came interview. I cleared the first round but couldn't impress them in the second round cause "I DIDN'T HAVE A SKILLSET THAT WOULD SET ME APART". You maybe very good with the basic Data structures and Java programming but always have an extra specialization skill that would set you apart. Eg. Data Analytics, Web Development , Image Processing. Your choice.

And Next is IBM. This time I was confident. First round was Gaming (Brainteasers) , next was psychometric test and then was one round of interview. I went in and gave a good intro. (He seemed impressed). "INTRO IS IMPORTANT, GUYS". And then he went on to ask few technical questions and few non-technical to see if I fit in the organisation. I did well. And FINALLY I GOT PLACED. Finally, Antworks came, I didn't have much expectations. I wanted to give it a go. With being placed already I was little confident on nailing this one. It being a super dream and AI based , I was genuinely interested. .

First question they threw at me was , "what is AI? Put in your own words". If you guys are interested in any AI company you got to have a solid answer for this question. Come up with something involving math. (Always impressive). And the rest of the interview was a breeze and I got placed again.

Anyway , guys think about all the pointers above and be confident , you will come out with flying colours. ALL THE BEST!

M. Janani Bharathi

IT-A , IV year

PLACEMENT INSIGHTS
A STUDENT PERSPECTIVE

All through my freshman and sophomore year, my interests and ventures were chaotic and those of a novice. I hardly indulged in any extra coding, beyond the little that was required for the university exams, though many of my classmates already were avid coders, some of them, inveterate! It was only in 5th semester that we had Java as a part of our web programming course. I felt comfortable with java due to its easier and user friendly statements as compared to C/C++ and hence, I took to Hackerrank for coding in Java, setting myself small targets of 7-8 programs a week. The IDE was comfortable, but prompted all the predefined functions, therefore, I moved to coding in Leetcode, topic by topic. According to our seniors' advice, choosing an extra domain like DBMS, OS, App development, Web development etc. was quite helpful in placements. Thus, my holidays were packed with preparations for aptitude, DBMS and coding in C, Python and Java. After the initial computer based test which had comprised of aptitude, programming based MCQs and coding, we had our interviews on the 16th of July.

Technical Interview 1: The first round thrust on OOPs concepts and basics. It started with basic differences between Java and C followed by explanation and pseudo code for each with examples. This was followed by questions based on basic searching and sorting. The last part was basic SQL- query classifications, commands and joins, to which I was able to give prompt answers.

Technical Interview 2: I was shortlisted for the next round which emphasized on data structures and operations. I was asked some pseudo codes based on stacks and queues, implementations of queues using stacks and vice versa.

There were questions based on sets, lists and maps and specific applications of trees and graphs and sorting. I did get stuck on good many questions, but my panellists helped me by prompting clues and similar examples. The database part was all about ER representations, normalisation, schemas and the likes. I learnt a lot through the process and was luckily asked to stay back for the HR round.

HR Round: The HR round was a breeze. There was nothing technical. I discussed my hobbies, school,   internship, projects and other areas of interest.

It was a fab end of the day, when I heard that I, along with 4 friends, was selected to be a part of the Navis team! I was on cloud nine! Though I had made a late start, hard work and prayers had really borne its fruits. I was thrilled to be placed in a super dream company, and was also among the first few to get placed in class. I now look forward to a hunk of new challenges and experiences, after my studies, at Navis.

Jananie R Balaji

IT A

4th year

UNIVERSITY RESULTS

PRASHANTHI B

CGPA 9.01

UNIVERSITY RANK 4

HEMANG M SHAH

CGPA 8.78

UNIVERSITY RANK 21

SHRUTHI S

CGPA 8.88

UNIVERSITY RANK 7

JAYARAM HARIHARAKRISHNAN

CGPA 8.75

UNIVERSITY RANK 25

MURUGAPPAN S

CGPA 8.67

UNIVERSITY RANK 41

SSN MUN

From 30th August - 1st September 2019, the 6th iteration of the SSN Model United Nations Conference (SSN MUN), hosted by the SSN College of Engineering, was a successful showcase of high quality debate, negotiation, and crisis performed by the most talented delegates on the collegiate Model United Nations circuit. SSN MUN has consistently been one of the most commendable conferences in the MUNning circuit, famed for its quality and hospitality since its inception.

SSN MUN commenced with Opening Ceremonies in the Justice Pratap Singh Auditorium, with over 205 delegates convening to start off their weekend.

With the conference showcasing a theme of 'Diplomacy-Deliberation-Discussion', this iteration of SSN MUN opened with individual speeches from Secretary General Navneeth Venkatesan, Under Secretary General Srinivasaraghavan Sundar, and Director General Pranav Ram. The conference then welcomed keynote speaker, Dr. R. Kannan.

This edition of the conference showcased five premier committees: United Nations Security Council (UN SC), Two United Nations General assembly committees – Economic and Financial Committee (ECOFIN) and Disarmament and International Security (DISEC), United Nations Human Rights Council (UN HRC) and the International Press.

Once the conference was gavelled in, delegates were immediately challenged by the complicated international issues of the modern world.

Not to be forgotten, the United Nations General Assembly delegates debated a variety of topics ranging from 'Macroeconomic policy question of International Trade and development with regards to external debt sustainability and financial inclusion' in the Economic and Financial Committee; to the issue of 'creating a framework for Disarmament, Demobilization and Security Sector Reforms (SSR)' iDIEC.

Throughout the weekend, debate was rigorous and often involved numerous member states adapting to the changing environments of geopolitical relations and the occasional curveball of an update in Crisis. To cap off the conference, the International Press published the official newsletter of the International Press- Athleia.
At the closing ceremony, the secretary-general thanked the staff and participants for their hard work. Delegate awards were announced shortly thereafter and certificates and gavels were given out.
The conference was a great success thanks to the preparation done by the Secretariat and the Executive Board. Delegates themselves, of course, demonstrated an excellent grasp of international relations and interpersonal skills and the conference was enjoyed by all.

The 4th version of SSN's Annual TechFest ,INVENTE was organised with great fervour and zeal on the 13th and 14th of September 2019. A plethora of technical and non technical events were organised by the IT Department across these two days which brought in participants from various eminent institutions. The theme of Invente in IT Department was Kollywood and all decorations were done with recycled materials to promote environmental well being.

Events:

1.Code Obfuscation and Reverse Coding :

organisers: Preethi L and Ramya S

Candidates were challenged to complicate the codes given. The best obfuscators were selected from the prelims and had to reverse code through the finals. The winning team bagged an internship at Mr. Cooper.

2.WebFX :

Organisers :Gowtham K, Sasidharan SD

WebFX challenged the candidates to show their web tools and designing knowledge , first through a written prelims on 13/9 and then a practical website design finals on 14/9. The winning trio were awarded internships at Agrya Consulting Pvt.Ltd.

3.cryptIT :

Organisers: Sasi kiran, Anirudh

"The best place to hide anything important is in plain sight". The challenge was to find out the messages that were twisted into random letters in the least time possible. The best decrypters selected from a written challenge got to face a decryption coding challenge in the finals.

4. "Who wants to be a Data Scientist?" workshop:

Organisers - Gautham Krishna, Ramkumar

Data , the most important resource in the world needs a few magical skills that can transform it into something invaluable. These skills of Data analytics, Machine Learning and Artificial Intelligence were discussed in-depth in this workshop conducted in collaboration with Hexaware Technologies - One of the most important data giants of the world.
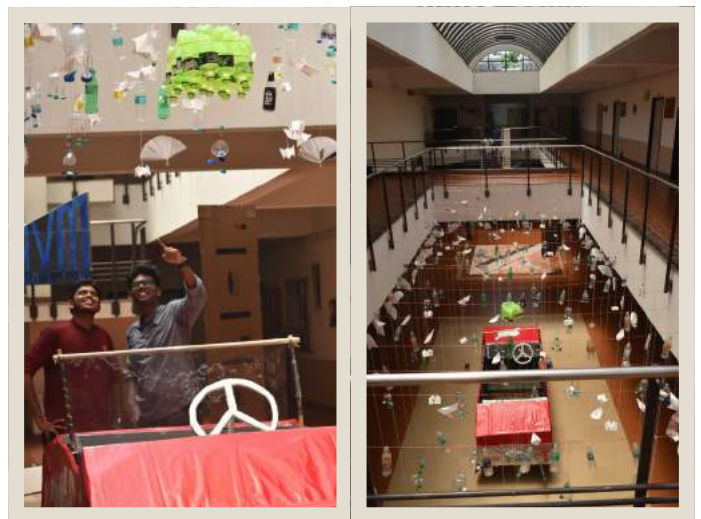
5.Data Request :

Organisers— Ram, Skandh, Rishi

The candidates were tested through a written test on the various data handling tools and concepts and the top emerging Data analysts and AI programmers got to analyze and draw conclusions from a given data set in the finals .

Hired ? | !Hired?

Organisers : Nivedhaa K G, sridevi muraleedhar

Candidates were given an outlook of how placement rounds of various companies are conducted by putting them through 3 rounds of the recruiting process. Best performers on the aptitude test were further filtered in the coding/ group discussion round and then to the HR round. The 'recruited' ones were offered an internship at SPI Edge

7. APPology:

Organisers :B.A Akash, Harini Murali

Our sincere APPologies if you do not know app development. But those who knew it were put to the test first through a pen and paper test, and then through a practical application development challenge on a given topic. The winning team took home exciting prizes.

8.Cup of Code:

Organisers :Kalaimathi A, Padmapriya M, Abishek

Solving problems by code is not everyone's cup of tea! Or cup of code, as the candidates realised. After shortlisting the best candidates from an MCQ test, each team was given 3 problems to solve on the online platform - CodeChef. Winners took home exciting prizes.
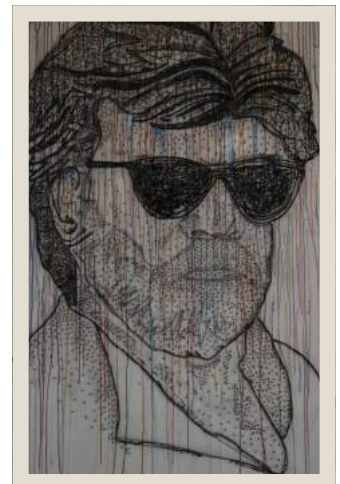
9. Paper Presentation :

Organisers : Ishwarya R, Aishwarya V

Innovative ideas in the fields of AI,ML, Big Data, Quantum Computing, Cyber Security , Speech and Image Processing and many more trending topics. The most creative and innovative ideas were given prizes.

INTERNALLY FUNDED PROJECTS

UG- IFP

Title :People Xploit

Guide: Dr. S.Karthika

Members:

V. Arjun Anand

A.K Buvanasri

R. Meenakshi

III Year

Title :Identification of prosopis julifera by drone images

Guide: Dr. R. Srinivasan
Dr. T. Sreesharmila

Members:

R. Aishwarya Vaikundam

S. Harshini

R. Jothika

II Year

Title : Reel or Real : Credibility checker for online news

Guide: Dr. S.Karthika

Members:

Janice Mariam Jockim

K. Meghana

II Year

Title : M-Shield: Android finder with remote

Guide: Dr. S. Karthika

Members:

A Indira Priyadarshini

Jajula Abhaya Chetna

II Year

Title :Enhanced Battlefield training using VR student team

Guide: Dr. I. Joe Louis Paul
Dr. S. Sasirekha

Members:

T. Dhanwin

R. Janani

N. Meghna

J. Sudhakar

V. Viswesh Iyer

III Year

Title : Ignition Interlocked device for cars to prevent drunken driving

Guide: Ms. R.Swathika
      Ms. N. Radha

Members:

  M. Badri Narayanan
  M. Jithesh Reddy
  V. Madhavan
  M. Amrith

    II Year

Title : Toxic gas detection and alert system for sewage

Guide: Dr. I. Joe Louis Paul
     Dr. S. Sasirekha

Members:

    M. Gopi

    M.K Nivetha

    Irfan Khan

    III Year

Title : Intelligent automatic traffic control system using IoT

Guide: Dr. S. Chitra

Members:

    A. Swathi

  Sruthi Ashok Kumar

    K. Raajalakshmi

    II Year

Title : IoT based road accident tracking and multimedia alerting system

Guide: Dr. E.M Malathy
Mr. R. Vinob Chander

Members:

    T. Aswini

    T. Dharagesh

    S. Divya

    III Year

Title :Smart Surveillance System for Theft Detection in Jewellery shops

Guide: Dr. I. Joe Louis Paul
     Dr. S. Sasirekha

Members:

    Ch. Haindhavi

    M. Vyshnavi

    K. Bhuvana

    II Year

Title : Smart Mirror

Guide: Ms. S. Poornima

Members:

V. Preetha

P. Smithi

II Year

Title : Kylindrometer: LPG Cylinder exhaustion predictor

Guide: Dr. T. SreeSharmila
        Dr. R. Srinivasan

Members:

K.S Arun

A. Arun Laxman

S.A Krithik Sharan

P. Lakshanya

II Year

Title : Speech enabled Smart safety wearable device

Guide: Ms. N. Radha
        Ms. R. Swathika
        Mr. A. Sandana Karuppan

Members:

G. Divyadharshini

M. Deiva Kauvya

III Year

Title :Wireless Object Finder

Guide: Dr. N. Bhalaji

Members:

R. Aravind Angappan

J. Bryan Ronnie

A.H Mohammad Jameel

II Year

FACULTY– IFP

Title : Vision-based hand gesture recognition for educating hearing impaired people

Applicants:

    Ms. J.K Josephine Julina

    Dr. T.Sreesharmila

    Dr. Joseph Gladwin

Fund: Rs. 60,000

Title : Social cyber forensics using OSINT

Applicants:

    Dr. S. Karthika

    Dr. S. Chitra

    Dr. N.Bhalaji

Fund : Rs 5.0 L

Title : Analysis of retinal images and prediction of diabetic retinopathy with image enhancement

Applicants:

    Mr. V.Sivamurugan

    Dr. K.R Uthayan

Fund: Rs. 1.0 L

Title :neXTGeneration learning and resource handling

Applicants:

    Mr. K. Kabilan

    Mr. R. Vinob Chander

    Dr. E. M. Malathy

Fund: Rs. 2.3 L

INTRA-DEPARTMENT EVENTS

PROCODE WORKSHOP

A week long workshop on competitive coding was conducted from 6th to 12th June 2019 by ProCoDe, the coding club of the IT Department. The objective of this week long endeavor was to familiarize the novice coders to the concepts and requirements of competitive programming.

The Competitive programming workshop was conducted under the guidance of Dr. T. Sree Sharmila , by Murugappan , Vignesh , Bhuvanasri, Akshaya and Janani – student volunteers from third and fourth years, IT Department.

A variety of topics were introduced and taught from the basics such as space and time complexity, graphs, recursion, dynamic programming, along with the concepts of sorting, searching and greedy algorithms.

The competitive programming workshop was well attended by students of various eminent institutions like Madras Institute of Technology (MIT) , SRM , SASTRA University, Sri Venkateswara College of Engineering (SVCE), Amrita College of Engineering

along with enthusiastic participants from schools like Chinmaya Vidyalaya.

The volunteers and organizers appreciated the enthusiasm of the audience and ended the workshop with an encouragement to the participants to try out various challenges on coding platforms like HackerRank and CodeChef.

DEPARTMENT ORIENTATION

The second years seated themselves in the IT department seminar hall on 26th June 2019 with a confused look on their faces but nevertheless were happy about the free hour they got. They eagerly waited for the ORIENTATION PROGRAM to begin.

The orientation program was conducted by the HoD and staff members of the department. The HoD welcomed the students and invited them to explore the various avenues of learning in the department.

Following that, the students were introduced to the faculty members. The respective faculty members also acquainted the students to their area of expertise and encouraged the students to feel free to approach them at anytime.

Dr. N. Bhalaji then briefed the gathering about the recent years' placement records of the department and the expectation of the industry. He elaborated on the plenty of internship opportunities available and preparation the students needed to carry out to place themselves in their dream companies. He also talked about plenty of internship opportunities available and how to make best use of them. Students were then addressed on opportunities to pursue higher studies, both in India and abroad. They were briefed on the opportunities and the requirements for the same.

Dr. T. Sreesharmila then introduced the students to the various intra-department student clubs available to nurture their skills and their benefits .Following which Dr. S. Karthika introduced the students to the department's official newsletter,' identITy'.

Dr. R. Srinivasan addressed the students regarding the various research fields the department was working on and how students could apply for Internally funded projects (IFP) provided by the department .This was followed by the 3rd and 4th year students sharing their projects that had been sanctioned.

Later, Mr. A. Sandana Karuppan and Student President, A. Narayanan briefly introduced the students to the "Association of Information Technology" (AIT). They were also given necessary information about the academic design of the course and the Department and Institute rules and regulations regarding academic matters.

The event concluded with a "Senior-Junior Interaction Session" to let the freshers have a candid talk with their final year seniors.

EC COUNCIL WORKSHOP

The EC-Council certification course Certified Secure Computer User (CSCU) was conducted under Cyber Security Working Group (CSWG). It was mentored by Mr. Ashok Kumar Mohan and Ms. R. Sandhya, EC-Council certified trainers. The course covered 10 different security modules related to mobile, cloud, E-mail and social engineering. The certification was successfully completed by 21 students of III year B.Tech and 3 faculty members.

ADHU ENNA PA DESIGN –U

The ProCoDe club of the Department of Information Technology, SSN College of Engineering, organized a design workshop "Adhu Enna Pa Design-u" by Design Baba on 27th August, 2019 from 1:00 - 3:30 pm and was held in the IT seminar hall. A total of 65 second and third year students of the IT department attended the event. The event was coordinated by Dr. T. Sree Sharmila, Associate Professor, IT.

Aashik Joel M, a student of third year IT department handled the workshop. He is a video editor, graphic designer and the founder of Studio AJ - A Chennai based digital production agency. The whole theme of the workshop was structured as "Design Baba" - A spiritual and cosmic approach to introducing design into daily lives. Right from the campaign, promotions, language, content and the slides, everything followed the theme of spiritualism. "Design Baba" - a stage name adopted by Aashik Joel, crowned the theme of spiritualism.

The workshop focused on the general outlook of design and the basics of design and how design is incorporated in human life.

The session was divided into 2 parts - the first one being posters, flyers and general design and the second one being app design and web design. The event started off with the introduction of the speaker. There was a simple self-realization quote to begin the session and went on to the basics of design - WHAT, WHEN, WHERE, WHY and HOW design is crucial in our basic life.

This was followed by the details of design and the basic rules of designing that has to be incorporated was introduced. The nuances of the basic elements of design (formats, layouts, text, content etc) was touched upon.

The UI and UX of Youtube was broken down as parts of design to enhance the understanding of the elements of design.

An activity was given to the students where they were required to team up in pairs and recreate the layout and the format of Youtube in their own style. The activity was done to bring out their creativity and understanding on design. Out of all the teams that participated, the best 2 teams were given prizes to appreciate their efforts.

Activities for self-introspection were also included in between to enhance the experience of the theme : Spiritualism. The session continued with a demo session on making a poster using Adobe Illustrator for SSN Invente by the inputs given by the audience. The event concluded with how design makes a difference.

MACHINE LEARNING WORKSHOP

The two-day workshop on "Machine Learning Techniques for Building Intelligent Systems (MLTBIS)" was conducted by Department of IT, SSN CE, during September 27 & 28, 2019. It was organized by Dr. T. Sree Sharmila , Ms. S. Vidhusha and Ms. J. K. Josephine Julina. This workshop focused mainly on the use of machine learning techniques for image classification, pattern recognition and data science in computer applications. It also focused on mathematical techniques and enlightened the knowledge to develop many complex applications. The sessions were handled by 3 internal speakers from SSN CE and 3 external speakers from different organizations, namely VIT, Mr. Cooper and CTS. A total of 35 participants (10 students, 12 research scholars, and 12 faculty members) participated in the workshop. First day, Dr. R. Srinivasan, Professor , IT Department, gave a brief introductory talk on fundamentals of machine learning techniques and handled a session on entropy based learning.

Dr. Janaki Meena, professor from VIT discussed on some of the applications of machine learning techniques.

Another session was handled by Dr. A. Shahina, Professor, IT Department, who gave a detailed session on deep learning techniques for processing unstructured data. Dr. T. Sree Sharmila, Associate Professor from IT Department handled a session on DNN applications.

The following day, Mr. Srinivasan, Senior Director, Cognizant Technology Solutions, discussed on how to apply ML techniques in creating intelligent systems which gathered a wide response from the audience. Mr. Sankarasetty Lokesh Sai Sri Harsha, Software Engineer, Mr. Cooper gave a talk on Neural Networks. The hands-on sessions were handled by two expert members namely Mr. K. B. Sundhara Kumar and Ms. L. K. Pavithra on Decision Trees and few ML applications.

RESEARCH SCHOLARS' COLLOQUIUM (RSC'19)

Dr. S. Mohanavalli, Dr. S. Chithra, Dr. N. Bhalaji and Dr. S. Karthika, organized Research Scholars' Colloquium (RSC'19) on 21 August 2019 in the department of IT, SSN CE. The scholars were introduced to the applications of IT in Health Care domain by Dr. S. Mohanavalli. The 'discussion on open research issues in the fields of IoT Security was presented by Dr. S. Chithra. The different kinds of distances and their significance in developing research model was interestingly elaborated by Dr. R. Srinivasan.

The ways to demystify journal publications was shown by Dr. N. Bhalaji and Dr. S. Karthika discussed the vital questions to be answered under different sections of a research paper.

There was an interactive session with the participants by Prof. Madhavan Mukund, Chair of Research Board, ACM India Council and Prof. Venkatesh Raman, Vice-President, ACM India Council to identify the research needs of the scholars. Dr. S. Chitra Babu, HoD and Professor, Department of CSE and ACM-W Chair, SSN CE also participated in the discussion.

The event had an active participation from 30+ faculty members and The event had an active participation by 30+ faculty members and research scholars from institutions like CEG Anna University, Sri Sai Ram Engineering College, SRM Institute of Science and Technology, Avinashilingam University, Sree Sastha Institute of Engineering and Technology, Rajalakshmi Engineering College, Annai College of Engineering and Technology, K.Ramakrishna college of engineering and SRM Valliammai Engineering College.

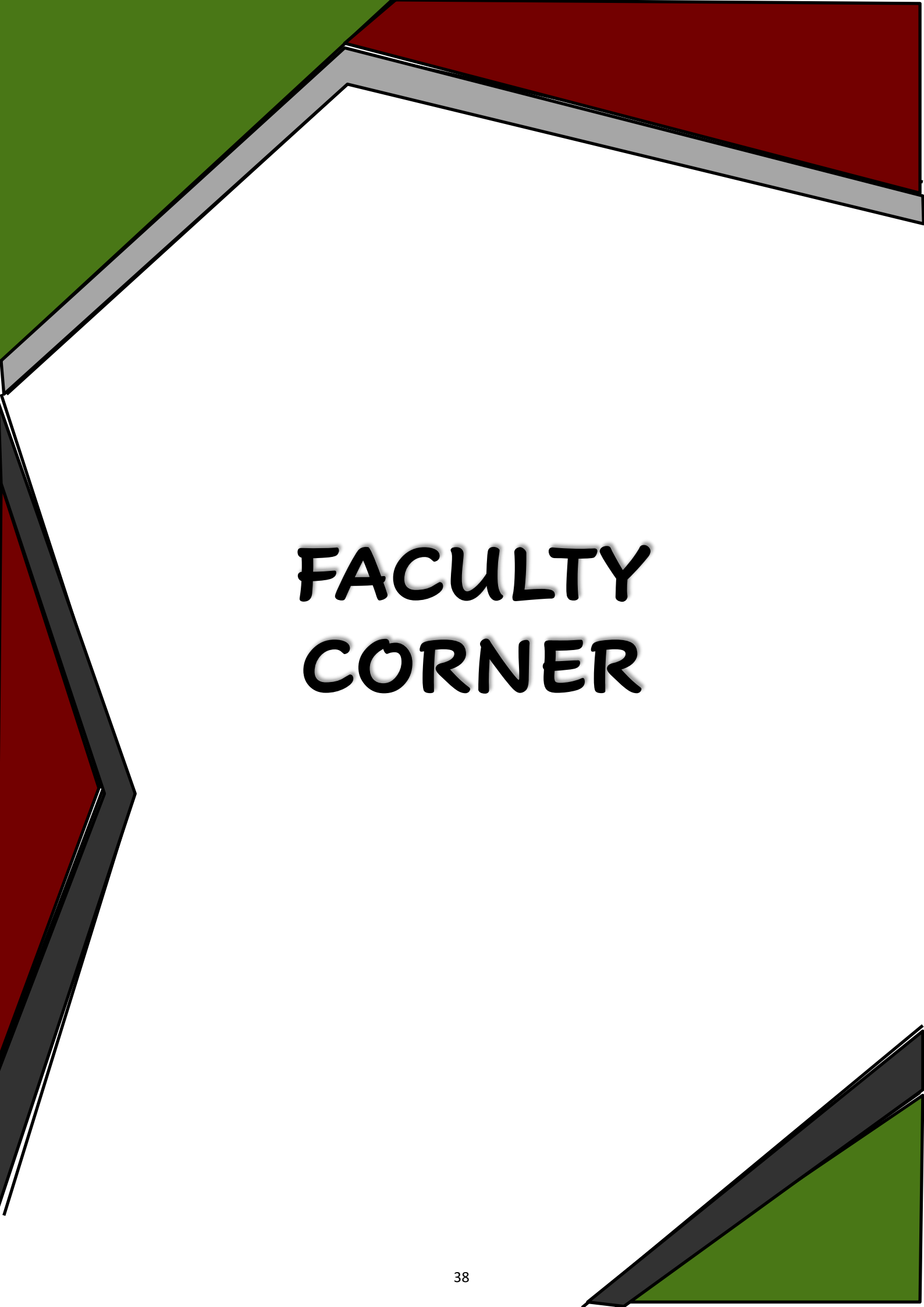# FLASHBACK TO "MALWARES & WHY THEY'RE SO INTERESTING"

A workshop was conducted on the topic of "Malwares and why they're so interesting" in the Department of Information Technology, SSNCE. It started off with the basics of malware. As our world grows increasingly dependent on computers and their applications in various domains, we are forced to reconsider the underlying essence of all computers, and that is to ensure they make our work easier for us.

While it is true, that with the advent of technology, many seemingly impossible milestones have been achieved with relatively fewer resources spent, more valuable resources are being spent on maintaining them. One such domain is cybersecurity. With the increasing number of malware, ransomware, etc. we invest more in defending against such adversaries rather than our prime goal at hand.

Running into the word that starts with mal is a literal sign that something is bad. In general, most experts view the term malware is a contraction of two words — malicious software. And as such, the various types of malwares such as Viruses (System/ Boot Infectors, File infectors, and Macro viruses), Worms, Trojan horses, Rootkits, Ransomware, Keyloggers, Grayware, Adware, and Spyware were explained with several real-world examples of implementations of the same. A brief overview of the notorious WannaCry Ransomware attack was also discussed where one man managed to find the C&C and register the domain in his name which further led to arrests, but that's a whole other story.

Towards the end, several personal security countermeasures were discussed like Canary tokens, VPNs, GreenLock (SSL/TLS), Whonix and QubesOS were discussed to help strengthen the personal security among the attendees. A couple of Udemy courses related to cybersecurity were given for free in the end along with over forty plus Udemy courses and various other resources over 10TB shared till date in a closed group.

FACULTY CORNER

BEST TEACHER AWARD

Two faculty members Dr. T. Sree Sharmila, ASP, IT & Dr. S. Chitra, ASP, IT were awarded the prestigious Best Teacher Award on the Teachers' Day Program.

MoU

As an initiative of Department of IT, SSNCE has signed an MoU with RapidQube Digital Solutions.

VALUE ADDED COURSE

The one credit value added course titled Certified Secure Computer User (CSCU) in collaboration with EC Council has been approved and is planned to be offered for the II year students in the forthcoming semester.

FACULTY CONTRIBUTION TO IEEE SB

Dr. T. Sree Sharmila, ASP, IT, SSN IEEE Student Branch Counsellor has been invited as a pilot coordinator for IEEE YESIST12 2019 Finals at Stanford University, Thailand. She has received "2019 Outstanding Branch Counsellor & Advisor Award" from IEEE Member & Geographic Activities (MGA), USA. She received an award for her outstanding service as Student Branch Counsellor of Sri Sivasubramaniya Nadar College of Engineering during the year 2018 in the annual general body meeting of IEEE at IEEE Madras Section office, Chennai. She also received IEEE Region 10 2019 Outstanding Branch Counsellor & Advisor Award by IEEE MGA. She participated IEEE mini POCO – 2019 at Manakula Vinayagar Institute of Technology, Puducherry organized by IEEE Madras Section.

IEEE Outstanding Branch Counselor and Branch Chapter Advisor Award 2019
Presented to
Dr T Sree Sharmila
Sri Sivasubramaniya Nadar College of Engineering (STB60551)
For demonstrating the Institute's commitment to the educational, personal, professional, and technical development of students in IEEE related fields of interest.
25th October 2019
José M. F. Moura
IEEE President 2019

IEEE Regional Exemplary Student Branch Award
Presented to
Sri Sivasubramaniya Nadar College of Engineering
Madras Section, R10
For exemplary performance as an active IEEE Student Branch offering technical programs, activities, professional networking opportunities that enable members in building critical skills.
25th October 2019
José M. F. Moura
IEEE President 2019

Ph.Ds AWARDED

Mr. M. Kathiravan, Part-time Research Scholar of Dr. N. Bhalaji, ASP, IT, successfully defended his PhD thesis titled "Aspect Level Opinion Mining and Sentiment Classification in Summarization of Quality Services for Cross Domains" on the 17th of June 2019

REVIEWED ARTICLES

1. Dr. N. Bhalaji, ASP, IT, reviewed articles for journals namely IEEE Internet of Things and Arabian journal of Science and Research.
2. Dr. N. Bhalaji, ASP, IT, reviewed articles for 2nd International Conference on Recent Trends in Advanced Computing, to be held in VIT, Chennai.

GUEST LECTURES ORGANIZED

1. Dr. S. Karthika, ASP, organized a talk titled " Use of Technology in Presenting NEWS" under IEEE WIE. The session was handled by Mr. Karki Bava, Journalist, Vikatan and had an active participation of students from different departments.
2. A talk on 'Automating Data Sience with Robots' by Mr. Pablo. Y. Abreu, SVP of Data Science , Socure, New York and Mr. Tom Thimot, CEO, Cocure Inc., New York , was organised by IT Department.
3. A talk on 'Industrial Coding' by Mr. Lordson Jacob , Software Developer, Ajira, was organised by IT Department.

ACHIEVEMENTS

1. Dr. T. Nagarajan, Professor & HoD, Department of IT, has received "Mudhalamaichar Kanini Tamil Virudhu", from the Government of Tamil Nadu, on 20th January 2020 for his research contribution in developing speech technology related software tools for Tamil.

2. Mr. R. Vinob Chander AP,IT attended the "Google Cloud Summit", at Mumbai.

3. Dr. P. Vasuki, ASP, IT, Dr. E. M. Malathy ASP, IT, Dr. T. Shanmugapriya AP,IT, Ms. R. Swathika AP, IT, Ms. N. Radha AP,IT, Mr. A. Sandana Karuppan AP,IT, Mr. V. Arulkumar AP,IT, Ms. S. Uma Maheswari AP, IT, Ms. S. Vidhusha AP, IT, and Ms. J. Sofia Jennifer AP, IT, participated in the faculty training program on "Effective Mentoring".

4. Dr. N. Bhalaji, ASP, IT, attended one day Faculty development program on "Change in Learning Approach" conducted by Cognizant Technology solutions, Chennai.

5. Dr. N. Bhalaji, ASP, IT, has been included as an Editorial board member in Journal of ISMAC.

6. Dr. E. M. Malathy, ASP, IT, participated in One Week FDP on Information Security at IIITDM Kancheepuram.

7. The workshop on "Accreditation" by Dr. Ganesh Shankar Samudra, Professor, NUS, Singapore, was attended by the HoD and the faculty members (Dr. S. Chithra, Dr. S. Karthika, Dr. S. Mohanavalli, Dr. I. Joe Louis Paul, and, Dr. V. Thanikachalam).

7. Mr. R. Vinob Chander, AP, IT, designed, developed, and deployed his secure personal website https://abpv.in using open-source technologies

8. Dr. N. Bhalaji, ASP, IT acted as a resource person for 5 Days - Faculty Development Program titled "Blockchain and Beyond" held at SRMIST, Vadapalani campus.

9. Dr. N. Bhalaji, ASP, IT acted as an External examiner for PhD Viva-voce examination of a candidate at Department of CSE, School of engineering, VELS University, Chennai

10. Dr.N.Bhalaji, ASP, IT acted as an External Academic Audit member and audited the Department of CSE, School of engineering, VELS University, Chennai.

11. Dr. N. Bhalaji, ASP, IT, acted as a Resource person for a National level workshop on Block-chain applications held at Anna adarsh College, Chennai

12. Dr. S. Karthika, ASP, IT, attended One-day Certification Workshop on Cyber Security conducted by eWiT in collaboration with ISACA Chennai Chapter and STPI at STPI, Taramani, Chennai.

PUBLICATIONS

1. Dr. N. Bhalaji, ASP, IT and Mr. S. Venkatesh (Part - time External Scholar) published an article titled "Enhanced analysis of border surveillance using intruders' crossing strategies"; in Soft computing, Springer. [IF =2.74].

2. Dr. P. Vasuki, ASP, IT and Divya Bharathi published a paper titled "Speech Emotion Recognition based on Gender Influence in Emotional Expression" (200518-072454), in IJIIT: Volume 15, Issue 4, Article 2.

3. Mr. V. Arulkumar, AP, IT, and Dr. N. Bhalaji, ASP, IT published a paper titled "Load balancing in cloud computing using water wave algorithm" in Concurrency and Computation Practice and Experience Wiley Publication (Scopus IF(1.164))

4. Mr. V. Arulkumar, AP, IT, and Dr. N. Bhalaji, ASP, IT published a paper titled "Resource scheduling algorithms in Cloud computing environment: A Literature Survey" in Springer Lecturer notes in Networks and Systems published by Springer publisher.

5. Dr. T. Sree Sharmila, ASP, IT published an article titled "Direction invariant binary pattern encoded descriptor for texture classification and retrieval," J. Electron Imaging 28(5), 053013 (2019 doi:10.1117/1.JEI.28.5.053013.

6. Ms. J. K. Josephine Julina, AP, IT, Dr. T. Sree Sharmila ASP, IT and Dr. S. Joseph Gladwin ASP, ECE presented the paper titled "Vehicle speed detection system using motion vector interpolation", in IEEE Global Conference for Advancement in Technology (GCAT-2019),co sponsored by IEEE Bangalore Section, organized by Nagarjuna College of Engineering and Technology (NCET), Bengaluru, Karnataka.

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7. Ms. Vidhusha S, AP, IT, has published the paper titled "Influence of Primary Auditory Cortex in the Characterization of Autism Spectrum in Young Adults using Brain Connectivity Parameters and Deep Belief Networks: AnfMRI study", Current Medical Imaging (2019) 15: 1.

https://doi.org/10.2174/1573405615666191111142039.

8. Dr. S. Poornima, ASP, IT and Dr. N. Sripriya, ASP, IT, presented a paper titled, "Classification of Gender from Face Images and Voice" in the 3rd International Conference on Big Data and Cloud Computing organized by Department of Computer Science and Engineering, Karunya Institute of Technology and Sciences and received best paper award.

9. Mr. Arulkumar V and Dr. N. Bhalaji published a paper titled "Performance Analysis of Nature Inspired Load balancing Algorithm in Cloud Environment" in Journal of Ambient Intelligence and Humanized computing, DOI: 10.1007/s12652-019-01655- x, Dec 2019 Springer Publications. (IF:1.910).

10. Ms. N. Radha, AP, IT, and Dr. A. Shahina, Professor, IT, presented a paper titled "Visual Speech Recognition using fusion of Motion and Geometric Features", in the Third International Conference on Computing and Network Communications (CoCoNet'19) held at Indian Institute of Information Technology and Managment-Kerala (IIITM-K), Trivandrum, Kerala, India. The Conference Proceedings published by Elsevier:Procedia Computer Journal (Scopus Indexed).

GUEST LECTURES DELIVERED

1. Mr. R. Vinob Chander, AP, IT, gave a talk along with demo on "Introduction to Kubernetes", at Navis, Chennai.
2. Dr. R. Srinivasan, Prof, IT, gave a talk titled "Entropy-based Machine Learning" in the Workshop on Machine Learning conducted at SRM University.
3. Dr. N. Sripriya, ASP, IT delivered a guest lecture on "Data Warehousing and Data Mining" in S. A. Engineering College Thiruverkadu, Chennai –600 077.
4. Dr. T. Sree Sharmila, ASP, IT delivered a talk on "Best practices of conference organization" in Technical Co-Sponsor & Conference Organiser (TCS-CO) meet conducted by IEEE Madras Section at Alumni Centre, Anna University Campus, Chennai - 600025.
5. Dr. N. Bhalaji, ASP, IT handled a Session on "Exploring Cryptocurrencies in Academic Perspective" in National Workshop on Smart Contracts for Cyber Security Systems using Blockchain Technologies, held at School of CSE, SRM Institute of Science and Technology, Chennai
6. Dr. I. Joe Louis Paul, ASP,IT delivered an invited talk on "Particle Swarm Optimization: Basic Concepts, Variants and Applications" in AICTE Sponsored Faculty Development Program on "Soft Computing Techniques and Its Applications" conducted by the Department of Electronics and Communication Engineering, organized by Anand Institute of Higher Technology, Chennai.

8. Dr. S. Mohanavalli, ASP, IT has delivered a talk on "Unsupervised Learning" in an AICTE Sponsored 2 weeks FDP on "Artificial Intelligence & Advanced Machine Learning Using Data Science" between 22nd Nov and 5th Dec, 2019 jointly organized by the Department of CSE & IT, S.A. Engineering College.

9. Dr. S. Karthika, ASP, IT, has delivered a talk tilted "Community Mining in SNA" in DCSE, CEG, Anna University for the AICTE Sponsored STTP on Social Network Analysis.

10. Dr. N. Sripriya, ASP, IT, has delivered a talk on "Introduction to Deep Learning and Convolutional Neural Networks" in an AICTE Sponsored 2 weeks FDP on "Artificial Intelligence & Advanced Machine Learning Using Data Science" between 22nd Nov and 5th Dec, 2019 jointly organized by the Department of CSE & IT, S.A. Engineering College.

11. Dr. S. Karthika, ASP, IT, has delivered a talk titled "Social Engineering" in National Power Training Institute, Bengaluru for the AICTE–ATAL academy Sponsored Programme on Cyber Security.

STUDENT ACHIEVEMENTS

SUSHMITA RAJTILAK - IV YEAR

- Recipient of **Natya Poorna Award**— Bharatakalanjali Institution
- Recipient of **Yuva Shri Kala Bharathi award**— Cognizant Technology Solutions Inter-college Student club
- Recipient of **Swami Vivekanand Award**– Bharati Yuva Kendra Trust
- Recipient of **Guru Periya Sharadha Kalakshetra Endowment Award** from YCPA Sri Krishna Gana Sabha Trust
- Recipient of **Star Performer Award** (May) from Cognizant Technology Solutions Inter - College Student Club

AASHIK JOEL M - III YEAR

- **Headed Customer Experience and Design** (Digital Video Production) at TEDx Chennai
- Part of **Organising team at Ink Salon**, Chennai
- Conducted **"Design Baba" workshop** in SSNCE

PRIYADHARSHINI R - III YEAR

- Selected as a part of **Anna University Badminton team** for 2 years
- Part of **winning badminton team at national intercollege match,** BITS Hyderabad
- Part of **winning badminton team at Kumaraguru Trophy**,
- Coimbatore
- Runners up in badminton at Intercollege zonals , 2019
- Won **3rd place in badminton , SSN Trophy**
- Part of **Winning badminton team at SASTRA Trophy**, Thanjavur
- Part of **Winning badminton team at PITS Trophy**

ALUMNI CORNER

ALUMNI TALK SERIES REPORT

The Alumni Association of the Department of IT conducted a "Three day Alumni Talk series" on 30.8.19 , 03.9.19 and 04.9.19. Three alumni were invited for the event. They interacted with the students and solved their queries. The talk was focused on the current state of technical field in industry, Higher education opportunities and their college experience. All the alumni had a good time interacting with the faculties and the students.

The alumni talk series was kickstarted by Ms.Akshara by giving an interesting talk on "Higher Education Opportunities". She is currently a Senior Business Analyst, S&M, Cognizant Digital Business. She also interned in L 'Oreal ndia. She has also completed her MBA in IIM Indore. In her talk she explained her strategies to prepare for the CAT exam and how to manage things in an easier way .She also explained the career opportunities after MBA and gave a list of institutions and how to apply to them. Through this session the students got a brief idea about MBA.

Next day, the talk was on "Data Science" by Mr.Sundaharakumar Balasubramanian. He is currently working as an Assistant Professor in SSN School of Advanced Career Education. His talk focused on the fundamentals of Data Science where he explained what it actually means and the career opportunities in this field. This talk was an eye opener for students who wanted to pursue their career in data science.

The last talk of the series was on "Cloud Computing and Big Data Analytics" which was given by Mr.Nithish Kumar. He is currently working as a Senior Consultant at Thought Works. He has also pursued his Masters in Big Data Management And Analytics from Universite libre de Bruxelles. In his talk he explained about Cloud Computing and Big Data Analytics and their importance in this era of technology. He also spoke about career options and the list of universities which are best for pursuing higher education in this field. The talk was very constructive and insightful.

This talk series would not have been possible without Alumni Faculty Coordinators Dr. P. Vasuki and Dr. N. Bhalaji who were actively involved in organizing and conducting this informational Alumni Talk Series.

– K R Kavya

TIME

 College was the time of our lives. It was the gateway to the rest of our lives, and for most of us, it provided the first real glimpse of what to expect from life.

I know that by this time of the year, the third and fourth year students would feel like they do not have enough time, and the first and second years would feel like they have all the time in the world. To those who ask "where do I get more time?", the simple answer is, you won't. You just have to start where you stand, and work with whatever tools you have. Better tools will come along the way. To those who say "but I have all the time in the world", the simple reply is, you don't. I spent most of my young adult life postponing many of the small things that I knew would make me happy and help me achieve my goals, until one day when I   realized that I would never have time later, unless I made the time.

The takeaway is that the time is never "too late". I can insert a thousand procrastination quotes (which will all sound clichéd at this point) here, but the surprising thing is, they will all be true at the end of the day. Have an assignment due? Just get it done. Want to play sports? Join the college teams and attend the practice sessions. Would like to improve your skill set? Take a course online! Extracurricular activities? Join the various clubs. Have something nagging at the back of your mind? Call your friends. Like a wise man with a long white beard once said, "All we have to decide is what to do with the time given to us."

I once read that, "when the dust settles, those are the only things that you'll have with you". Don't hold back. Be bold, be open, be inquisitive, be yourself. Ask doubts, make mistakes, experiment. Now is the time, because college is where you have the liberty to do all these things. Most importantly, work hard. Do not focus on what others want for themselves or for you.

Work for what you want, and only that and give it all you have got. No matter the result, the effort that you have put will always yield something fruitful. Do not dread the outcome or blame the circumstances. Take everything life has to throw at you in your stride, for another wise man with a long white beard said : "It does not do to dwell on your dreams, and forget to live."

In fact, the coming years might be the best that SSN has yet to offer its students, with all the new developments surrounding our college. You will be exposed to the best and the latest that the world has to offer, with all the new infrastructure, curriculum, and study material. Utilize this opportunity, and use this as your platform to achieve all that you want.

SSN has proved to be an excellent launch pad for people with great ambition, and know that coming this far has already put you on the right course to have a bright future. Now it's in your hands to steer the ship the way you want.

S. Nitheesh Prabu

(2019 batch)

HOW I FELL IN LOVE WITH OUTSKIRTS OF CHENNAI

As of November 2019, I have cycled 8000 kilometers in 3 years. My daily target varies from 15 to 25 km and 40+ kms on the weekends. Although it seems to be a small ride for cyclists who ride 100+ kilometers on weekends, believe me short rides around the outskirts of your city are worth every day. I do get occasional rest during the weekdays due to late night office works, still I make it a point to get on the cycle just to fall in love with the nature's visual treat. I call it a "PERFECT morning" only if I have completed a ride.

I live in Pattabiram, one of the suburban outskirts of Chennai city. This place is geographically well placed with a big city on the east and villages or small towns in its north, west and south. However, in the next 2–3 years, I am afraid that the city would extend eating up all villages in and around this region.

We all love to travel to far away destinations by packing our backpacks, don't we? The question here is how many of you have explored your *neighborhood?* We may look for relaxation by travelling to hill stations, remote forests etc., but trust me small rides to nearby towns and villages can help you to get refreshed every day.

Photographs taken during the ride are my driving source of motivation. Yesterday's memory becomes tomorrow's inspiration. Look what I found in the outskirts of Chennai.

Look what I found in the outskirts of Chennai.

If you are already living in a small town or village, walk around to spot what captures your love and if you are living in big cities like Chennai, Mumbai or Bangalore, it's high time to explore what is in its rural regions. Consider a cycle ride, as car and bikes may fail to click the nature views against its speed.

This is my neighborhood story, yours might be more beautiful than this. Explore!

Nijin Vinodan
(2013 Batch)

BENEFITS OF AI IN HEALTH CARE INDUSTRY

Artificial intelligence (AI) is propelling the technological world today. AI is the decision-making system which makes a cognitive decision based on the available data, analyzing the past decision made and making a decision associated with the human minds in real time. The best example for AI is the self-driven car can be seen commonly in Silicon Valley in the USA.

How does Artificial Intelligence help Healthcare Industry?

In the USA, the health care accounts for $3.3 trillion dollar of Country's Gross Domestic Product (GDP) as per 2018 statistics. Defensive medicine contributes significant number in this expenditure. Defensive medicine means unnecessary hospitalizations, tests, invasive procedures, drug prescriptions etc. performed by the physicians and hospital to safeguard themselves from patients suing against them for presumed medical error. In 2018, it costs around $45 Billion dollars.

An AI system can provide personalized patient care by analyzing the past record of the patient and extracts useful information from a large patient population to assist making real-time inferences for health risk alert and health outcome prediction. It can assist physicians by providing up-to-date medical information from journals, textbooks and clinical practices to inform proper patient care. Thus AI system can help reduce the defensive medicine practice all over the world considerably.

How Artificial Intelligence works in Healthcare Industry?

AI system uses machine learning (ML) techniques that analyze structured data such as imaging, genetic and electrophysiological data. In medical applications, the ML procedures attempt to cluster patients' traits, or infer the probability of the disease outcomes. AI system also uses natural language processing (NLP) methods that extract information from unstructured data such as clinical notes/ medical journals to supplement and enrich structured medical data.

Benefits of Artificial Intelligence in Healthcare Industry?

The next generation of radiology tool will combine MRI machines, CT scanners and x-rays tools and using Artificial Intelligence, it can assist Physicians in determining the diagnosis to cure the patients. It could help mitigate the impacts of severe deficit of qualified clinical staff by taking over some of the diagnostic duties typically allocated to humans in the developing nations. AI can detect Tuberculosis better than humans using chest x-ray. Electronic health record (EHR) data can help identify infection patterns and highlight patients at risk before they begin to show symptoms. Leveraging machine learning and AI tools to drive these analytics can enhance their accuracy and create faster, more accurate alerts for healthcare providers. Artificial intelligence will provide much of the bedrock for that evolution by powering predictive analytics and clinical decision support tools that clue providers in to problems long before they might otherwise recognize the need to act. AI can provide earlier warnings for conditions like seizures or sepsis, which often require intensive analysis of highly complex datasets.

Challenges in Implementing Artificial Intelligence on Health Care in developing nations

In developing nations, the infrastructure for the basic needs has not reached to every corner of the country. AI requires clinical data to support the decision making for the patient's care. The health records are stored vastly in paper which is a major challenge to implement Artificial Intelligence on HealthCare for the developing nations. The government needs to step up in implementing the common format to store the Electronic Health Records of patients and the data are stored in a secured environment.

Nesamani Paulraj

(2008 Batch)

STUDENT VISITS

CTS INDUSTRIAL VISIT

The industrial visit to Cognizant Technology Solutions was organized by Ms. J.K. Josephine Julina on 24ᵗʰ August 2019, for the third year students of the Department of Information Technology. The purpose of the visit was to gain insight into the software engineering methodologies in an engineering perspective.

The session was handled by Mr. Anand from the HR team, CTS. A total number of 70 students and two faculty members Ms. J. K. Josephine Julina and Ms. J. Sofia Jennifer attended the visit.

A brief introductory presentation about the CTS working culture was shown to students. The students were then divided into different teams where each one of them has been assigned with a set of tasks, namely UI design, bug identification, prototype modeling, technical debate, and team play. The students performed really well and their participation seems to be very encouraging. The pros and cons of their performance were discussed which highlighted the importance of use case and activity diagrams in UI design focus on technical issues while identifying bugs, the importance of prototype modeling and team co-ordination.

VISIT TO SRIHARIKOTA

SSN College of Engineering organized a one-day trip to visit Satish Dhawan Space Centre, Sriharikota. Around 10 students from IT department and a total of 100 students from the institution were taken for the trip and were accompanied by a faculty member from each department.

The onward journey to SDSC started from SSN campus at 6 am. On arriving at SDSC at around 9:30 am and after going through a few checks, the students and faculty were taken into the lush green premises of the Satish Dhawan Space Centre. A personnel from the Space Centre accompanied the students as tour guide for the day.

The students were first shown the Mission Control Room(MCR) , where all the final checks are done and the countdown for the launch takes place. The duty of each person in the MCR was explained to the students and a short clip of the Chandrayaan 2 launch was shown on the big screen of the MCR .

The students and the faculty were then taken to the Universal Launchpad at the Space Centre. Many significant details about the launchpad such as its load capacity, working, features etc. were explained in detail.

Next, the PSLV launch pad or "golden launchpad" as it is called at ISRO, was shown and the credit for its name was given to the high number of successful launches of the PSLV rocket. Such a close view and knowledge of the launch pads was a new experience for the students and faculty alike.

The students were also taken on a tour of the communication and telemetry center where they got to know and see the servers and antennas for sending , receiving and processing information to the satellite in space.

After having lunch at the premises, the tour group was shown around the space museum and parks which contained models of different rockets launched by ISRO over time. By late afternoon, the students and faculty took leave of the facility and returned to Chennai.

The journey to SDSC was an engrossing and informative experience and students learnt a lot about the space journey of our country through this trip.

A DETOUR FROM SSN

The students of 3rd year , IT department went on a 3 day tour to Munnar, Cherai and Kochi from the evening of 27th September to the morning of 1st October 2019.

The trip was coordinated by Jamal and Akshay of IT A and their team, who left no stone unturned in their efforts to make the trip a success. The students were accompanied by Mr.Kabilan, Asst. Professor and Mr. Guru of IT Department.

The onward bus journey to Munnar commenced in the evening of 27th September. The journey was filled with light hearted moments of dance and music. The tour group reached Munnar by afternoon the following day and they were greeted with a half a kilometer trek downhill to the resort.

After refreshments, the students assembled for a trek downhill to a waterfall, which was led by the guides from the resort , 'Spice Jungle'. The sign of expended efforts vanished at the sight of the roaring waterfall 4 kilometers down the hill. The lush greenery and the gurgling water connected everyone to essence of nature's beauty and rejuvenated everyone for the trek back uphill.

The day came to an end with a campfire which became much more enjoyable due to light hearted campfire dances by the students.
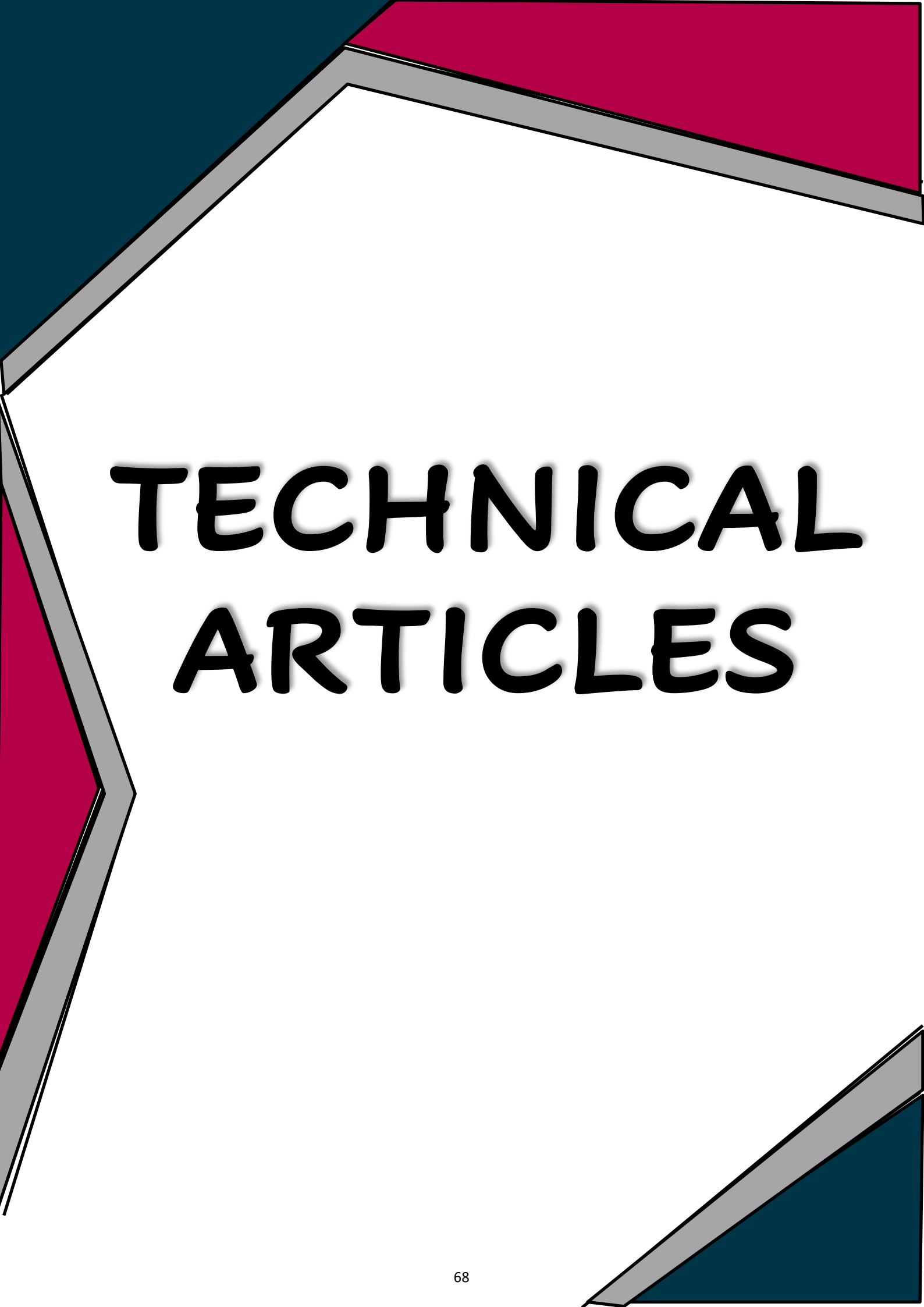
The day of 28th   September brought forth new experiences for the students on the tour as they travelled to the coastal district of Cherai. The resort was much appreciated by the students for the peaceful, green environment and mainly for the beach which was close by. The evening was spent exploring the beach and the neighboring areas.

29th September took the travel team to the sea lined district of Kochi. A cruise boat was organized where students were sailed into and given a glimpse of the massive Arabian Sea. Food and fun activities were organized on the boat to add on to the excitement of being out in the sea.

The last stop of the trip was the Lulu Mall in Kochi. After a couple of hours shopping and exploring, the travel party set its way back home and reached Chennai in the afternoon, the following day. On the whole, the trip was a relaxing and refreshing break from the daily routine and perfectly followed the expectations set which were 'azhaga' , 'alava', 'sirappa'.

TECHNICAL ARTICLES

CYBERSECURITY
Why you should consider it

Cybersecurity, Ethical hacking, Penetration testing, Security operations centre, Incident response and Malware analysis. Does all of this sound cool to you? And if you don't want to be like every other Engineering Indian student I.e. learning competitive programming and solving problems on hacker rank for ages, then you're in the right spot.

I never really had a thing for writing programs and building applications. And while all of my colleagues were off coding and training machine learning models (which I still don't understand why), I was sitting there in the corner of the classroom thinking what to do with my life besides biriyani. That's when I came across cybersecurity. Ever since childhood, Hackers fascinated me. So I decided to become one. Ethically. Not the guy behind bars.

While others code and build things that work, I break the very same things that work and prove that they don't work. I've isolated malware samples within virtual machines and watched them do their dirty work while I carefully observe them to find any way to reverse engineer them. That's the challenge in security. You must have the courage to tread the road less travelled by (get that Robert Frost reference? No?).

So how do you pave your way into security? It's simple. The core concepts of cybersecurity are Networks (That paper from which all you probably remember is the OSI network model), Operating systems and a little bit of basic Computer (GEEK) skills.

The predicted global shortfall for cybersecurity jobs by 2021 is a whopping 3.5 million (according to Cybersecurity Ventures). Clearly, the industry has a massive problem regarding supply and demand. So will you take up the call for hacking and become one of India's greatest ethical hackers? Or sit behind a desk and code your way to the grave? Your call.

- RIYAZ AHMED

IV YEAR

AngelHack Global Virtual Hackathon

The AngelHack Global Hackathon is a series of in-person events across various cities and ends with a global virtual hackathon where teams from all over the world can submit their projects and participate. This was the first edition of the Global Virtual Hackathon and there were 3 main challenges at the event. The AngelHack prize, the AWS Challenge and the IBM Challenge. We focused on the AngelHack prize and the AWS Challenge.

The event ran for a month and we had to hand in our submissions on July 1st. The event had webinars teaching us how to pitch our product and such. In this duration we built an app that uses a novel labelling system to detect pills from pill bottles and reminds visually impaired and old patients to have their medicines at the right time. The app was connected with Alexa and we also implemented a feature for the patient to video call the doctor when needed. In this video call, we implemented a feature where the doctor gets information about the patient's heartbeat just from his/her face, replicating a CSAIL MIT paper for the same.

The AngelHack prize consisted of 1 grand prize and regional prizes, the regions being China/EPAC, MENA region, The Americas and the Indian Subcontinent. We are proud to say that we were placed first in the Indian Subcontinent.

We were also able to bag the Runner Up position and the AWS Global Challenge as we built an app that was end to end connected with Amazon Alexa and used various other Amazon services. As part of this award, we received 4000$ AWS credit and 5 Limited Edition Mechanical Keyboards from AWS.

Our team of 5 comprising of students from IT and CSE departments also received an invite to join the Hackcelerator program, where we will be receiving 1:1 mentorship from Silicon Valley Gurus and other businessmen, to take our project to the next level and possibly into implementation.

- SRINATH V

III YEAR

Common Sense
In AI

We might all know well that, the main aim of Artificial Intelligence is to emulate the functioning of the human brain. The AI model receives inputs through its various sensors which is analogous to our brain receiving input through five bodily senses. Then, the AI model makes a decision accordingly. But, this is where it differs from the human brain.

We humans have another factor that weighs on our decision making which is our inherent intelligence/logical deduction which we call common sense in layman terms. For example, if you say 'a bat ate a fly', it is common sense to assume that the bat is an animal. But something which is so easy for us might not be so easy for the AI model. The software also considers the possibilities that the bat might refer to the inanimate club, which is not likely. Another aspect of common sense would be under-standing references or hints. Google Translate may not understand the context of our sentence which wouldn't be a problem for a human translator.

Thus, many studies are being carried out to improve the perceptiveness or Common sense quotient of the AI model. But it isn't that easy to gather such huge data especially the one which is not mentioned explicitly but is gathered from assumptions and deductions.
Dr. Douglas Lenat from Stanford university has employed immense manpower and time to create a knowledge base called Cyc. This base contains all the implicit assumptions on how the world works and can be used in any AI model to provide logical skills to the AI brain. Also, a team of researchers from MIT have come up with a knowledge base called ConceptNet which uses the concepts of graph theory to express the relations in the sentence. Do refer to the link at the end of the article for more information .

The basic step being taken in this field is to identify the relationships between the objects in sentences as 'Is-A', 'Has-A' or one among the 21 language independent relations.

Common Sense reasoning will be of a great value in Smart Systems, such has Smart Homes. With the use of such advanced AI, more livelier interactions can be carried out. CSR may also be of help for the disabled who need a personal assistant in their day to day jobs.

CSR in AI is also beneficial for a social cause as it helps identify cases of bullying on social media. Understanding the implication of normal sentences on different sections of the society may help the software identify cases of harassment with greater precision.

Common sense in AI reduces the differences between human and machine and gives an enhanced personalised experience and a relatively 'human' companion to interact with.

https://www.youtube.com/watch?v=2w_ekB08ohU
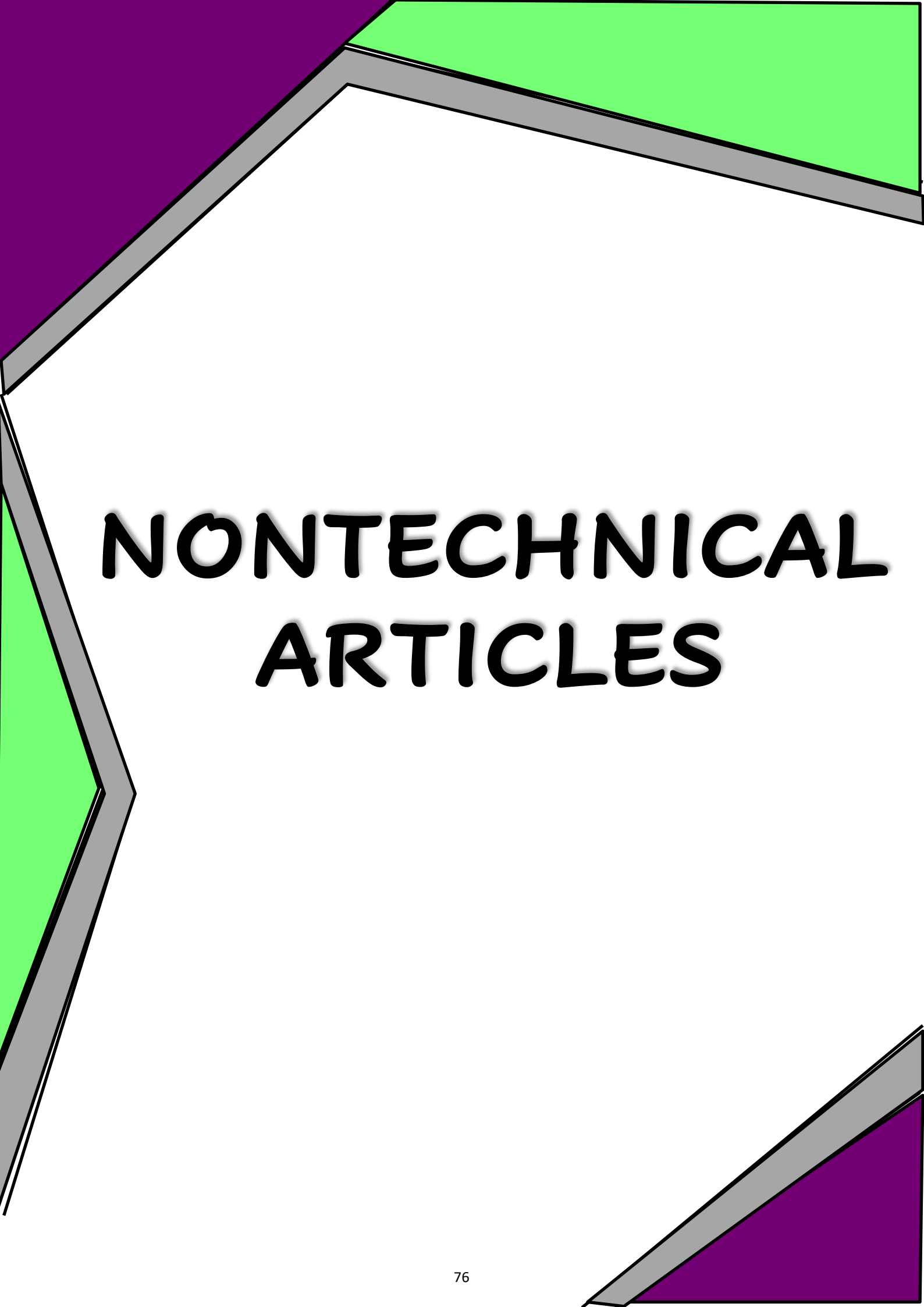
-SOWMYA K

III YEAR

The Smart Decade
2010-2019

It is difficult to find one particular thing that binds an entire decade together but fret not as we have a single artefact called smartphone that binds us. Until 2010s, cell phones were just used to make calls and send texts. It was only after internet gained momentum that phone became a digital truck loaded with different apps. Gone or almost gone are physical things like cameras, torch, alarm clock and music players. Our smartphones are filled with all of that and much more. We can easily buy things online, navigate our way, build connections, learn online, create content, track our physical activities, calories consumed and what not. It is then no surprise that the average number of days in a year that Indians spend on their phones is 75 days. In this country when most people can't afford cameras and video players, mobiles have brought another kind of mobility. Everything our smartphones have touched, they have changed. One cannot forget all the gifs and memes that involves another type of creativity. Like they say, everything comes with a price , there are some downsides to this model. While social media has connected us, it has given rise to fake news, misinformation and has exponentially boosted the capacity to protest. Governments , including our own , now uses internet blackouts to repress discontent. Kodak, the photo company which invented the digital camera, once employed 140,000 people but shut down in 2012 as technology displaced human labour. The smartphone has brought breakneck transformation but has subtly crept upon us. New marvels have been rapidly absorbed and new anxieties are being grappled with. To look back at this decade is to realize how much it has shaped our societies and psyches . It is no longer about euphoria or backlash - it is time to accept that we have incorporated this technology into our lives.

-PRIYANKA SRIVASTAVA

III YEAR

NONTECHNICAL ARTICLES

TOP 3 CLUB FOOTBALL MATCHES OF THIS DECADE

Football never ceases to surprise us. The beautiful game is not just any another ball game but it truly is a different ball game altogether. The game over the course of time has never failed to flummox us with its unpredictability , after all the one thing that is predictable about this game is its unpredictability . People say that some results were just fortuitous rather than calling it a well executed plan , well I like to call it sorcery because who doesn't like a good fairy tale ? Today I bring to you 3 such matches of this decade that are too far-fetched to be true , yet are the reality . Predictably unpredictable !

3) **ROMA DEFIES REALITY**

When you think of Rome , what is the first thing that comes to your mind ? The ruins , the colosseum ,the bad-blood between Romans and Greeks , the history ! Well what if I said that a Greek helped Romans to overcome one of the world's Impossible task ? You wouldn't believe it right ? But what if I told you it is very much possible and in fact happened once , not a long back ago, just a couple of years ago ! The second leg of Champions League game between AS Roma and Barcelona at the Stadio Olympico was a proof of everything that I have spoken till now. Roma rose from their ruins in a historic night as they achieved the unthinkable by defeating Barcelona 3-0 . Peter Drury provides more than enough evidence when he says "It's the Greek god in Rome" to suggest what unfurled in front of our eyes was nothing short of a once in an aeon event . Roma had defied all the plausible outcomes of the game and went on to write a script of their own and there was nothing that Barcelona or even Messi himself could have done about it . The footballing juggernauts were left defeated by the son of LEONIDAS and the descendants of THE GREAT AUGUSTUS. Quite a story isn't it!

2) **Trent Alexander Arnold to Trent Assiduous Arnold**

Barcelona can't be defeated with Leo Messi playing for them but 'Anfield can make miracles happen' . This is certainly not an overstatement and anyone who believes it ,is nothing less than a passive viewer of the game. When Anfield sings 'You'll never walk alone' in its full tilt , you better put aside even the tiniest bit of complacency that you carry and take them seriously because they surely can wreak havoc at the Anfield . Once Liverpool gets started then there is no stopping them at the Anfield! Liverpool were up against a start studded Barcelona and they were certainly without their star man Mohammed Salah who could dazzle his way through any defence and score a goal or two for you . But only the god could tell if that was for the better sake of Liverpool or not ! Certainly it was not going to be a walk on the cake for either of the teams as there was one team with nothing to lose and the other had their pride and respect on the line . Liverpool were commanding the pace of the game from the very beginning of it and entered the half time with a slender one goal lead in the match. The super-sub Gini scores 2 beauties before Trent and Origi combine for what could arguably be the best goal from a corner kick ever The flowing emotions of the supporters and the desire of Klopp's men to prove a point , all in the Anfield crucible gave birth to one of the most historic nights in the history of football.

1) **Agueroooooooooooooooooooooooo**

If there was one match that if you asked me would be a befitting example to the phrase "Before a period of ecstasy if it is to come ,then there must be a period of agony" , then it would be the Man City vs QPR match of 2011/2012. QPR were 10 men down. It was a game and a title Man City's to lose. Man Utd scored their goal against Sunderland and were comfortably leading their game . The teams were tied on points and city led on goal difference.

City started looking sloppy and gave away the ball a few times and then came the moment of reckoning , QPR scored a goal and led city by 2-1 . The play entered the extra time or 'The Fergie time' and QPR conceded a corner . It was a towering header from Edin Dzeko and the ball finds the back of the net . Deep into the extra time Man city gain possession and the ball comes to Aguero who then passes it to Balotelli and makes a forward run to the right immediately . He is pressured by QPR players who almost falls down but makes an accurate pass to Aguero on the right side which takes the ball away from all the QPR defenders except for one. In pursuit to try and stop Aguero from reaching the ball the defender tried slide tackling him, but Aguero avoids the tackle and pulls back his right foot , generates all the power he could and releases it on ball which then sizzles past the keeper into the back of the net . Martin Tyler screams with every ounce of voice left in his throat , "Aguerooooooooooooooooo" . Man City win their first trophy after 44 years of wait and what a way to bring it up   .It was all in all an unreleased Hollywood feature film   in   its own .

– RONAK AGARWAL

III YEAR

VENTURING INTO VACUUM

Of all the exotic, horrible, and totally awesome ways to die that science fiction writers have dreamed up, some of the coolest involve being exposed to the vacuum of space. On the page or on the screen, you've seen it described somewhere. A spacesuit leaks or a ship's hull breaches, and suddenly some unwitting astronaut is frozen solid or their blood's boiling or they just start convulsing and screaming until their head explodes. Totally fun to watch, but is that what would really happen?

Well, there have in fact been plenty of studies and tests and, yes, even a few near-misses with real-life astronauts to give us a sense of what would happen. And it's not what you might think.

First, you wouldn't explode. This was a popular theory for awhile because our bodies exert internal pressure to counteract the atmospheric pressure that's exerted on us from the outside. But in space, this pressure would be well contained by your connective tissue and your skin. As long as those things remained intact, the rest of you would too.

Another scenario is that your blood would boil. Now sci-fi writers thought this up because the lower the air pressure gets, the lower a liquid's boiling point is. So in space, where there's no pressure at all, most liquids as we know them would boil instantly. But if your live body was floating around in space, your blood would not boil because, again, it's part of an enclosed system in this case, your circulatory system so it wouldn't be directly exposed to the vacuum, it would be subjected to your body's same internal pressure.

So what about freezing to death? At first blush, this makes sense because the universe is like the coldest place in the universe: about 2.7 Kelvin, or -270 degrees Celsius. But in order for your body to lose heat, it needs something to transfer that heat to. This is known as thermal conduction; and in a vacuum, there's no air, there's no stuff around you, which means there's nothing to absorb your body heat. So you wouldn't freeze either.

So, you might get cocky and be like "Will I die at all?" Well, yeah you would. You're not Superman.

The most obvious problem you're going to have if you're sucked out into space is the lack of oxygen. Space is a nearly perfect vacuum, so there's not much air to breathe in let alone good ol' oxygen. So if you find yourself aboard some space catastrophe you should hold your breath and wait for help right? Wrong. The oxygen left in your lungs will immediately expand and rupture your lungs. All of the air would rush out of your body really fast. No matter how tight you close all your orifices, you wouldn't be able to resist the pull of the vacuum. So every molecule of air would flow out of your lungs-- and also of your intestines. Disgusting, I know. But really, what were you expecting going out of your spaceship without a suit?

In another 10 to 15 seconds, you would black out. That's the amount of time it takes for blood from your lungs to reach your brain, so with no air to breathe, your brain would start starving for oxygen. The lack of pressure would cause all the blood vessels on the surface of your body to break, especially those in your eyes. And all of your body fluids that were directly exposed to space would in fact start to boil.

This is one of the few things that we actually have first-hand knowledge of because during a test in a vacuum chamber in a Space Flight Center, a leaky spacesuit accidentally exposed a human subject to near -complete vacuum. He passed out in 14 seconds, and the chamber was re-pressurized 15 seconds later. When he regained consciousness, he said that the last thing he remembered was the saliva on his tongue beginning to boil. Because of the incredibly low pressure, the water in his mouth was able to boil at body temperature.

The lack of external pressure would also cause you to start swelling up rapidly. In fact you'd swell up to almost twice your size. But because the human skin Is so incredibly elastic, you wouldn't explode. In the end though, after blacking out, you would simply suffocate from lack of oxygen. So, keep all this in mind before your next extra-vehicular activity, and always double check your gear. Oh! And if you were naked-- uh, I don't know why you would be--but if you were naked, you would also get the worst sunburn ever, but you probably wouldn't mind that much considering how dead you'd be.

What happens once you're dead though? Do you disintegrate into dust or bust into flames maybe? Again, no. The reality is that you wouldn't change much for a long long long time. The harsh conditions of space would have killed all the hungry bacteria in your immune system that are just waiting for you to die so that they can gorge you inside out. So you're corpse will be preserved in pristine condition for billions of years. If you have the fortune of coming close to a star, you'll even be mummified like the clever old Egyptians. So if you know someone who is really vain, you should recommend they die in space.

- SANJANA SUKUMAR

III YEAR

மொழி கலப்பின் வரலாறு

தமிழ் மொழி பல மொழிகளுக்கு தாய் மொழியாக விளங்குகின்றது, இன்னும் சில மொழிகளுக்கு உறவு சார்ந்த வார்த்தைகளையும் அளித்துள்ளது. அப்படி ஒரு வளமான மொழியில் பின்னாளில் பிற மொழி சொற்களின் தாக்கம் அதிகமாக காணப்படுகிறது. அதை வரலாற்றின் வழியில் எப்படி நிகழ்ந்தது என்று காண்போம்.

தமிழில் கலந்துள்ள அரபுச் சொற்கள்:

அல்வா,போத்தி,முகாம்,வசூல், ஜாமின்ன ஆகிய சொற்கள் இன்றும் பேச்சு வழக்கில் உள்ளது. அரபு மொழி வர்த்தகம் மூலமே தமிழில் கலந்துள்ளது. கிபி 3ஆம் நூற்றாண்டில் தான் முதல் முதலில் பாண்டிய மன்னர்கள் அரபு நாட்டுடன் வர்த்தகம் மேற்கொண்ட சான்றுகள் உள்ளன என வரலாற்று ஆய்வாளர் சி. சத்யலிங்கம் தெரிவித்துள்ளார்.

மாறவர்மன் சுந்தரபாண்டியன் காலம் முதல் அரேபியர்கள் வணிகம் செய்த தடயங்கள் உள்ளன. மேலும் கீழக்கரையில் அதற்கான கல்வெட்டுகள் உள்ளன என அவர் குறிப்பிட்டுள்ளார்.

தமிழில் கலந்துள்ள உருதுச் சொற்கள்:

அண்டா, தயாரிப்பு, ரொக்கம், சப்பாத்தி ஆகிய சொற்கள் இன்றும் பேச்சு வழக்கில் உள்ளது.

உருது மொழி கிபி 12ஆம் நூற்றாண்டில் பாரசீகம் மற்றும் அரபு மொழியின் கலப்பில் உருவானது. பாரதத்தில் முகலாயர் காலத்திலும் டெல்லி சுல்தான் காலத்திலும் உருவானது என்று கூறப்படுகிறது. பின்னாளில் மராத்தியர் , ராஜபுத்திர்களின் அடக்குமுறை மற்றும் படையெடுப்பால் முகலாயர் வீழ்ச்சி கண்டு பின் பல அடக்குமுறைக்கு உட்பட்ட மக்கள், தமிழகத்தில் தஞ்சம் அடைந்தவர்

இம்மொழியை பேசினார்கள் என்று டார்ஸ்சன்ட் (TORSTEN TSCHACHER) தான் எழுதிய இஸ்லாமிய தமிழர்கள் என்று ஆய்வுக் கட்டுரையில் குறிப்பிட்டுள்ளார்.அதன் தாக்கம் காரணமாக நாளடைவில் தமிழில் உருது கலந்துள்ளது என்று கணிக்கின்றார்கள் மொழியியல் ஆய்வாளர்கள்.

தமிழில் கலந்துள்ள சமசுகிருதச் சொற்கள்:

அனாதை, உஷ்ணம், ஓமம், கல்யாணம் ஆகிய சொற்கள் இன்றும் பேச்சு வழக்கில் உள்ளது.

இந்த மொழி தோன்றிய காலம் தெரியவில்லை அது தமிழகத்தில் சைவ சமயம் பரவிய காலத்தில் இருந்து இங்கு புழக்கத்தில் உள்ளது என கூறப்படுகிறது. கிபி 600யில் பல்லவ அரசன் மகேந்திர பல்லவன் காலத்தில் அவர் சைவம் தழுவிய நிலையில் சமஸ்கிருதம் அதன் மூலம் தென்னாட்டு எங்கும் பரவியதன் சான்றுகள் பல உள்ளன. ஆனால் முற்கால சோழர்களின் காலம் (கிமு 300) முதல் சைவம் பரவியது என்ற வாதமும் உண்டு. ஆனால் இதற்கு சான்று இல்லை. தமிழகத்தில் சைவ சமயம் பரவியது பற்றிய குறிப்புகள், புத்தகங்கள் ஆயிரக் கணக்கில் உள்ளன. ஆங்கிலத்திற்கு அடுத்து சம்ஸ்கிருத மொழியின் தாக்கமே தமிழில் பெரும் பங்கு வகிக்கிறது.

ஆங்கிலம்,பிரேஞ்சு, போர்த்துகீசிய மொழிகள் கிபி 1600யில் தொடக்கத்தில் தொழில் புரட்சி ,வணிகம் மற்றும் படையெடுப்பு ஆகிய காரணங்களால் தமிழில் அம்மொழிகலின் தாக்கம் அதிகமாக காணப்படுகிறது. சர்வதேச சந்தை மற்றும் நாடு பிடிக்கும் ஆசையில் இவர்களின் ஆதிக்கம் மாறி மாறி இடம் பெற்று இறுதியில் ஆங்கிலேயர் வசம் நாடு சென்றது. எனவே ஆங்கிலத்தின் தாக்கம் தமிழில் பெரும் பங்கு வகிக்கிறது .

ஆங்கிலத்தின் தாக்கத்தால் தமிழ் மொழி திரிந்து இன்று "தமிங்கிலம்" என்ற மொழி உருவாகும் அளவு தாகத்தை ஏற்படுத்தியுள்ளது.

தமிழ் தனித்து இயங்கும் ஆற்றல் கொண்டது, உலகின் மூத்த மொழி அதை நாகரிகம் என்ற வார்த்தையில் முலம் சிதைப்பது இழிவு.

காலத்திற்கு ஏற்ப தமிழ் தன்னை தயார்படுத்திக் கொள்ளும், எனவே இதில் வேற்று மொழியை திணிப்பது அவசியமற்றது .எம்மொழியும் கற்போம் இருந்தும் அதன் தூய்மை கெடாமல் பேசுவோம்.

http://www.suedasien.uni-halle.de/SAWA/Tschacher.pdf

– YOGESH KUMAR B

III YEAR

THE LEARNER'S PERMIT

Driving isn't easy.. Getting your license needs you to get out of your chair, go out of your home, and actually do things. Learning how to drive isn't a simple feat either. But everyone still goes through with it, and gets behind the wheel at some point. It is at this point when they say, "Okay! I need to get my life back on track," like they were "out of track" initially.

"There's Public transport at my doorstep, and it costs less than Rs. 50 to get anywhere in the city. Why learn how to drive?" A grown-up would say it's very unreliable. To this, I'd say Ok boomer, and disagree. Chennai is peppered with comfortable modes of transportation. The American public transportation system is unreliable. And in fact, it's getting worse in some places. But enough about that. Let's get back to our side of the equator.

There's no doubt that getting a license will free you from the shackles of public transport. But, with great horsepower comes great responsibility. Getting a license will grant you access to many new venues. You can listen to music you've been wanting to hear while driving (I don't encourage you to do this). You can stay outside late, without worrying about how you're going to get back home. It's clear now, right? You HAVE to become independent. You HAVE to learn to drive. But do you really HAVE to? Many people live their lives at 50 kmph. Does that mean you should as well? "I want to walk, or run." Sure, you decide the pace you want to move at. You grab life by the steering wheel (clutch, to be exact), and attain complete control (occasionally change the gear).

Elon Musk says that if you need inspiration to do something, you don't do it. And I agree. The drive to do it has to come from within. I started learning to drive because I wanted mobility. I wanted to get home without worrying about train schedules and bus routes. It's a steep learning curve. That's why I'm going to keep at it!

20% of your time makes you better than 80% of the people. The same applies when you're learning a skill. In life, you already have the learner's permit. You can learn anything you want, technical or non-technical, and become any kind of person you want. No one can pull you over and ask for your license to learn a new skill (yet). So, go and experiment with anything that piques your interest. But always remember: C-B-A (left-Clutch, centre-Brake, right -Accelerator).

– SRINATH V

III YEAR

POEMS

BROKEN MASTERPIECE

I've always been a little girl
Listening to the fairy tales,
Waiting for my prince to rescue me
Making me his beloved princess.

But I suddenly got caught in the wrong hands of yours.
You scribbled your awful thoughts on me,
Made me a crumpled paper.
I struggled to get away from
The horrible hands of yours.
Yet you plucked the pretty little flower.

You are conscious and aware that
You broke me into unfixable pieces,
Yet you wanted more.
Further broke me into little itty bitty pieces.

Is this what the world's known well for?
Harassment?
If I'd known this dreadful future of women,
I would've asked my fairy godmother,
To always let me be a joyful little kid.

All the inhumane things are done by you.
Yet you are the one still gonna live with dignity.
You are proud of moulding this innocent girl's
happy life into a miserable one.
Eventually you've made me a broken master
piece.

– SAMEERA HOLY S

III YEAR

A PRESENT

Today was the day you came

and everything felt the same

excepting the happiness you brought

and the hearts you caught

Being motherly by nature

and understanding an added feature

Our entertainment quotient would be missing

if not for your blabber rising

You finally turn twenty today

Growing younger and younger by the day

Siblings is too small a word for our bond

as your soul makes me fond

of the times spent together

with mother and father

always close to my heart

from the very start

Love you my dear

always and forever

**– PRIYANKA SRIVASTAVA
III YEAR**

IS SHE SMILING?

she stared at me

Through the canvas large

With a hint of a smile on her face

Or so I thought

Her eyes lined with melancholy

Seemed to speak volumes

Only to those

who read between the lines.

Whether it was losing a loved one

Or just having a bad day

No one ever seemed to know,

What she was trying to say.

To the world she was an icon of artistic genius

But to those who knew her,

She was Mona Lisa

One who made peace with life

**– SOWMYA K
III YEAR**

SLEEP

I have seen people escaping

Escaping from darkness that loves to reside

In the crevices of the past

That darkness which transforms into reality and we
hate the day and night alike

When sleep is the escape

When the hours awake are spent

Counting the hours still left to be awake

When guilt claws your gut

But you no longer care

Sleep, sleep and sleep

And never be awake.

And then I see my mom and dad

Their sleep is different

My mother mops the floor

And wipes the panes

Even when everything shines.

And my father is never home

Even when his bones cry

And they sleep every time in their place

While I sleep in my bed

- SUPRIYA S
III YEAR

ஏழையின் பசி

நீண்ட நாட்களாக அடிமைப்பட்டு நீட்சித்
தண்ணீர்க்குக் கூட வழியில்லாமல்
பாம்பைத் தின்னும் பாமர ஏழையே!!!
தான் ஈன்ற மக்களுக்கு ஒருவேளையாவது
வயிராற உணவு கிடைத்துவிடாதா என
ஏங்கும் ஏழை விவசாயப் பெருமானே!!!
விதை நெல்லைக்கூட தன் குடும்பப் பசிக்கு
உட்படுத்தாமல் அதை விளைநிலத்தில்
விதைத்து மற்றவர்க்கு உணவளிப்பவனே!!!
இவ்வாறு மற்றவர்க்கு உணவளித்தும்
பெருமிதம் கொள்ளாமல் தன் குடும்ப
பசிக்காக நியாய விலைக்கடையில்
நிற்கும் தியாகத் தலைவனே!!!!!
ஏழைகளாகிய உங்களின் பசியை நீக்க
இன்றைய இளைஞர்கள் விவசாயத்தைக்
கையில் எடுப்பார்கள் என்று
இக்கவிதையை முடிக்கிறேன் தலைவனே!!!

– VEERAMANI M
III YEAR

தனிமை

தனிமை என்பது மற்றவர்கள் என்னைப் புறக்கணிப்பதால் நான் எடுக்கும் முடிவல்ல ,

நான் மற்றவர்களைப் புறக்கணிப்பதால் எடுக்கும் முடிவு!!!

தனிமையானது விரக்தியினால் ஏற்படுவது அல்ல , மற்றவர்கள் புண்படக்கூடாது என்ற நன்நோக்கத்தினால் ஏற்படுவது!!!

தனிமையாய் இருப்பது என்றும் ஒரு குறையாகாது , அது தன் குறையைத் திருத்திக் கொள்ளக்கிடைக்கும் அரிய வாய்ப்பு!!!

துன்பம் ஏற்படும்போது தனிமையாக இருந்தால்தான் , அத்துன்பத்தைப் போக்க சிறந்த முடிவு எடுப்பாய்!!!

வருத்தத்தில் நீ அழும்போது , உன் கண்ணீரைத் துடைக்க யாரையும் எதிர்ப்பார்க்காமல் , உன் கையே துடைக்கும் பார் , அதுதான் உன் தன்னம்பிக்கை!!!

முயற்சியில் தோற்கும்போது , இது முடிவல்ல , இனிதான் ஆரம்பம் என்று உன் மனம் சொல்லும் , அதுதான் உன் வீரியம்!!!

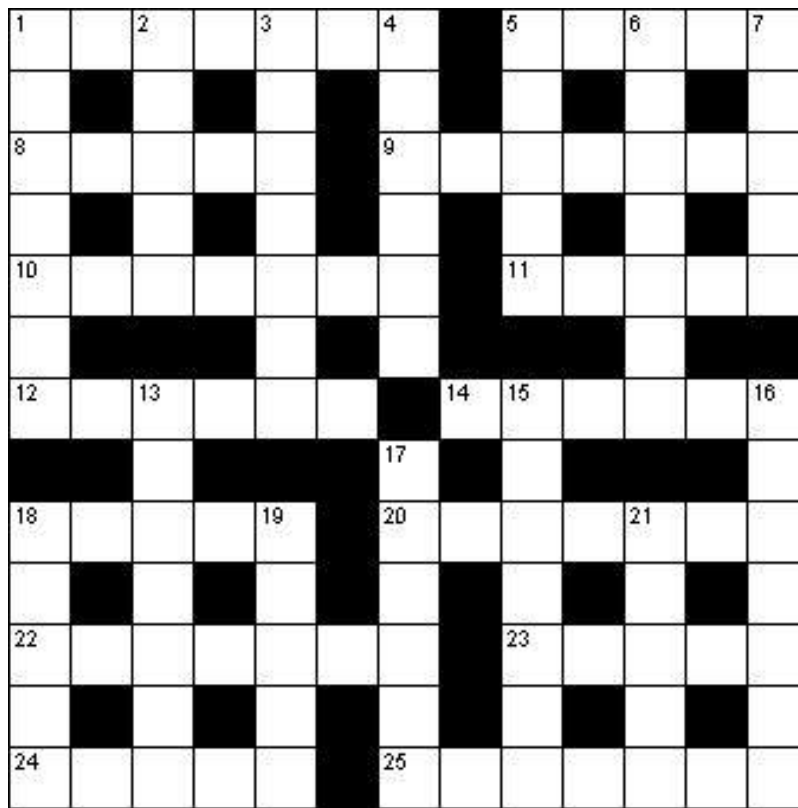தனிமையாக இருக்கும் பயனால் , உன்னால் மற்றவர்கள் பாதிக்கப்படவில்லை என்பதே , உனக்கு பெரிய வெற்றி நண்பா!!!!!!

- VEERAMANI M
III YEAR

# PUZZLES SECTION

CROSSWORD

Across

1 Empires (anag.) (7)
5 Objectives (5)
8 Fisherman's basket (5)
9 Bizarre (anag.) (7)
10 Whole number (7)
11 Cavalry sword (5)
12 Obstacle (6)
14 Concurred (6)
18 Establish (3,2)
20 Turn at batting (7)
22 Restore (3,4)
23 Burn slightly (5)
24 Accessory (3-2)
25 Attempted (7)

Down

1 Rather hungry (7)
2 Vote into office (5)
3 Unlawful (7)
4 Go aboard (6)
5 Window material (5)
6 Friendly, pleasant and good - tempered (7)
7 Twilled fabric (5)
13 Revolved (7)
15 First book of the Bible (7)
16 Go down (7)
17 Inconstant (6)
18 Colour of old photographs (5)
19 Unadorned (5)
21 Silly-billy (5)
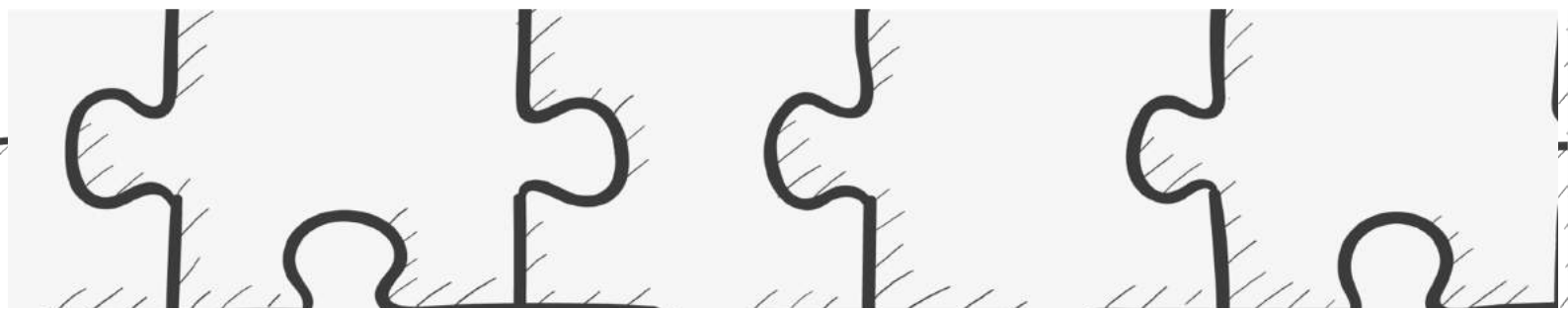
ODD EVEN SUDOKU

6				4			8	
	4	2		6				
								9
	2		9		3			8
4							1	
3			7				5	6
					1			
		5	3		8			
7		3			2			5

CARDS FACING UP

A blind-folded man is handed a deck of 52 cards and told that exactly 10 of these cards are facing up.
He is asked to divide those cards into two piles, each with the same number of cards facing up.
He can't peek, get help, or damage the cards, but may use any strategy that occurs to him to do so.
How can he do it?

CIPHER

Find the code!

• It has 6 different digits
• Even and odd digits alternate (note: zero is an even number)
• Digits next to each other have a difference greater than one
• When we break the code into three sets of two-digit numbers, then the first and middle are a multiple of the last
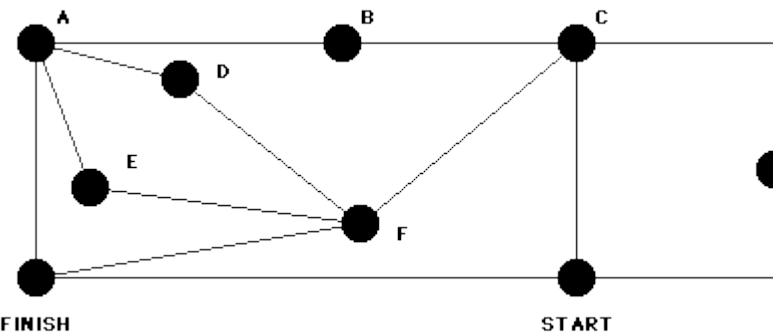What is the code? (more than 1 solution)

GEARS

There are five gears connected in a row, the first one is connected to the second one, the second one is connected to the third one, and so on.

How much faster would the last gear be if the second gear was twice the size of the first gear, and all the other gears were the same size as the first gear?

FIND THE PATH

The idea is to plod your way along all the streets on this map without going down a street you've been down before.
Starting and finishing in the places indicated, in what order would you visit the letters on the map?
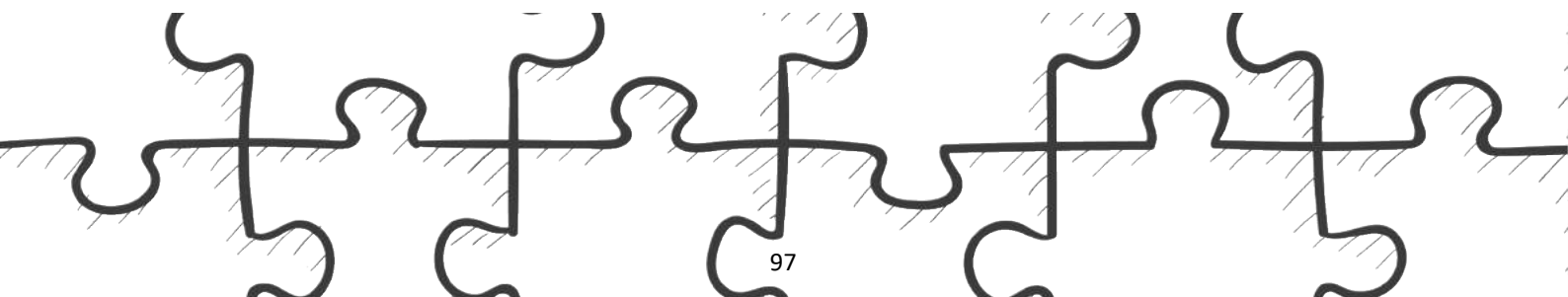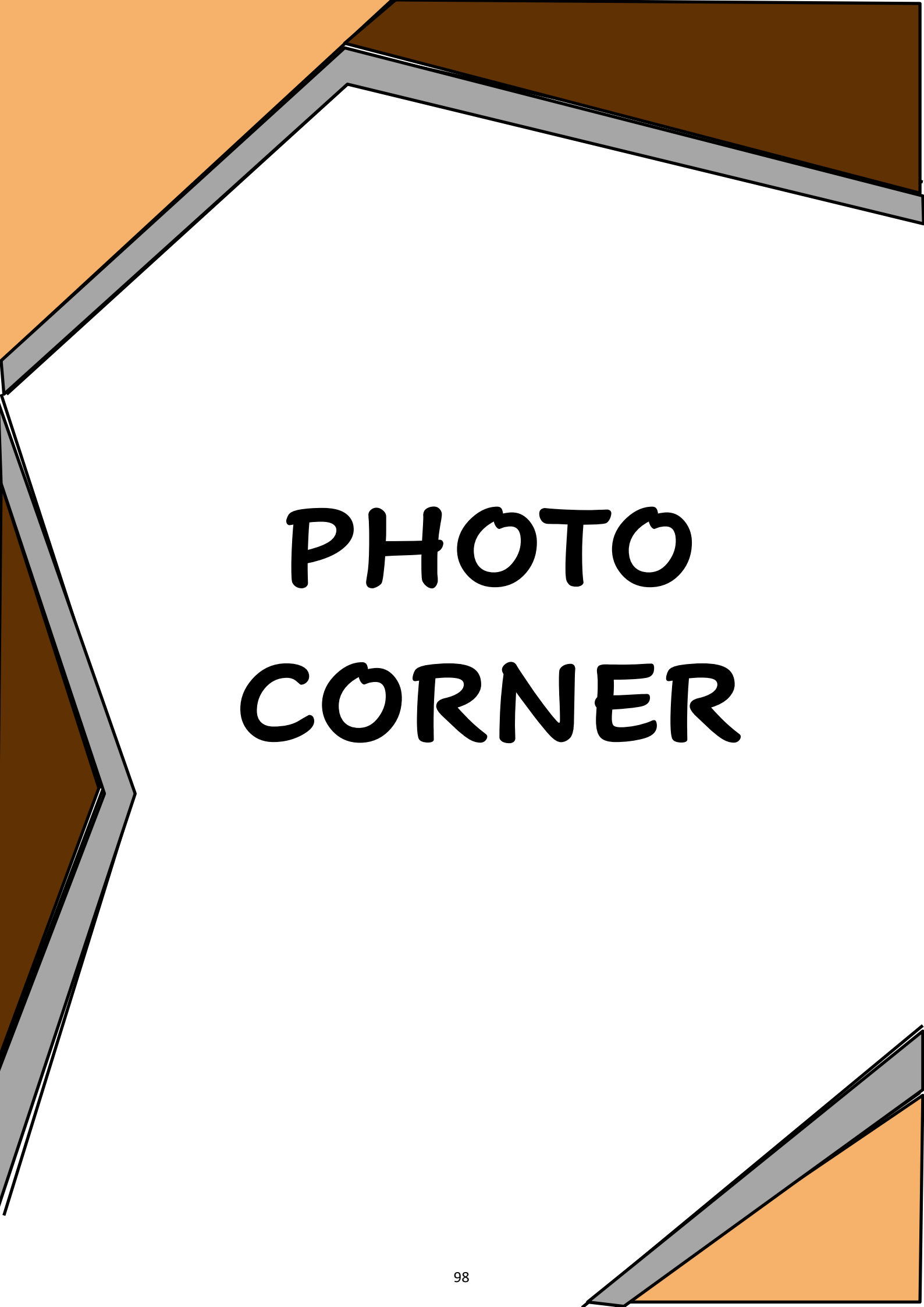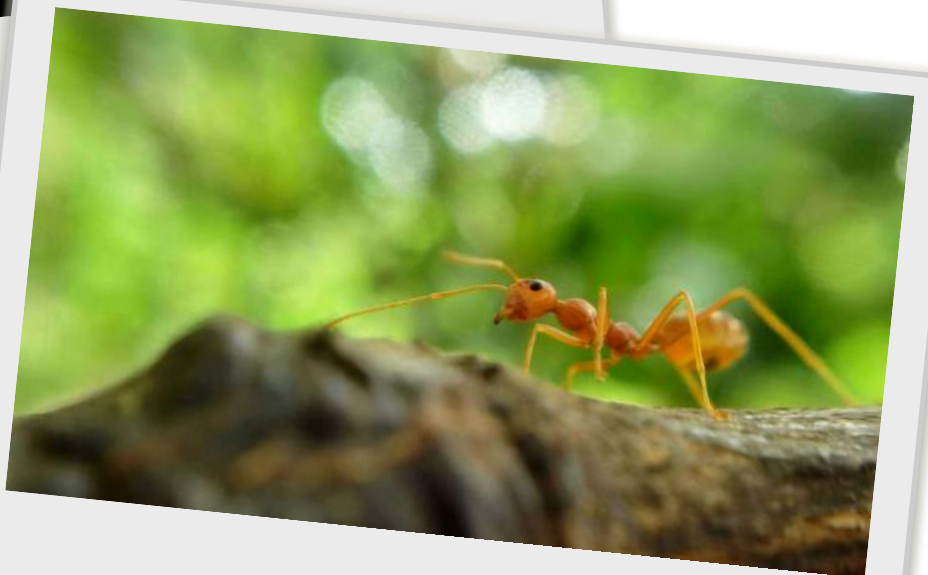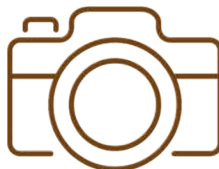
PHOTO CORNER

ASHWIN SURESH,

IT-A, THIRD YEAR

SAMYUKTHA S,
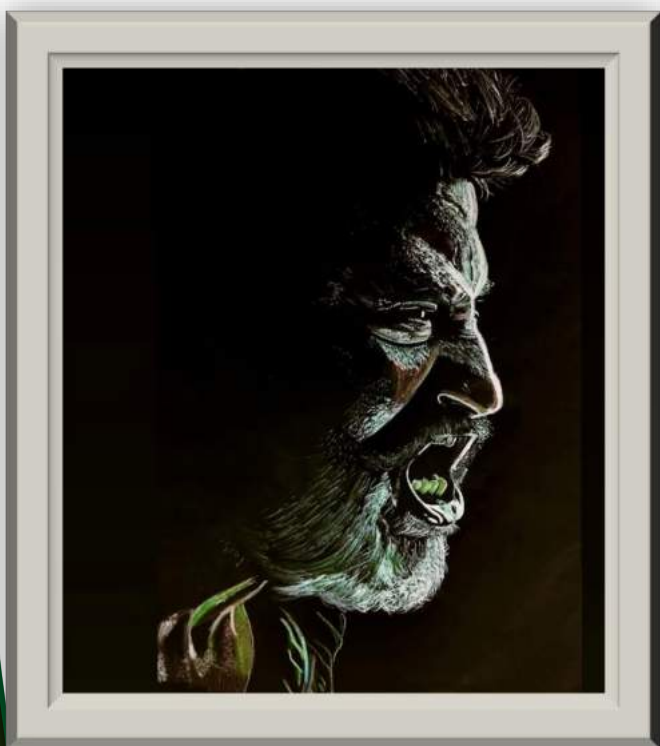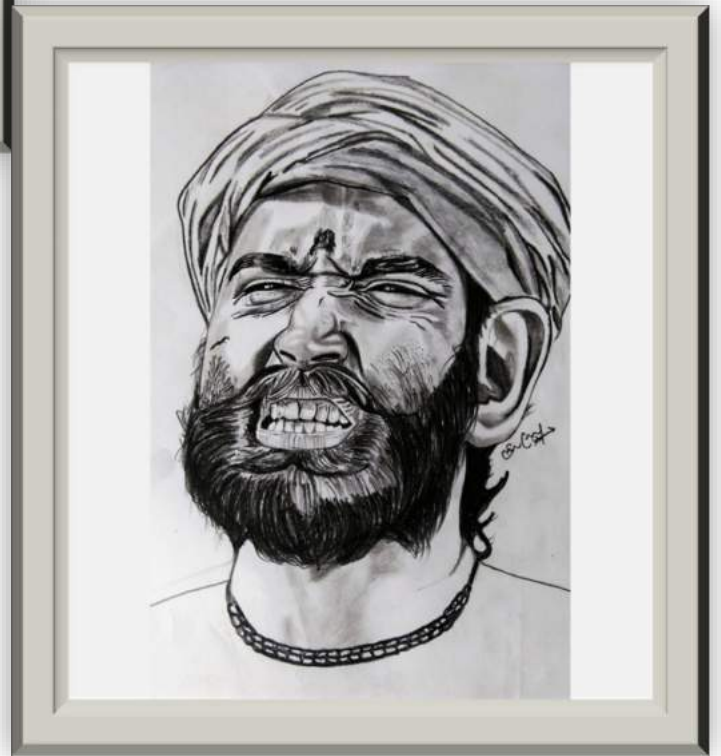**IT–B, THIRD YEAR**

ART GALLERY

SUPRIYA S

IT B,THIRD YEAR

SHIVA S
IT B,THIRD YEAR

There is no place like 127.0.0.1

CSS : MS paint for coders

Number theory: where you have to give a 2 page proof of common sense

DAA : The salesman is never tired of travelling.

ANSWERS

CARDS FACING UP

The blind-folded man divides the cards into two piles with 10 and 42 cards each. He then flips all cards in the smaller pile. Done!

GEARS

The last gear would be the same speed.

CIPHER

When we try to make full numbers that follow all the rules we find only these: 692703, 816903, 496307, 816309, 903618,

P	R	E	M	I	S	E		G	O	A	L	S

6	3	7	1	4	9	5	8	2
9	4	2	8	6	5	7	3	1
1	5	8	2	3	7	6	4	9
5	2	6	9	1	3	4	7	8
4	7	9	5	8	6	2	1	3
3	8	1	7	2	4	9	5	6
8	9	4	6	5	1	3	2	7
2	6	5	3	7	8	1	9	4
7	1	3	4	9	2	8	6	5

The crossword grid reads:

P R E M I S E G O A L S
E L L M L M E
C R E E L B R A Z I E R
K C E A S A G
I N T E G E R S A B R E
S A K L
H U R D L E A G R E E D
 O F E E
S E T U P I N N I N G S
E A L C E I C
P U T B A C K S I N G E
I E I L I N N
A D D O N E S S A Y E D

EDITOR'S NOTE

At this juncture, we would like to express our sincere, heartfelt gratitude to the management, students and faculty for their valuable contributions, constant encouragement and support.

Wishing an engaging reading!

Regards,

Editorial team

IdentITy

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