

INSTITUTE VISION AND MISSION

VISION

To achieve the autonomous and University status and spread Universal education by inculcating discipline, character and knowledge into the young Minds and mould them into enlightened citizens.

MISSION

Our mission is to impart high quality education, in a conducive Ambience, as comprehensive as possible, with the support of all the modern technologies and make the students acquire the ability and passion to work wisely, creatively and effectively for the betterment of our society.



CSE DEPARTMENT VISION AND MISSION

VISION

Serving the high quality educational needs of local and rural students within the core areas of Computer Science and Engineering and information technology through rigorous curriculum of theory, Research and collaboration with other disciplines that is distinguished by its impact on academia, industry and society.

MISSION

The mission of the department of Computer Science and Engineering is to work closely with industry and Research organisations to provide high-quality Computer Education in both theoretical and Applications of Computer Science and Engineering. The department and courageous original thinking, fosters research and development, evolve innovative applications of Technology.



PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- **PEO1:** The graduates of Computer Science and Engineering will have successful career in technology or managerial functions.
- **PEO2:** The graduates of the program will have solid technical and professional foundation to continue higher studies.
- **PEO3:** The graduates of the program will have skills to develop products, offer services and create new knowledge.
- **PEO 4:** The graduates of the program will have fundamental awareness of Industry processes, tools and technologies.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- **PSO1: Foundation of Mathematical Concepts:**

To use mathematical methodologies to crack problem using suitable mathematical analysis, data structure and suitable algorithm.

- **PSO2: Foundation of Computer System:**

The ability to interpret the fundamental concepts and methodology of computer systems. Students can understand the functionality of hardware and software aspects of computer systems.

- **PSO3: Foundation of Software Development:**

The ability to grasp the software development lifecycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

PROGRAM OUTCOMES (POs)

- **PO1:Engineering Knowledge:**

Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. •

- **PO2:Problem Analysis:**

Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

- **PO3:Design/Development of Solutions:**

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

- **PO4:Conduct investigations of complex problems:**

Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

- **PO5:Modern tool usage:**

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

- **PO6:The engineer and society:**

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

- **PO7:Environment and sustainability:**

Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8:Ethics:

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9:Individual and team work:

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10:Communication:

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11:Project Management and Finance:

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

PO12:Life-long Learning:

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Message from Chairman

**Sri Ch. VENUGOPAL
REDDY**



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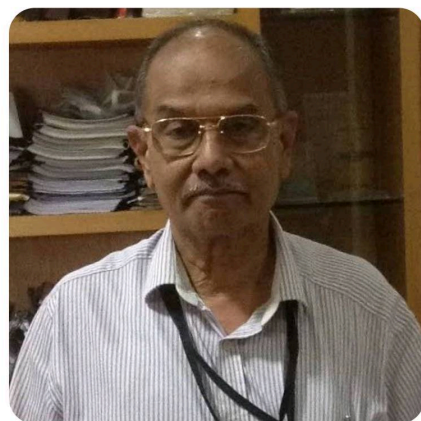
It gives me great pleasure to know that 'EPISTEME', a CSE Department magazine 2020-'21 is ready for publication. True to its name, this magazine gives an insight into the range and scope of the imagination and creativity of our students and faculty members. Providing ample opportunities in engineering education is one of the most fundamental obligations we owe to our students because in BIET we are driven by the belief that every student deserves a high-quality education. EPISTEME provides an intersection of great challenge and great opportunity for the students to review their efforts and to analyse their achievements in research and development. I congratulate the team of students and the faculty for their tireless efforts that have come to fruition in the form of this magazine. I wish it all success and hope that this tradition that has been set by the current students will be carried through by the following generation of students to come.

Sri Ch. VENUGOPAL REDDY
Chairman, Bharat Institutions

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Message from Director

**Prof. G. KUMARA SWAMY
RAO**



“

It is always a pleasure to be a part of a team which strives to bring out the talents of students and staff. BIET has always been striving to keep itself ahead of the competition and the results are now for everyone to see. The essential purpose of a department magazine is to inform, engage, inspire and entertain a diverse readership - including alumni, parents, students, faculty, staff and other friends of the college - by telling powerful stories that present a compelling, timely and honest portrait of the college and its extended family.

This magazine has made an earnest attempt in this direction and brought out certain aspects of the college to the eyes of the public so that they may understand and know the college even better.

I am sure the college will scale even greater heights in the years to come and serve many more millions in the society.

Prof. G. Kumara Swamy Rao
Senior Director, BIET

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Message from Director

Prof. KHAJA ALTHAF HUSSAIN



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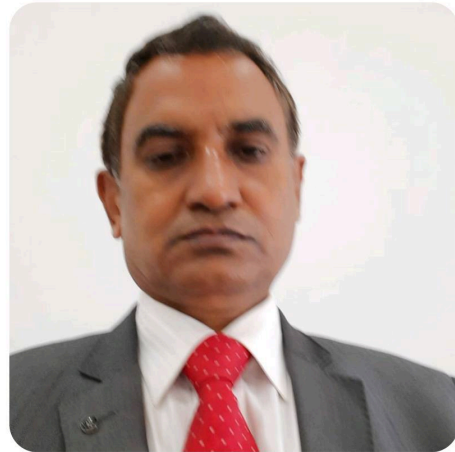
It gives me immense pleasure to write the message to the Department of computer science and engineering on the occasion of the release of departmental magazine “EPISTEME” for the year 2020-21. I congratulate the department for completing yet another academic year successfully and getting ready for the next academic year. I appreciate the encouragement received from the department, and from the honorable chairman sir and the management of the college. I congratulate the contributors and mentors for their hard work. I wish that the academic outcome for the year 2021-22 will be much better than 2020-21. I wish all the faculty and students all the very best.

Proff. Khaja Althaf Hussain
Director Planning & Development

”

Message from Principal

Dr.J.P.SINGH



“

It gives me immense pleasure in unveiling the CSE Magazine “*EPISTEME 2021*”. I would like to Congratulate to the students and faculty associated to magazine committee for successfully publishing the departmental magazine *EPISTEME*.

EPISTEME is creating a platform which provides an opportunity to the students and staff to express and share their original and innovative thoughts on technical and non technical topics. The process of learning is continuous and extremely important in life .what you learn, how you learn and where you learn play a crucial role in developing ones intellectual capability, besides career.

Hence on behalf of our college, I welcome all of you and congratulate the Magazine team and the faculty coordinators for their brilliant and original efforts for bringing out the Magazine. I am glad to see that they have lived up to the high standards as they have set with the first edition and my best wishes to the students for a bright future.

Dr.J.P.Singh
Principal, BIET

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Message from Dean Admin

Dr. SANJAY KUMAR SUMAN



“

I am very much delighted to offer my best wishes to the admin in-charge, academic in-charge, Magazine coordinators, Editorial Board, faculty members and the students of CSE department for releasing their Annual magazine of “EPISTEME 2K21”. This will inculcate the communication and writing skill among the students community. It is an excellent opportunity to the students to interact and share their innovative ideas in the field of fast growing technology which may provide the solution for the future technological challenge.

I congratulate the editorial team and wish all the success in their endeavours.

Dr. Sanjay Kumar Suman
College Admin In-charge

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Message from Admin In-charge

Suyash Agrawal



“

It is a matter of great pride and satisfaction for BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY to bring out the Magazine “EPISTEME” Means Knowledge and Understanding Released from the Department of Computer Science & Engineering and Information Technology. The College has made tremendous progress in all areas academic, non-academics, capacity building relevant to staff and students. I am confident that this issue of Department Magazine will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students and faculties but also develop a sense belonging to the institution as well. A Magazine is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. I express my deep sense of gratitude and heartfelt Congratulations to staff members and Students for their fruitful effort.

With Best Wishes.

Suyash Agrawal

Admin Incharge

Department of CSE and IT

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Message from Academic In-charge

Mrs. SHILPA SUDHEENDRAN



“

Fostering creativity and stirring innovation are two of the key elements of a successful education, and a college magazine is the perfect union of both. It binds the creative energies of the academic community, and distils the essence of their inspired imagination in the most brilliant way possible. Hence, I am delighted to know that CSE department magazine “Epistemic” is ready for publication. I congratulate the editorial team for the hard work and dedication they have invested in realizing this goal, and wish my students and faculty members success in all future endeavours.

Mrs. Shilpa Sudheendran
Academic In-charge

”

MEET OUR EDITORIAL TEAM!

FACULTY SUPPORT



Ms. Jincy Denny
Assistant Professor, BIET

"Obstacles don't have to stop you. If you run into a wall, don't turn around and give up. Figure out how to climb it, go through it, or work around it."



Mr. K. Bhaskar
Assistant Professor, BIET

Determination is nothing without dedication and hard work

CHEIF EDITORS



K. Nithin Goud
18E11A05F9 3rd Year

"If there is a code there is a bug..!"



Ch. Usha Sowmya Sri
18E11A0558 3rd Year

You only have one who can push you higher...
and that's you!

STUDENT EDITORS



Neha Murarishetti
18E11A1225 3rd Year

Keep learning, consistency is the key!

Veda Sri
18E11A0520 3rd Year

Good things take time , be patient and believe in yourself.



Shaik Nausheen
19E11A05E1 2nd Year

The best view comes after the hardest climb.

CHIEF DESIGNERS



Rithika VJ
18E11A05C3 3rd Year

Get lost in what you love.

S. S. V. Alekhya
18E11A05C8 3rd Year

When things change inside you, things change around you.



S. Kautilya
18E11A05G7 3rd Year

Sometimes I panic and think there's a crazy person in my house, and then I realize it's just me.!

EDITOR'S MESSAGE

A college magazine is a reflection of college life. The editorial board of CSE of BIET presents its unique creation in the form of the magazine " EPISTEME " - knowledge and understanding.

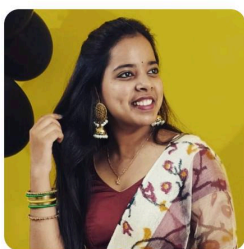
" Good leaders create a vision, articulate a vision, passionately owns a vision and turns it into a reality "

The magazine - EPISTEME is an idea behind which a dream and an aspiration are bounded. The very crucial purpose of episteme is to have a great educative value, developing talents, strengthen student's thoughts to inspire, engage, entertain a diverse readership.

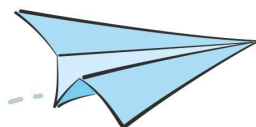
Episteme exhibits the creativity of our students and relive the memories made throughout the year. This magazine manifests the overall view of our BIET ventures such as hackathon programs, industrial visits, technical fests, projects, seminars, workshops, NPTEL courses, and students achievements, campus drive, cracking campus placement interviews, department celebrations, and many more!

We would like to extend profound gratitude to all those who have contributed to make this a success. It has remained a pleasure.

Our generous thanks to all the authors who have sent their articles. We truly wish that the succeeding pages will keep you fond of episteme.



Ch. Usha Sowmya
18E11A0558

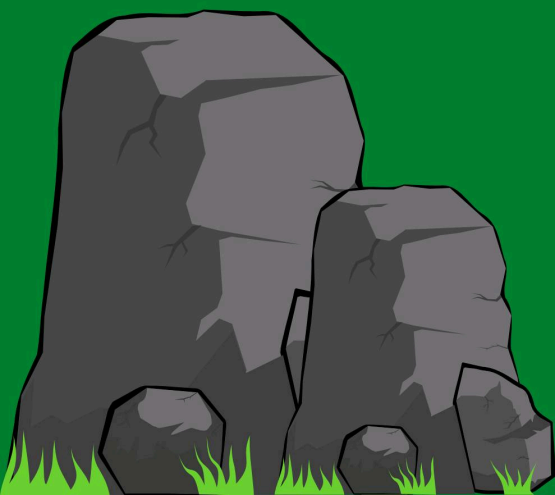
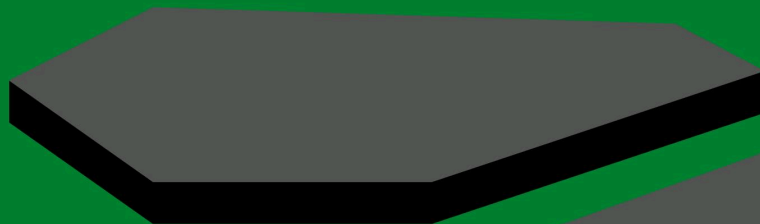
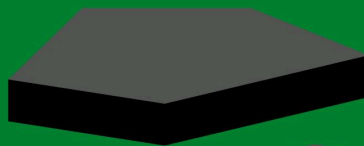


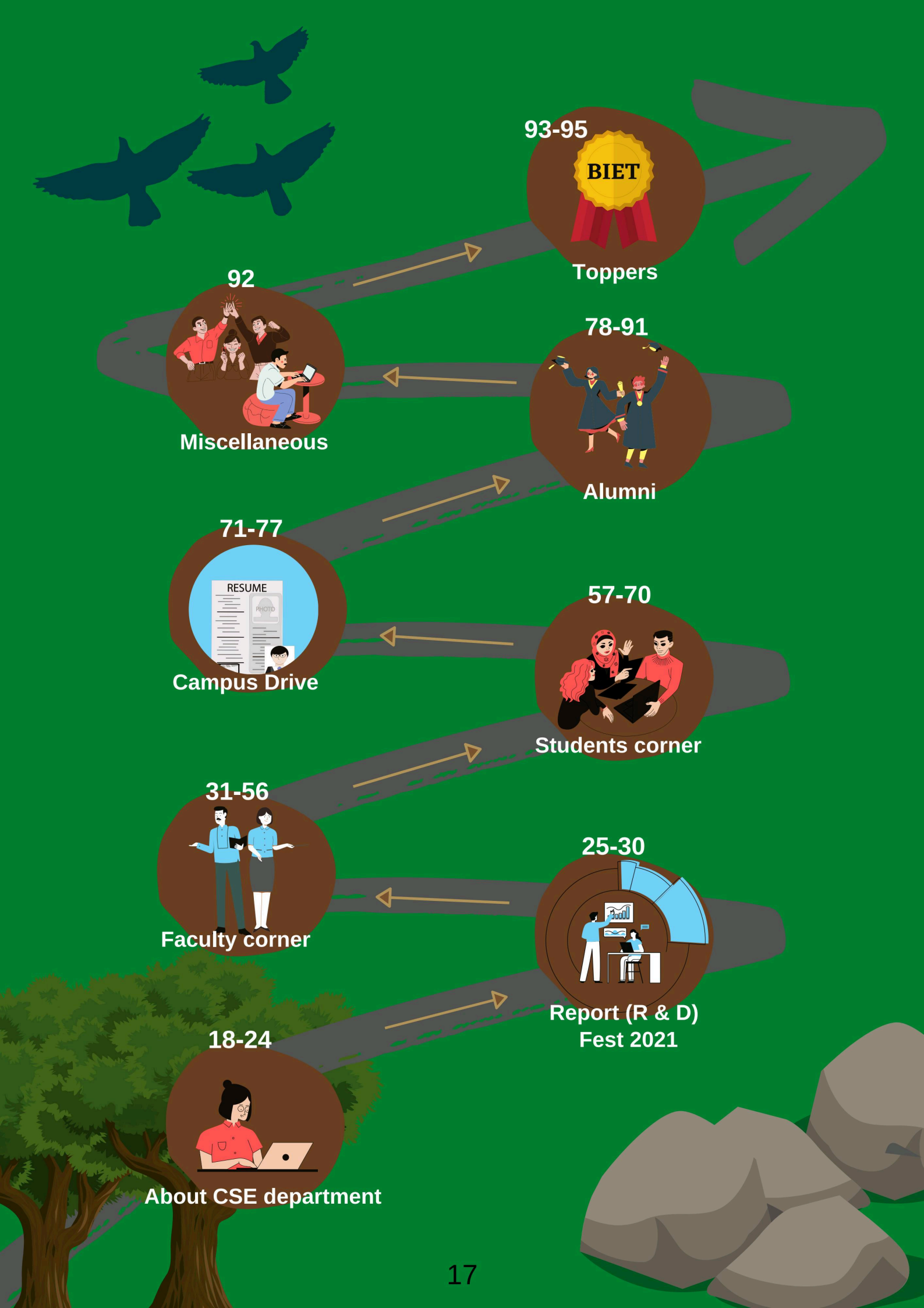
WHAT'S INSIDE?

GET

SET

GO!!





A silver laptop is positioned diagonally on a dark, distressed wooden surface. The wood has a rough, textured appearance with some white paint or varnish peeling off, revealing the dark wood underneath. The laptop's keyboard is visible, showing keys like 'Z', 'X', 'C', 'V', 'B', 'N', 'M', 'command', 'option', and 'shift'. A small, dark, irregular mark is visible on the laptop's lid. Overlaid on the image is the word 'ABOUT' in large, bold, white capital letters, with the letter 'U' in red. Below 'ABOUT' is a large, bold, white capital letter 'S'.

ABOUT
S



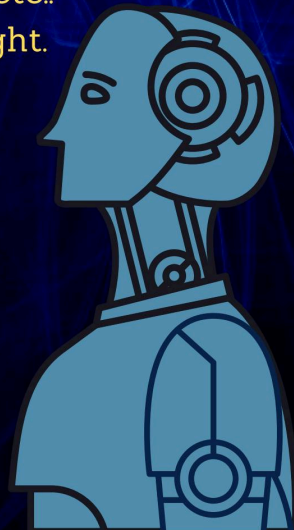
ABOUT CSE DEPARTMENT

Welcome to Department of Computer Science and Engineering at BIET Hyderabad, where students undertake studies that offer a well-rounded education in the science & technology. Computer Science is the most exciting, gratifying, and promising field we can pursue, that's why, at BIET, we believe our Computer Science and Engineering program should not only educate but also inspire you with the joy of computing. Each strikes a balance between conducting world-class teaching, excelling in education, and training students to become leaders in their field. The Department is renowned for cutting edge state-of-the-art and quality education since its inception. The Department is also known for facilitating the quality education to the highest and conducting various curricular and extra-curricular activities to make students excel in every field of study, through Interaction with Board of Studies, Bridge Courses, Value-added Courses, Experiential Learning, Certificate Courses, Seminars & Guest Lectures, Peer group learning, Problem Solving Skills and Social Service Activities. Computer Science and Engineering Department epitomises excellence in all major functions associated with higher learning such as teaching, student development and curriculum planning. The strengths of the Department are its quality faculty, innovative and flexible curricula with their unique focus on post-graduate education, state-of-the-art facilities with remarkably high and open transparent policies that foster a healthy student-faculty interaction. A consistent number of paper presentations / publications and FDPs were taken part by the faculty members of the department. Our laboratories also reflect the unique dichotomy of our curricula with general-purpose ones for core subjects and several specialized laboratories. Access to such laboratories is provided to students and faculty on all working days.



The Department now has responsibility within the College for all academic aspects of computing; for teaching, for technical assistance in entire campus, for trouble shooting issues, for basic collaboration with other departments and with industry on applied research. Department's involvement in major tasks like maintenance of College Website, College Face book page, Checking and maintaining the College official mail id, administering online feedback from students every semester, maintaining the attendance software issues and training to entire college, network related issues, maintenance and purchases of IT infrastructure facilitates like PCs, LCDs, monitors, Projectors, etc.. A variety of extra-curricular activities brings CS undergraduates together, too. We are working actively since years to build the gap between the technology innovation and learning perspective. We organized and took part in seminars, FDP's and guest lecturers for students and faculty.

We organized Techfest for different groups of students. The Department continues to grow in giving services to the college management by serving in various committees and positions. Students come from all over the state and the Department is beginning to attract the attention of Students. The diversity of the student community and the technical strength of the different programmes are recognized by many distinguished multinational and other high-end companies that find our students technically superior with excellent problem-solving skills and great cultural awareness. Alumni of our B-Tech, M-Tech programs land jobs at top technology companies—such as Google, Byzu's, Infosys, TCS, Accenture, Wipro, Microsoft etc.. The students in our program are outstanding in their own right.





B. Tech (Computer Science and Engineering)

The B.Tech program in Computer Science and Engineering (CSE) was started in the year 2001 with an intake of 60, enhanced to 120 in 2009, 120 to 180 in 2013 and 180 to 240 in 2014 and 240 in 2015. The main focus of the department is to produce graduates & post graduates with strong fundamentals in Computer Science and Engineering domain. Computer Science and Engineering programme is designed to create globally competent manpower for the information and communication technology (ICT) industry. The course is an outcome based structured to help students to achieve this goal.

The course was accredited by National Board of Accreditation (NBA) in 2007 for a duration of 3 years and second time accreditation in 2019 for a duration of 3 years from the Academic Year 2019-2020 to 2021-2022. The department comprises well qualified faculties.

M. Tech (Computer Science and Engineering)

M. Tech (Computer Science and Engineering) is a two year full time post-graduate programme approved by the All India Council of Technical Education (AICTE) for the students who have a B.E / B. Tech in any branch of engineering, M.Sc and M.C.A. The course is offered by the Department of Computer Science & Engineering by highly qualified and experienced teaching faculty. Intake to this course is 24, selected by J N T University by common Entrance Test.

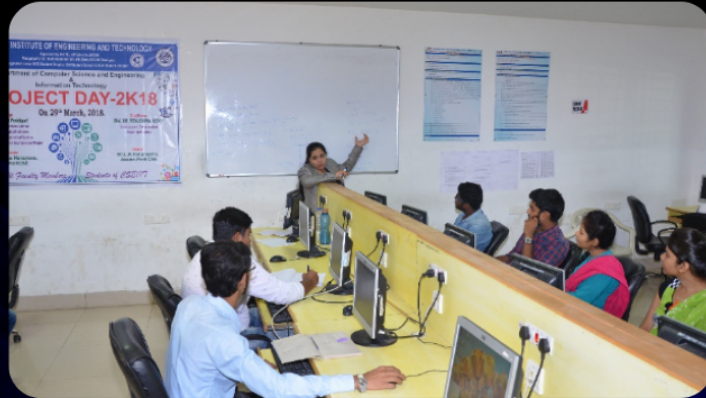
The course offers core subjects like Advanced Computer Architecture, Computer Networks, RDBMS, Software Engineering, Language Processor and Operating Systems in the first two semesters and a host of elective subjects like Data structures, Advanced Computer Graphics, Distributed systems, Artificial Intelligence, etc.

A dedicated project work is taken up by every student for the next two semesters. The project work is of high quality basing used in current industry practices. Project work is supported by leading MNC's and Defence laboratories doing state of art research and development.



FACILITIES AND ASSETS

Programming for Problem Solving Lab



IT workshop



Data Structures Through C++/OOPS through java Lab/Operating System Lab



Database Management System Lab/Compiler Design Lab/Linux Programming Lab /data Warehousing &Data Mining Lab



Case Tool and Web Technologies Lab



Software Incubation Centre



M.Tech Laboratory

Advanced Algorithm Lab



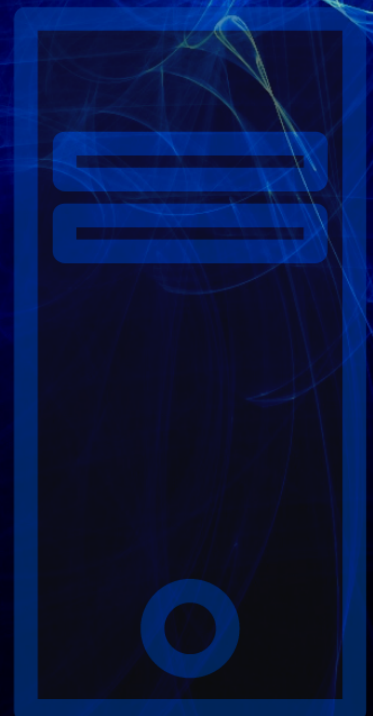
Internet Technologies and Services Lab



Project Laboratory



SAP Lab



REPORT

R & D ANNUAL REPORT

Bharat Institute of Engineering and technology has promoted meaningful Research and Development activities with a vision and mission to pursue and promote Research in Frontier Technologies. In order to strengthen and expand the research activities in the institute, R&D cell in Computer science department was established and is functioning in this Institution from last several years. It is acting as the nodal centre for all Research related activities. The significant factors indicating potential growth in the research activities includes the enhancement in the research publications in peer reviewed journals, Research Projects/ grants, Patents, Collaborations, Doctoral program and Faculty development. R & D cell is focusing the attention on the following major activities:

Major Goals / Objective of R & D Cell

- To promote research activities in frontier areas of science and technology
 - To enhance the research output of the institute by research paper publication in referred journals and reputed conferences
 - To promote Institute- R&D Organization- Industry Collaboration
 - To encourage Core Competence and Consultancy work
 - To organize various workshops/ seminar/ trainings related to promotion of research
 - To create awareness about filing Patents & IPR
- Effective management Ph.D. Program

As a result of tireless efforts taken in the research activities, the college has to its credit many research publications in National and International peer reviewed Journals. The faculty members have also presented research papers in various reputed national and international conferences. One of the important criteria to judge the performance of research output of the department is to obtain recognition by reputed Government/Autonomous sponsoring agencies towards generation of funds to conduct quality research. The institute has received a number of research grants from agencies like DST, AICTE, IET, DRDO, CSIR etc. over the period. Quality engineering education coupled with innovative research and development is absolutely essential towards the overall faculty development. BIET provides an opportunity to faculty members from the institute as well as from external institutions for carrying out doctoral programme in various engineering disciplines to attain higher qualification in order to keep abreast with continuous technological activities. Accordingly Institute promotes participation of faculty in innovative research by providing a conducive environment, necessary facilities and motivation.

R & D REPORT

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R & D Incharge

Name	Dr. SURIYA BEGUM
Signature	

Research Project

Sl. No.	Name of the Faculty	Project Submitted	Project/ Scheme Title	Fundin g Agency	Applied Date with Applicati on No.	Sanctioned Amount (Rs.)	Status
1	Dr. R. Madana Mohana	2 applied	Data Analytics using R Programming	AICTE-I STE REFRES HER COURS E	202000782, Date: 28-12-2020	3 Lakhs	under review
			INTELLIGENT FISH STOCK PREDICTION USING IMAGE PROCESSING, MACHINE LEARNING AND DEEP LEARNING	DST-SE RB	CRG/ 2021/00000 8, Date: 04-Feb-2021	30 Lakhs	Under Review
2	Dr. Suriya Begum	3 applied	Secure and Optimized Cloud Solutions for Entrepreneurship	SERB	SPR/ 2021/000 34, Date : 08-Jun-2021		under review
			Data Science and Python Programming	AICTE(S TTP)	10/6/2021	3 Lakhs	under review
			Machine Learning and Artificial Intelligence	AICTE(S TTP)	10/6/2021	3 Lakhs	under review
3	Dr. Tiruphal Reddy	1 applied	Augmented Reality	AICTE-M ODROB S	Date : 12-01-2021 1-93350778 51	Expected 20 Lakhs	Expert Evaluation Completed
		1 applied	Augmented Reality	AICTE(S TTP)	Jun-21	3 Lakhs	under review
4	Dr. Srihari Rao	1 applied	Secure and Optimized Cloud Solutions for Entrepreneurship	SERB	SPR/2021/	32 Lakhs	under review
		1 applied	Cloud Computing for Potential Entrepreneurs	AICTE(S TTP)	3/6/2021	3 Lakhs	under review

TECH FEST-2K21

Bharat Institute of Engineering and technology hosted the national college Tech-Fest'21, on the 25th and 26th of June 2021. Every year BIET conducts a two-day fest, first day will be technical and the second day will be non-technical. As the pandemic made the gatherings impossible we came up with the "online fest". CSE & IT department conducts a two-day online fest called "VIRTUOTSAV". Though it was tough as it is the first time to celebrate fest online, it was a grand achievement. Students and the faculty along with the non-teaching staff participated in this fest.

For the event to be successful, organising TEAM worked tirelessly for a month. The creative logo which was unanimously praised was a result of our Designing team's creative mind. The Registration and Promotion Team of the TechFest went to 5 different zones, more than 15+ colleges of the state to promote and participated the national TechFest'21. The students managed their academics along with their TechFest duties magnificently. A team of 150 CSE & IT students worked in harmony, with strong support of the faculties, to make this event as remarkable and memorable as it deserves to be...

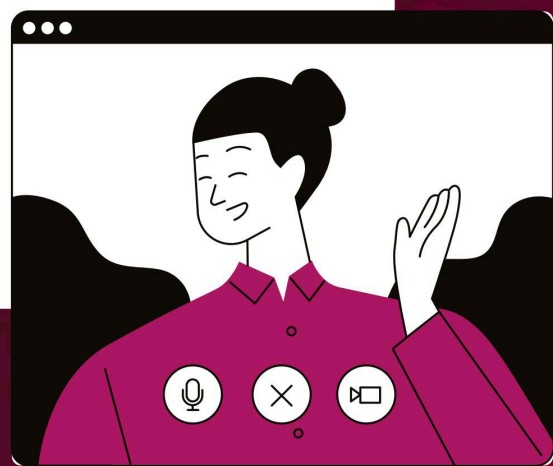
The events conducted by the department of CSE&IT are as follows

TECH EVENTS:

Joy with turtle
Hunters for Hire
Interlocution
Symposium
Blank Coding
Mystify
Espial The Code
Logo Contrive
Poster Presentation
Tech Quiz
Error correction

NON-TECH EVENTS:

Rapid Fire
Yaari Meter
Music trivia
Judge Mental
Blackout truth or dare
Words worth
Fastest Fingers First
Irrelevant answer
Murder Investigation
For and Against



Approximately 350 people participate in these events and 30% of the participants were from various other colleges. In all the events, winners were awarded with certificates and cash prizes. Student coordinators and Volunteers were awarded with appreciation certificates. Apart from this, CSE & IT Awarded for “best Techfest poster” award. Tech-fest’s unforgettable imprints remain with us.

“Though it was online we enjoyed it equally as offline fest”
– Feedback from the participants

We have been fortunate enough to be backed by a team of very motivated and supportive faculties, who supported us all the way, that made “VIRTUOTSAV” a big success. We are glad the efforts put in by everyone have borne us the fruits.

We extend our most sincere thanks to the entire BIET family for their incessant support, guidance for making VIRTUOTSAV-2K21 a great success.

**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CSE AND IT
TECH-FEST SUMMARY SHEET 2K21**

TECH-FEST COORDINATOR: MRS.ARATHI S.B & MS.JINCY DENNY

DEPT TECH-FEST NAME:

S.NO	TECH OR NON TECH	NAME OF THE EVENT	FACULTY COORDINATOR LIST	STUDENT COORDINATOR NAME	ROLL NO	PARTICIPANTS COUNT	BIET STUDENTS COUNT	NON-BIET STUDENTS COUNT	1ST WINNER	2ND WINNER	3RD WINNER
1	TECH	Interlocution	Manohar Sir	Shrujana	18E11A0546	15	10	5	Sowmya	Upendra	Neha Reddi
2	TECH	Symposium	Romy Sinha	Vinay/Surya	18E11A0557/588	19	17	2	Amuktha	Aryan	Shamitha
3	TECH	Tech quiz	U.Narasimhulu	Adhitya/Rameshwar	18E11A1201/1242	11	8	3	Sai Teja	Palreddy Char	Varun Chennuri
4	TECH	Error Detection	Dr.N.SriHari Rao	Varshini/Sai Teja	18E11A1218/1235	12	9	3	Neha	Rameshwar	V.Sanjay
5	TECH	Logo Contribute	K.Bhaskar	Shashank /Chanikya/Sandeep	18-5G8/5E2/5E9/5	17	9	8	Bhanu Prasanna	Kautilya	Suraj Ch
6	TECH	Joy with turtle	Farhana Bono	G.Shravya	18E11A1516	14	2	2	G.Shreya	Lakkiram	Sumalika
7	TECH	Mystify	Ms.Ann Tabitha	Akshaya/ Mounika/ Divya	18-5A9/5A4/595	17	8	9	Ponnam Usha	Ashwini Rachar	Harshini
8	TECH	ESPIAL THE CODE	Madana Mohana	Manideep/Rakesh/Naveen/	18-5E6/5D4/5F2/5	11	7	4	Sai Teja	Manasvi	Vaishnavi
9	TECH	Hunters for hire	Mubeena Begum	B.Uday/S.Harish	18E11A0551/582	10	9	1	Karthik	Shiva Saketh	Shrujana
10	TECH	Blank Coding	Dr. SURIYA BEGUM	sravani/rajasree/sai madhuri	18-563/574/573	11	6	5	Sai Kamal	Sandeep	Sharath
11	TECH	Poster presentation	Dr.Vivek Kumar Singh	L.Sai Ankitha/Ch.Sowmya	18E11A1241/1206	16	10	6	Shrujana	Rithika	Harika Reddy
12	NON-TECH	Truth Or Dare	K.Muni Dhanalaxmi	Sahithi/Ramya/Surya Kiran	18-5G5/5D7/5G2	38	28	10	Abhilash	Swathi	Nikitha
13	NON-TECH	JudgeMENTAL	D.L.N.PRASUNNA	Alekhyia/Rithika/SriRithika/J	18-5C8/5C3/5D1/5	40	34	6	Y.Nikesh	Ankitha	Lydia Grace
14	NON-TECH	Music Trivia	Mr. Kushal Gupta	Sanjana/Sadhana/Ch.Shravya	18-5H4/5F8/559/5	27	18	9	Sangeeta	Uma Maheshw	Pololu Lahari
15	NON-TECH	Yaarimeter				25	15	10			
16	NON-TECH	Irrelevant Answer	Bhagvan Krishna Gupta	B.Saikiran	18E11A1203	11	9	2	Adhitya	Vikas	Lathasri
17	NON-TECH	Murder investigation	Kiranmai	J.Vedasi	18E11A0520	37	29	8	Varun Reddy	Shreya Reddy	Anjali
18	NON-TECH	RapidFire	Shazia Anjum	Sai Sindhu /Geethika	18E11A0538/542	21	15	6	Sharat Chandra	Deepak	Krishna
19	NON-TECH	Words worth	Mangesh Matke	Likitha/Lathasri	18E11A1220/1234	18	12	6	Anil	Sreevani	Nandhini
20	NON-TECH	Fastest fingers first	Amit Sharma	M. Sravanthi P. Akshitha	18E11A0535/541	21	17	4	PREMI	SAI KAMAL	Kiran



FACULTY CORNER



FACULTY ACHIEVEMENTS

ACHIEVEMENTS IN NPTEL

S.No	Course Name	Faculty Name	Elite +Gold	Elite +Silver	Elite	Remarks
1.	Introduction to Internet of Things	Arati S B				Certified
2.	Introduction to Research	Arati S B				Certified
3.	Fundamentals of Artificial Intelligence	Arati S B				Certified
4.	Programming for Problem Solving using C	D.L.N.Prasunna			Elite	Certified
5.	Programming in JAVA	D.L.N.Prasunna				Certified
6.	Brief Introduction to Psychology	R.Surendra				Certified
7.	Outcome based pedagogic principles for Effective Teaching	R.Surendra				Certified
8.	Principles of Human Resource Management	R.Surendra				Certified
9.	Introduction to Research	R.Surendra				Certified
10.	Fundamentals of Artificial Intelligence	R.Surendra				Certified
11.	Fundamentals of Artificial Intelligence	Suyash Agrawal				Certified
12.	Fundamentals of Artificial Intelligence	Narasimhulu			Elite	Certified
13.	Introduction to Machine Learning	Farhanabano			Elite	Certified
14.	Fundamentals of Artificial Intelligence	N Srihari Rao				Certified

NITTT ACHIEVEMENTS

S.No	Name of the Module	Faculty Name	Module	Remarks
1	Orientation towards Technical Education & Curriculum Aspects	SUYASH AGRAWAL	M1	certified
2	Technology Enabled Learning and Life-long Self-learning	U NARASIMHULU	M5	certified
3	Creative Problem Solving, Innovation and Meaningful Research and Development	U NARASIMHULU	M7	certified
4	Technology Enabled Learning and Life-long Self-learning	R MADANA MOHANA	M5	certified
5	Creative Problem Solving, Innovation and Meaningful Research and Development	R MADANA MOHANA	M7	certified
6	Orientation towards Technical Education & Curriculum Aspects	TP ANN THABITHA	M1	certified
7	Technology Enabled Learning and Life-long Self-learning	MUNIDHANALARSHMI	M5	certified
8	Creative problem Solving, Innovation and Meaningful Research and Development	MUNIDHANALARSHMI	M7	certified
9	Technology Enabled Learning and Life-long Self-learning	MANOHAR GOSUL	M5	certified
10	Creative Problem Solving, Innovation and Meaningful Research and Development	MANOHAR GOSUL	M7	certified
11	Creative Problem Solving, Innovation and Meaningful Research and Development	N SRIHARI RAO	M7	certified
12	Orientation towards Technical Education & Curriculum Aspects	FARHANABANO	M1	certified
13	Professional Ethics Sustainability	FARHANABANO	M2	certified
14	Technology Enabled Learning and Life-long Self-learning	K THIRUPAL REDDY	M5	certified
15	Creative Problem Solving, Innovation and Meaningful Research and Development	K THIRUPAL REDDY	M7	certified
16	Technology Enabled Learning and Life-long Self-learning	MUBEENA	M5	certified
17	Creative Problem Solving, Innovation and Meaningful Research and Development	MUBEENA	M7	certified
18	Institutional Management & Administrative procedures	K SURENDRA	M8	certified

FACULTY PUBLICATIONS AND PATRONS-2021



Dr. R. Madana
Mohana
Professor
BIET

Paper Publications

- "Random forest algorithms for the classification of tree-based ensemble" published in Materials today: Proceedings Elsevier journal, SCOPUS, 20-02-21.
- "A Study and Early Identification of Leaf Diseases in Plants Using Convolutional Neural Network" published in 4th International Conference on Smart Computing and Informatics (SCI-2020), SPRINGER.Aug-21.
- "Robust and Resilient Authentication on MapReduce Model" published in "IEEE 2020 International Conference on Computer Science, Engineering and Applications (ICCSEA 2020), IEEE.03-07-20
- Customer Support Chatbot using Machine Learning", Published in 8th International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2020), SPRINGER.30-08-20.
- "Classification Of Medical Image Data Using Advanced Deep Learning And Super Optimization Technique "Published in Turkish Journal of Physiotherapy and Rehabilitation.2021

Patent Published/Filed

- "IoT- Based Micropayment Protocol for Wearable Devices with Biometric Verification "Published on 12-02-21.
- "TESTING FLANGE."Published on 27-11-20.
- "Car Driver Alcohol Level and Sleeping Status Detection and Notification System. (Using Machine Learning Programming and Iot- Based Technology)." 2021



Dr. Suriya
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Associate
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Paper Publications

- "A Study to Predict Heart Disease Using Machine Learning Technique" published in Turkish Journal of Computer and Mathematics Education, SCOPUS, May-21.
- A Study To Predict Home Loan Defaulter Using Machine Learning ", Samaroh 2021 - SP Sampathy's Memorial International Conference Technology, Innovation and Quality Management 17-18, SCOPUS, June 2021

Patent Published/Filed

- "Augmented reality Based Low Cost Smart helmet For E-Vehicle" Published on 12-02-21.
- "Artificial Intelligence And big Data analytics detection System." on 12-02-21
- Artificial Intelligence And big Data analytics detection System(03-03-2021)(Australian)



Dr. Thirupal Reddy
Assistant Professor
BIET

Paper Publications

- "Classification Of Medical Image Data Using Advanced Deep Learning And Super Optimization Technique "Published in Turkish Journal of Physiotherapy and Rehabilitation. May 2021

Patent Published/Filed

- "Adml-Covid19 Protected Room: Automatic Disinfecting Room Air Using Machine Learning System" filed on 16/06/2020.
- "Intelligent Cloud Bursting Scheduling using Machine Learning" Published on 16 June 2021.
- "Car Driver Alcohol Level and Sleeping Status Detection and Notification System. (Using Machine Learning Programming and Iot- Based Technology)."Filed on may 2021



Dr. N. Srihari Rao
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Paper Publications

- "Cyberpolicing through Social Medium", Presented in National Conference on Social Entrepreneurship: Issues and Challenges on 20th November 2020.
- "Information Technology (IT) for the Organization Development: A Case Study", Presented in 3rd National Level Student Technical Paper & Model Contest (TECHNOVATION 2020) on 12th December 2020.
- "Identifying the Websites that Maintain Operational Standards through Obligation Links to Website-Standards Approval Body", Presented in International Conference on Information & Communication Engineering (ICICE-2021) on 12th February 2021.
- "Identifying the Websites that Maintain Operational Standards through Obligation Links to Website-Standards Approval Body", Published in Turkish Journal of Computer and Mathematics Education Journal (e-ISSN: 1309-4653; Indexed in SCOPUS) on 28th April 2021.

Patents Published/Filed

- "Sensor-Based Intelligent Teaching to Develop Behaviors using Machine Learning", Published on 10-07-2020.
- "Covid 19 Outbreak Prediction with Machine Learning and AI Based", Published on 02/07/2021.



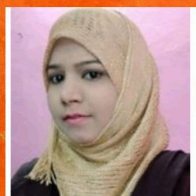
Mr. Suyash
Agrawal
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Paper Publications

- "6G Technology Health Care management "Published in IJMPERD, June 2020, Volume 10, Issue 3.
- Investigation of an Early Identification & Measurement of Osteoarthritis Seriousness in Knee Using Machine Learning," Published on IJCRT, August 2020, Volume 8, and Issue 8.

Patent Published/Filed

- "Sensor Based Intelligent Teaching to Develop Behavior Using Machine Learning." Published on 10-7-2020.



Mrs. Mubeena
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Assistant
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Paper Publications

- "Mechanism of soil Audit for agriculture using ARDUINO", ICICE-2021"Published in International Conference on Communication Systems (ICICE-2021), May-20
- "System for prediction of crops for effective yield across crop categories augmented with a chatbot guiding the farmer during crop lifecycle during pandemic situation" Published in International Conference on Communication Systems (ICICE-2021), May-20.
- Paper Publication on " Information technology for the Organization Development: A case study " published in 3rd National level Technical Papers & Model Contest (TECHNOVATION-2020), Dec 12-13, 2020.

Patent Published/Filed

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Mrs. Farhana
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Patent Published/Filed

- "Intelligent Customer advanced service system using AI Programming" Published on 10-07-20.



Mr. Manohar
Gosul
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Patent Published/Filed

- "Web Based- Irrigation Services: Advanced Cloud Based Implementation of Mashup, Web Based Agriculture and Irrigation Services." Published on 03/07/2020.
- "Adml-Covid19 Protected Room: Automatic Disinfecting Room Air Using Machine Learning System" filed on 16/06/2020.



Mrs. Arathi S.B
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Patent Published/Filed

- "Intelligent Customer advanced service system using AI Programming" Published on 10-07-20.



Mr. Munisekhar. P
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Patent Published/Filed

- "Customer Segmentation: Customer Segmentation using Machine Learning on IOT" Published on 21-08-20



Mrs. Shilpa S
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Patent Published/Filed

- "Intelligent Customer advanced service system using AI Programming" Published on 10-07-20.



Mrs. G. Rashmi
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Patent Published/Filed

- "Adml-Covid19 Protected Room: Automatic Disinfecting Room Air Using Machine Learning System" Published on 03/07/2020



Mr. K.
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Paper Publications

- Identifying the Websites that Maintain Operational Standards through Obligation Links to Website-Standards Approval Body "Published in Turkish Journal of Computer and Mathematics Education, SCOPUS.03-01-21.
- "Identifying the Websites that Maintain Operational Standards through Obligation Links to Website-Standards Approval Body", Presented in International Conference on Information & Communication Engineering (ICICE-2021) on 12th February 2021.

Patent Published/Filed

- "Intelligent Customer advanced service system using AI Programming" Published on 10-07-20.



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Patent Published/Filed

- "Customer Segmentation: Customer Segmentation using Machine Learning on IOT" Published on 21-08-20



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-shmi. K

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Paper Publications

- "IoT-based Healthcare Monitoring System for Soldiers", Published in Journal of science and Engineering on June 2020.

Patent Published/Filed

- "Adml-Covid19 Protected Room: Automatic Disinfecting Room Air Using Machine Learning System" filed on 16/06/2020.



Mr. K. Surendra
Assistant
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Paper Publications

- "Cyclomatic Complexity In Software Development" Presented in AICTE Sponsored E-Conference on Systems Modelling and System Dynamics "held at Bapatla Engineering college, Bapatla from 24Th - 28Th August 2020.



Mrs. Kiranmai
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Professor, BIET

Patent Published/Filed

- "Sensor-Based Intelligent Teaching to Develop Behaviors Using Machine Learning." Published on 24.06.2020
- "Fake News Analysis Using Machine Learning And Updateable Neural Analysis" Published on 27/07/2021.



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Denny
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Paper Publications

- Identifying the Websites that Maintain Operational Standards through Obligation Links to Website-Standards Approval Body "Published in Turkish Journal of Computer and Mathematics Education, SCOPUS.03-01-21.
- "A Web Portal for Student Grievance Support System" Published in International Research Journal of Engineering and Technology (IRJET), May 2021.
- "Identifying the Websites that Maintain Operational Standards through Obligation Links to Website-Standards Approval Body", Presented in International Conference on Information & Communication Engineering (ICICE-2021) on 12th February 2021.

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- Novel Graph Based Community Detection System for early prediction of COVID Spread based on Mobile data, Published on 19-04-2021.



Mrs. D. L. N
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Paper Publications

- "Artificial Intelligence Learning Approach" Presented in an ICICE BIET on February 2021.

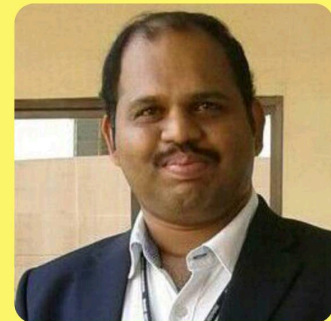
Patent Published/Filed

- "Sensor-Based Intelligent Teaching to Develop Behaviors Using Machine Learning." Published on 24.06.2020
- "Fake News Analysis Using Machine Learning And Updateable Neural Analysis" Published on 27/07/2021.



MACHINE LEARNING BASED IMPLEMENTATION OF MASHUP OF WEB BASED AGRICULTURE AND IRRIGATION SERVICES

-Dr.R. Madana Mohana



India is a land of villages and agriculture still remains the main source of livelihood for the majority of the population. With an average annual growth rate of 3.3%, a major challenge this sector is facing is the lack of timely information about crop varieties, production techniques, production and yield strategies. Farmers need to make efficient use of modern technology to achieve maximum yield from available land. Therefore this article mainly aims at providing a mashup of web based services (namely agriculture service and irrigation service) hosted on cloud platform to help the farmers gain beneficial information regarding farming in India. The web services provide information regarding the current agricultural and irrigational practices in India. It provides detailed information to the end user about various crops and the irrigation techniques that include weather conditions, type of soil, fertilizers, potential diseases and the best places in India to grow a particular crop and also the type of irrigation techniques to be used for particular regions on a single cloud platform using machine learning approaches.

Key-Words: - Cloud computing, machine learning, mashup service, Agriculture and Irrigation.

Dr. R. Madana Mohana
Associate Professor



Nature and Future of Robotics

-Dr. N.Srihari Rao



Robotics is an interdisciplinary field that integrates computer science and engineering. Robotics involves design, construction, operation, and use of robots. The goal of robotics is to design machines that can help and assist humans. Robotics integrates fields of mechanical engineering, electrical engineering, information engineering, mechatronics, electronics, bioengineering, computer engineering, control engineering, software engineering, mathematics, among others.

I like the robot qualities of accuracy, no feelings or no humility to carry out cleaning activities in places like bathrooms, toilets etc., capability to work in dangerous environments and in environments where humans cannot survive, substitutability for humans thereby saving human dignity and lives, serving food carefully like a waiter in hotels, productivity boosting around the workplaces or factories, computer vision and natural language processing capabilities, coding capabilities, goods and service delivering capabilities in the form of drones, fire response and emerging medical purposes, law enforcement, mail delivery, greatly entertaining and communication (humanoid robots) capabilities, capability to improve the quality of life (QoL) of the needy people like the people who need prosthetic limbs, possible multiplicity which is the idea of humans and machines working together, nature of protecting workers, and usefulness in robotic surgeries.

I dislike the robot qualities of pretty rudimentary nature, often ridiculous nature, job stealing nature, emergence and arising of health, privacy and security issues, garbage in garbage out nature, and purely machine nature.

Robots definitely will be greatly used in future as there are already good indications of several possible changes in lifestyles in contrast to those experienced so far. Robotics develops machines that can substitute for humans and replicate human actions. Robots can be used in many situations and for many purposes, but today many are used in dangerous environments including inspection of radioactive materials, bomb detection and deactivation, manufacturing processes, or where humans cannot survive, for example in space, underwater, in high heat, and clean up and containment of hazardous materials and radiation. Robots can take on any form but some are made to resemble humans in appearance. Robots' utility in real life depends on the scenario.

Dr. N. Srihari Rao,
Assistant Professor.,

Tools used in the life cycle of Data Science

-Dr. Suriya Begum



1 .Data Science Tool for Data Storage

- Apache Hadoop

It is a free, open-source framework that can manage and store tons and tons of data. It provides distributed computing of massive data sets over a cluster of 1000s of computers. It is used for high-level computations and data processing

- Microsoft HD Insight

Azure HDInsight is a cloud platform provided by Microsoft for the purpose of data storage, processing, and analytics. Enterprises such as Adobe, Jet, and Milliman use Azure HD Insights to process and manage massive amounts of data.

2 .Data Science Tools for Exploratory Data Analysis

- Informatica PowerCenter

The buzz around Informatica is explained by the fact that their revenue has rounded off to around \$1.05 billion. Informatica has many products focused on data integration. However, Informatica PowerCenter stands out due its data integration capabilities.

- RapidMiner

RapidMiner ranked at number 1 in the Gartner Magic Quadrant for Data Science Platforms 2017, and in the Forrester Wave for predictive analytics and Machine Learning, and one of the top performers in the G2 Crowd predictive analytics grid.

3 Data Science Tools for Data Modelling

- H2O.ai

H2O.ai is the company behind open-source Machine Learning (ML) products like H2O, aimed to make ML easier for all. With around 130,000 data scientists and approximately 14,000 organizations, the H2O. H2O.ai is an open-source Data Science tool that is aimed at making data modeling easier.

- DataRobot

DataRobot is an AI-driven automation platform, that aids in developing accurate predictive models. DataRobot makes it easy to implement a wide range of Machine Learning algorithms, including clustering, classification, regression models.

4..Data Science Tools for Data Visualization

- Tableau

Tableau is the most popular data visualization tool used in the market. It allows you to break down raw, unformatted data into a processable and understandable format. Visualizations created by using Tableau can easily help you understand the dependencies between the predictor variables.

Dr. Suriya Begum,
Associate Professor.

Print Media and type of Image Forgeries

-Dr. Vivek



We are undoubtedly living in an age of imaged proofs. All the ideas and thoughts can be represented in the form of images.

That's why images can be used as proofs for various evidences. Now a days, it is very easy to edit any existing images by the help of various freely available image editing tools.

Today's image editing technology has begun to erode the trust. From the tabloid magazines to the fashion industry and in mainstream media outlets, scientific journals, political campaigns, courtrooms, and the photo hoaxes that land in our e-mail in-boxes, doctored photographs are appearing with a growing frequency and sophistication. In India also there is various such cases in which images were the last proofs.

For the shake of some cheap publicity some political or non political opponents use to defame their oppositions by the mean of cheap manipulations. Some News papers, Digital media, magazines owner also use to do some image tampering to make their content spicier. We have one such example in which Saddam and Bill Clinton are shown together. But in real there was no such meeting between them. Fraudsters just copied bill Clinton portion from any other image and Saddam from different image and pasted them on to the other image with the background as White House. The picture is shown in Figure 1.

This type of forgery is called image compositing.



Figure 1 Sample of Image Forgery

There are various more cases in other media. On internet there are various sites which are providing many fake images of celebrities.

There are various types of image forgery. If we classify this type of forgery on the basis of approaches to falsify then we get two types of forgery.

- 1.Active approach
- 2.Passive approach

In Active approach, fraudsters use watermarks. Digital watermarking has been proposed as a means by which an image can be authenticated (for general surveys). The drawback of this approach is that a watermark must be inserted at the time of recording, which would limit this approach to specially equipped digital cameras. In contrast to these approaches, passive techniques for image forensics operate in the absence of any watermark or signature. These techniques work on the assumption that although digital forgeries may leave no visual clues that indicate tampering, they may alter the underlying statistics of an image.

On the basis of image alteration, we can divide image forgeries in five parts. Image color enhancement, Image compositing, image copy move, textured image alteration, multiple image tempering.

In color enhancement, the color of original images is changed. One can change the RGB levels of images and thus result in a tampered image. Darkness background and brightened background or environment can be achieved by such image tampering methods. In figure 2 following changes are performed.

Changing the color of objects

Changing the weather conditions

Blurring out objects



Figure: 2 various changes in RGB levels of an image

Another type of forgery is image compositing. When some portion of an image is copied and pasted over other image for making different sense then this type of forgery is known as image compositing. This type of forgery is blindly being used by digital media like newspapers, internet etc.

Example of such forgery is shown in figure 3.

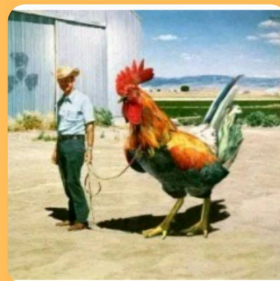


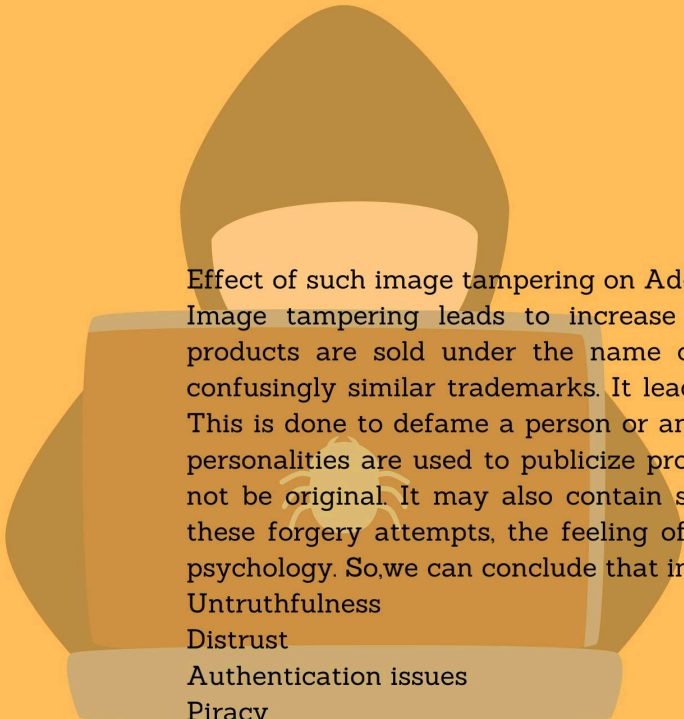
Figure 3 image compositing.

There is another type of image forgery i.e., Copy Move type forgery. . In this type of forgery one portion of image is copied and pasted elsewhere in same image. This type of forgery can be used to hide some information from same image or to show a crowd in big amount.

In texture image editing, texts are written over some existing photographs. This type of forgery is very common in magazines and newspapers. These are widely used now a day in all form of advertisements.

Another type of image forgery attempt is multiple image editing. In this type of image forgery various attempts are made. In some cases it is found that various attempt has been done on the same image.





Effect of such image tampering on Ad-worlds:-

Image tampering leads to increase in piracy of trademarks and holograms. Fake products are sold under the name of other reputed original brands in the form of confusingly similar trademarks. It leads to spoiling of reputation of good brand names. This is done to defame a person or an organization by its opponents. Images of famous personalities are used to publicize products without their legal permission. Images may not be original. It may also contain some unauthentic and vulgar contents. Due to all these forgery attempts, the feeling of distrust is nowadays very common in consumer psychology. So, we can conclude that image tampering leads to following consequences:

Untruthfulness

Distrust

Authentication issues

Piracy

Vulgarity

Conclusion

We can see a huge number of doctored images in our daily life eg in magazines, journals, agriculture, political campaigns and in movies etc. Due to all these ill-effects of image forgery, this problem should be taken very seriously and efficient methods should be employed to detect and report these forgery attempts. Images no doubt made our life very realistic and entertaining but it gave in addition some sort of mistrust over existing photographs. So there is a need of some technology that can ensure with the truth about the images.

My article is inspired from the following references and pictures are also taken from these references.

Guggenheim, K. "New Prison Abuse Photos Outrage Lawmakers." Phillyburbs May 13, 2004. <http://www.phillyburbs.com/pb-dyn/news/27-05132004-299158.html>.

Fridrich, J., J. Lukas, and D. Soukal, "Detection of Copy-Move Forgery in Digital Images." Proceedings of DFRWS 2003. Cleveland, OH, August 2003.

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Hany Farid" .2009, Image Forgery Detection A Survey", IEEE Signal processing Magazine.

www.google.com

Dr. Vivek

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Maze Ransomware-Case Study

-Mangesh Matke



We are living in the world of internet and In the recent past, there has been an exponential increase in the cyber-attack. One of the foremost perilous attack in this cyber-attack is the ransomware attack which not as it corrupts and encrypts the information but it also steals the information from the system which can be very dangerous. In recent times, large companies have grappled with ransomware threats from various cyber black hat hacker groups, who became even more active following the Coronavirus pandemic, leading to data breach and loss of reputation. A Maze ransomware attack can spread through a network, extract data from compromised systems and lock the users or encrypt data. With control over one's system and data, the ransomware actors invite ransom or threaten to publish extracted confidential data on darknet. Here's how a typical Maze attack works:

- Maze ransomware is often delivered via emails or exploit kits such as 'Fallout' and 'Spelevo'.
- '2048-bit RSA' and 'ChaCha20' stream of ciphers are used for encrypting files on the victim's machine.
- Random file extensions used by Maze e include .ini, .gfh, .lLnD, among others.
- Further to encryption, it displays a message about the encrypted files and the file name of the dropped ransomware note.

- A notable feature of Maze ransomware is that it sets the ransomware amount based on the type of system it detects,

such as standalone server, backup server, home computer/ workstation, etc.

Maze Ransomware Meaning - Maze ransomware may be a sophisticated strain of Windows ransomware which targets organizations worldwide across many industries. like other sorts of ransomware, Maze demands a crypto currency payment in exchange for the safe recovery of encrypted data. If maze ransomware victims refuse to pay, the criminals threaten to leak the victims' confidential data. This behavior is increasingly seen in newer forms of ransomware, including REvil/Sodinokibi, JSWorm/Nemty/Nefilim, Clop, and others. How does Maze ransomware work?

Maze is typically distributed through:

1. Spam emails, often using malicious links or attachments
(mostly Word or Excel files)
2. RDP brute force attacks
3. Using an exploit kit

In some cases, the attack may come from an organization's client or partner who has already fallen victim to the hackers. Once Maze gains access to a network, the operators then try to get elevated privileges so they can deploy file encryption across all drives. Maze is particularly dangerous because it

also steals the data it finds and exfiltrates it to servers controlled by malicious hackers who then threaten to release it if a ransom is not paid.

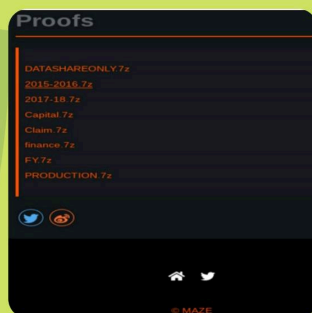
Organizations may be able to restore their data from a secure backup to get up and running again (if the backup itself has not been compromised), but that doesn't undo the fact that criminals now have a copy of the organization's data.

Essentially, maze is a combination of a ransomware attack and a data breach.

• **Cyber Attack - Haldiram Snacks Pvt. Ltd.** The threat of ransomware attacks and data leaks is on the increase . Allegedly, Haldiram Snacks Pvt. Ltd., an Indian manufacturer of sweets and snacks, has been one among the recent victims of a knowledge breach. The chain was recently targeted by a threat actor in July, followed by demands of an enormous ransom for decrypting their stolen data. During our regular monitoring of the dark web, on July-27- 2020, it had been noted that the IT infrastructure of Haldiram's was allegedly breached by Maze Ransomware operators. consistent with a piece of writing on the days of India, a complaint was submitted to the Noida Cyber Cell in India on July 17, 2020 followed by an FIR (First Information Report) on October 14th, 2020. Between July 25 and 27, the leak was also proclaimed by Maze ransomware operators on their website.

Below is a snapshot of the leak published by Maze Ransomware Operators on July 27, 2020 .At that time, only 5% of the data was uploaded by Maze operators but the leaked file was corrupt, thereby providing no concrete evidence of the data leak. These type of posts on ransomware operators' sites is a scare tactic to bring the victim to the negotiation table. Since July 2020, there might have been negotiation talks between the ransomware operators and Haldiram's which may have not been successful. Recently, we found complete i.e. 100% sensitive data leaked by Maze on their website in the dark web. The data consists of various types of sensitive information within 8 compressed files, as shown in the image below.





The leaked data includes internal emails, financial documents– including tax and payroll details of some employees, vendorrelated documents, ex gratia payment details, and PAN cards among other sensitive details.

S.No	Payment Terms	Nos.	On Payroll			Left Employees			Left & Already Paid			Total No Of Employees		
			Payable Before Loan	Loan Amount	Net Payable	Nos.	Payable Before Loan	Loan Amount	Net Payable	Nos.	Payable Before Loan & Payment		Loan Amount	Net Payable
1	Full	451.00	50,00,000.00	5,00,000.00	45,00,000.00	451	50,00,000.00	5,00,000.00	45,00,000.00	451	50,00,000.00	5,00,000.00	45,00,000.00	902
2	2/3	151.00	15,00,000.00	1,50,000.00	13,50,000.00	151	15,00,000.00	1,50,000.00	13,50,000.00	151	15,00,000.00	1,50,000.00	13,50,000.00	302
3	1/2	42.00	4,20,000.00	42,000.00	3,78,000.00	42	4,20,000.00	42,000.00	3,78,000.00	42	4,20,000.00	42,000.00	3,78,000.00	84
4	1/3	6.00	60,000.00	6,000.00	54,000.00	6	60,000.00	6,000.00	54,000.00	6	60,000.00	6,000.00	54,000.00	12
5	1/4	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1000	84.00	8,40,000.00	84,000.00	7,56,000.00	84	8,40,000.00	84,000.00	7,56,000.00	84	8,40,000.00	84,000.00	7,56,000.00	168
7	500	5.00	5,00,000.00	50,000.00	4,50,000.00	5	5,00,000.00	50,000.00	4,50,000.00	5	5,00,000.00	50,000.00	4,50,000.00	10
8	Not entitled	18.00	-	-	-	18	-	-	-	18	-	-	-	36
9	As Per act	182.00	-	-	-	182	-	-	-	182	-	-	-	364
Total		939.00	93,90,000.00	9,39,000.00	84,51,000.00	939	93,90,000.00	9,39,000.00	84,51,000.00	939	93,90,000.00	9,39,000.00	84,51,000.00	1,878

Most of these documents contain information from 2016, with details from F.Y. 2015-16 as well. The data comprises multiple excel and pdf files that are not password protected.

List of Employees Who received loan		Loan Amount		Net Payable		Total No Of Employees	
S.No	Employee Name	Loan Amount	Net Payable	S.No	Employee Name	Loan Amount	Net Payable
1	Mr. A. K. Singh	50,00,000.00	45,00,000.00	1	Mr. A. K. Singh	50,00,000.00	45,00,000.00
2	Mr. B. K. Singh	15,00,000.00	13,50,000.00	2	Mr. B. K. Singh	15,00,000.00	13,50,000.00
3	Mr. C. K. Singh	4,20,000.00	3,78,000.00	3	Mr. C. K. Singh	4,20,000.00	3,78,000.00
4	Mr. D. K. Singh	60,000.00	54,000.00	4	Mr. D. K. Singh	60,000.00	54,000.00
5	Mr. E. K. Singh	-	-	5	Mr. E. K. Singh	-	-
6	Mr. F. K. Singh	8,40,000.00	7,56,000.00	6	Mr. F. K. Singh	8,40,000.00	7,56,000.00
7	Mr. G. K. Singh	5,00,000.00	4,50,000.00	7	Mr. G. K. Singh	5,00,000.00	4,50,000.00
8	Mr. H. K. Singh	-	-	8	Mr. H. K. Singh	-	-
9	Mr. I. K. Singh	-	-	9	Mr. I. K. Singh	-	-
10	Mr. J. K. Singh	-	-	10	Mr. J. K. Singh	-	-
11	Mr. K. K. Singh	-	-	11	Mr. K. K. Singh	-	-
12	Mr. L. K. Singh	-	-	12	Mr. L. K. Singh	-	-
13	Mr. M. K. Singh	-	-	13	Mr. M. K. Singh	-	-
14	Mr. N. K. Singh	-	-	14	Mr. N. K. Singh	-	-
15	Mr. O. K. Singh	-	-	15	Mr. O. K. Singh	-	-
16	Mr. P. K. Singh	-	-	16	Mr. P. K. Singh	-	-
17	Mr. Q. K. Singh	-	-	17	Mr. Q. K. Singh	-	-
18	Mr. R. K. Singh	-	-	18	Mr. R. K. Singh	-	-
19	Mr. S. K. Singh	-	-	19	Mr. S. K. Singh	-	-
20	Mr. T. K. Singh	-	-	20	Mr. T. K. Singh	-	-
21	Mr. U. K. Singh	-	-	21	Mr. U. K. Singh	-	-
22	Mr. V. K. Singh	-	-	22	Mr. V. K. Singh	-	-
23	Mr. W. K. Singh	-	-	23	Mr. W. K. Singh	-	-
24	Mr. X. K. Singh	-	-	24	Mr. X. K. Singh	-	-
25	Mr. Y. K. Singh	-	-	25	Mr. Y. K. Singh	-	-
26	Mr. Z. K. Singh	-	-	26	Mr. Z. K. Singh	-	-
27	Mr. A. K. Singh	-	-	27	Mr. A. K. Singh	-	-
28	Mr. B. K. Singh	-	-	28	Mr. B. K. Singh	-	-
29	Mr. C. K. Singh	-	-	29	Mr. C. K. Singh	-	-
30	Mr. D. K. Singh	-	-	30	Mr. D. K. Singh	-	-
31	Mr. E. K. Singh	-	-	31	Mr. E. K. Singh	-	-
32	Mr. F. K. Singh	-	-	32	Mr. F. K. Singh	-	-
33	Mr. G. K. Singh	-	-	33	Mr. G. K. Singh	-	-
34	Mr. H. K. Singh	-	-	34	Mr. H. K. Singh	-	-
35	Mr. I. K. Singh	-	-	35	Mr. I. K. Singh	-	-
36	Mr. J. K. Singh	-	-	36	Mr. J. K. Singh	-	-
37	Mr. K. K. Singh	-	-	37	Mr. K. K. Singh	-	-
38	Mr. L. K. Singh	-	-	38	Mr. L. K. Singh	-	-
39	Mr. M. K. Singh	-	-	39	Mr. M. K. Singh	-	-
40	Mr. N. K. Singh	-	-	40	Mr. N. K. Singh	-	-
41	Mr. O. K. Singh	-	-	41	Mr. O. K. Singh	-	-
42	Mr. P. K. Singh	-	-	42	Mr. P. K. Singh	-	-
43	Mr. Q. K. Singh	-	-	43	Mr. Q. K. Singh	-	-
44	Mr. R. K. Singh	-	-	44	Mr. R. K. Singh	-	-
45	Mr. S. K. Singh	-	-	45	Mr. S. K. Singh	-	-
46	Mr. T. K. Singh	-	-	46	Mr. T. K. Singh	-	-
47	Mr. U. K. Singh	-	-	47	Mr. U. K. Singh	-	-
48	Mr. V. K. Singh	-	-	48	Mr. V. K. Singh	-	-
49	Mr. W. K. Singh	-	-	49	Mr. W. K. Singh	-	-
50	Mr. X. K. Singh	-	-	50	Mr. X. K. Singh	-	-
51	Mr. Y. K. Singh	-	-	51	Mr. Y. K. Singh	-	-
52	Mr. Z. K. Singh	-	-	52	Mr. Z. K. Singh	-	-
53	Mr. A. K. Singh	-	-	53	Mr. A. K. Singh	-	-
54	Mr. B. K. Singh	-	-	54	Mr. B. K. Singh	-	-
55	Mr. C. K. Singh	-	-	55	Mr. C. K. Singh	-	-
56	Mr. D. K. Singh	-	-	56	Mr. D. K. Singh	-	-
57	Mr. E. K. Singh	-	-	57	Mr. E. K. Singh	-	-
58	Mr. F. K. Singh	-	-	58	Mr. F. K. Singh	-	-
59	Mr. G. K. Singh	-	-	59	Mr. G. K. Singh	-	-
60	Mr. H. K. Singh	-	-	60	Mr. H. K. Singh	-	-
61	Mr. I. K. Singh	-	-	61	Mr. I. K. Singh	-	-
62	Mr. J. K. Singh	-	-	62	Mr. J. K. Singh	-	-
63	Mr. K. K. Singh	-	-	63	Mr. K. K. Singh	-	-
64	Mr. L. K. Singh	-	-	64	Mr. L. K. Singh	-	-
65	Mr. M. K. Singh	-	-	65	Mr. M. K. Singh	-	-
66	Mr. N. K. Singh	-	-	66	Mr. N. K. Singh	-	-
67	Mr. O. K. Singh	-	-	67	Mr. O. K. Singh	-	-
68	Mr. P. K. Singh	-	-	68	Mr. P. K. Singh	-	-
69	Mr. Q. K. Singh	-	-	69	Mr. Q. K. Singh	-	-
70	Mr. R. K. Singh	-	-	70	Mr. R. K. Singh	-	-
71	Mr. S. K. Singh	-	-	71	Mr. S. K. Singh	-	-
72	Mr. T. K. Singh	-	-	72	Mr. T. K. Singh	-	-
73	Mr. U. K. Singh	-	-	73	Mr. U. K. Singh	-	-
74	Mr. V. K. Singh	-	-	74	Mr. V. K. Singh	-	-
75	Mr. W. K. Singh	-	-	75	Mr. W. K. Singh	-	-
76	Mr. X. K. Singh	-	-	76	Mr. X. K. Singh	-	-
77	Mr. Y. K. Singh	-	-	77	Mr. Y. K. Singh	-	-
78	Mr. Z. K. Singh	-	-	78	Mr. Z. K. Singh	-	-
79	Mr. A. K. Singh	-	-	79	Mr. A. K. Singh	-	-
80	Mr. B. K. Singh	-	-	80	Mr. B. K. Singh	-	-
81	Mr. C. K. Singh	-	-	81	Mr. C. K. Singh	-	-
82	Mr. D. K. Singh	-	-	82	Mr. D. K. Singh	-	-
83	Mr. E. K. Singh	-	-	83	Mr. E. K. Singh	-	-
84	Mr. F. K. Singh	-	-	84	Mr. F. K. Singh	-	-
85	Mr. G. K. Singh	-	-	85	Mr. G. K. Singh	-	-
86	Mr. H. K. Singh	-	-	86	Mr. H. K. Singh	-	-
87	Mr. I. K. Singh	-	-	87	Mr. I. K. Singh	-	-
88	Mr. J. K. Singh	-	-	88	Mr. J. K. Singh	-	-
89	Mr. K. K. Singh	-	-	89	Mr. K. K. Singh	-	-
90	Mr. L. K. Singh	-	-	90	Mr. L. K. Singh	-	-
91	Mr. M. K. Singh	-	-	91	Mr. M. K. Singh	-	-
92	Mr. N. K. Singh	-	-	92	Mr. N. K. Singh	-	-
93	Mr. O. K. Singh	-	-	93	Mr. O. K. Singh	-	-
94	Mr. P. K. Singh	-	-	94	Mr. P. K. Singh	-	-
95	Mr. Q. K. Singh	-	-	95	Mr. Q. K. Singh	-	-
96	Mr. R. K. Singh	-	-	96	Mr. R. K. Singh	-	-
97	Mr. S. K. Singh	-	-	97	Mr. S. K. Singh	-	-
98	Mr. T. K. Singh	-	-	98	Mr. T. K. Singh	-	-
99	Mr. U. K. Singh	-	-	99	Mr. U. K. Singh	-	-
100	Mr. V. K. Singh	-	-	100	Mr. V. K. Singh	-	-

BONDS / E / EXEMPTION DETAILS

1. Bond Name: **7.65% 2023-24**

2. Bond Type: **7.65% 2023-24**

3. Bond Issued: **7.65% 2023-24**

4. Bond Maturity: **7.65% 2023-24**

5. Bond Interest: **7.65% 2023-24**

6. Bond Coupon: **7.65% 2023-24**

7. Bond Yield: **7.65% 2023-24**

8. Bond Price: **7.65% 2023-24**

9. Bond Face Value: **7.65% 2023-24**

10. Bond Par Value: **7.65% 2023-24**

11. Bond Premium: **7.65% 2023-24**

12. Bond Discount: **7.65% 2023-24**

13. Bond Spread: **7.65% 2023-24**

14. Bond Basis: **7.65% 2023-24**

15. Bond Basis: **7.65% 2023-24**

16. Bond Basis: **7.65% 2023-24**

17. Bond Basis: **7.65% 2023-24**

18. Bond Basis: **7.65% 2023-24**

19. Bond Basis: **7.65% 2023-24**

20. Bond Basis: **7.65% 2023-24**

21. Bond Basis: **7.65% 2023-24**

22. Bond Basis: **7.65% 2023-24**

23. Bond Basis: **7.65% 2023-24**

24. Bond Basis: **7.65% 2023-24**

25. Bond Basis: **7.65% 2023-24**

26. Bond Basis: **7.65% 2023-24**

27. Bond Basis: **7.65% 2023-24**

28. Bond Basis: **7.65% 2023-24**

29. Bond Basis: **7.65% 2023-24**

30. Bond Basis: **7.65% 2023-24**

31. Bond Basis: **7.65% 2023-24**

32. Bond Basis: **7.65% 2023-24**

33. Bond Basis: **7.65% 2023-24**

34. Bond Basis: **7.65% 2023-24**

35. Bond Basis: **7.65% 2023-24**

36. Bond Basis: **7.65% 2023-24**

37. Bond Basis: **7.65% 2023-24**

38. Bond Basis: **7.65% 2023-24**

39. Bond Basis: **7.65% 2023-24**

40. Bond Basis: **7.65% 2023-24**

7.65% 2023-24 7.65% 2023-24 7.65% 2023-24

2023-24

2023-24 2023-24 2023-24 2023-24 2023-24

S.No	Bond Name	Bond Type	Bond Issued	Bond Maturity	Bond Interest	Bond Coupon	Bond Yield	Bond Price	Bond Face Value	Bond Par Value	Bond Premium	Bond Discount	Bond Spread	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis	Bond Basis
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Architecture of Reversible Digital Image Watermarking for Watermarking Applications

-Manohar Gosul



Visible Digital watermarking is a technique that embeds copyright information perceptibly within the image to prevent illicit use of multimedia content. There are numerous applications that require user authentication to make the original image content available. In this paper the design of reversible digital image watermarking for watermarking applications is introduced. Here the image is identified based on the authentication of data. After this paper, segmentation is applied. Segmentation will divide the image into number of regions. Compression of image is performed after segmentation. The compressed image will divide into number of blocks. Now the blocks will be identified which are smoothen. After this embedding process is performed, at last an watermarked image is obtained. From results we can observe that the proposed system gives effective output.

In the past few years, the information exchange in the digital world has increased enormously which in turn increased the vulnerability and copyright violation issues of the digital content. In order to counter this kind of threat digital watermark, steganography and cryptography can be considered as the possible solution. Steganography is art and science of hiding information between two parties for the purpose of communication with one another. In steganography if the existence of secret information is revealed, steganography fails. In order to increase the security of communication sometimes steganography is combined with cryptography where in an attacker may be able to extract the message from the cover work but the attacker has to irremovable which makes them unacceptable for applications which empower validated clients to recoup the first picture quality.

The reversible unmistakable watermarking plans figure out how to recuperate the first picture quality. In any case, the implanted unmistakable watermark with the strategy fundamentally diminishes the nature of the watermarked picture, while the strategies need a duplicate of the first watermark to recuperate the first picture quality. Also, notwithstanding their benefits, the reversible obvious watermarking plans accessible today are appropriate for uncompressed pictures, which make them unacceptable for most Internet applications where media transmissions are done in compacted picture/video groups. To the learning of the creator, there are no reversible watermarking plans which are pertinent to compacted pictures

ARCHITECTURE FOR REVERSIBLE DIGITAL WATERMARKING

The below figure (1) shows the architecture of proposed system. In this system mainly authenticate of image, image segmentation, image compression, identification of smooth blocks and embedded process is performed. the watermark is extracted using the pixels of image. The reference image is used to reconstruct the image. The hiding capacity is decreased by adding and locating the information related to that image pixels. The watermark image is encoded into the smooth regions to get watermarked image.

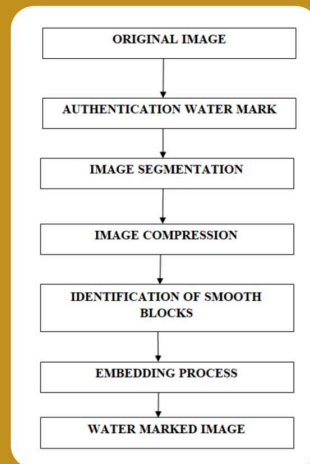


Fig. 1: PROPOSED SYSTEM

Manohar Gosul
Assistant Professor

Performance Study on Iris Data Set using various Machine Learning Algorithms

Mrs. Farhana Bano



Mrs. K. Munidhanalakshmi

Abstract: Machine Learning is very significant aspect in this research areas. This ML Techniques are we can use in many Business Applications. These Techniques makes more Optimization results to customers. In this Article we have used IRIS data set and predicts information about different accuracy, precision, recall and F-score.

Related Survey:

Many study researches has been conducted on the identification of iris flower species using various case studies and methods. The related work aims to classify iris flowers among three species (setosa, versicolor, or virginica). Every method applies different strategy. Review of some significant solutions is presented. In this Article, IRIS - Flower Classification by C. Geetha, Raghu Ram, Nazeer Vali, Identification of Iris flower species works in two phases, namely training and testing. During training the training dataset are loaded into Machine Learning Model and Labels are assigned. Further the predictive model, predicts to which species the Iris flower belongs to. Hence, the expected Iris species is labeled. This paper focuses on IRIS flower classification using Machine Learning with scikit tools.

Python

In this Article we have used Python tool for execution of this Application

In this machine learning project we have done following steps

- Define Problem.
- Prepare Data.
- Evaluate Algorithms.
- Improve Results.
- Present Results

Here is an overview of what we are going to cover:

- Installing the Python and SciPy platform.
- Loading the dataset.
- Summarizing the dataset.
- Visualizing the dataset.
- Evaluating some algorithms.
- Making some predictions.

Install SciPy Libraries

scipy

numpy

matplotlib

pandas

sklearn

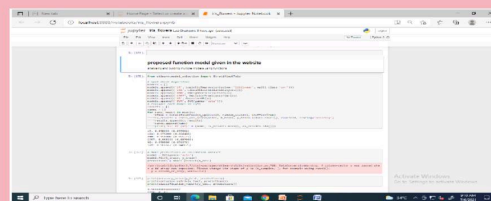
Iris Data Set:

Link for Download : <https://archive.ics.uci.edu/ml/datasets/iris>

Data Set Characteristics:	Multivariate	Number of Instances:	150	Area:	Life
Attribute Characteristics:	Real	Number of Attributes:	4	Date Donated	1988-07-01
Associated Tasks:	Classification	Missing Values?	No	Number of Web Hits:	4089182

Exexution/Implementation:

Analysing and bulding multiple models using functions.



Using of following Build Models Logistic Regression (LR),Linear Discriminant Analysis (LDA),K-Nearest Neighbors (KNN),Classification and Regression Trees (CART),Gaussian Naive Bayes (NB),Support Vector Machines (SVM).We got Higher performance in LDA Algorithm

Final Code and Data set available at given Links::a

<https://drive.google.com/drive/folders/1ZFbumqyAHX3ncvOfTA7TI-3O8-VM1YNY?usp=sharing>

<https://archive.ics.uci.edu/ml/datasets/iris>

Summary: Machine Learning is very significant aspect in all research. In this Machine Learning Algorithms we have done many comparisons for IRIS Data Set. We have Calculated accuracy precision recall f1 score using python Tool.

Mrs Farhana Bano
Assistant Professor.

Mrs.K.Munidhanalakshmi
Assistant Professor.

Autonomous Vehicle using AI and ML

-Mrs. Mubeena Begum



With the Increase in emerging technologies in the field of computer science such as Artificial Intelligence, Machine learning, IoT and the internet of vehicle (IoV). There is a remarkable growth of Autonomous vehicles on the roads. Autonomous Vehicle- "A self driving car/driverless/Robotic car" gives safety comfort and reduces accidents. This Article provides a comprehensive analysis of Autonomous Vehicle and its requirements for the latest and most advanced autonomous driving application. It also investigates the communication technologies which offer high reliability, scalability and less congestion. This article also focuses on the potential issue and the research challenges.

From the invention of the car there is a great relation between human and car. Because by the invention of the car the automobile industry was established. By this car the traveling time from one place to another place is reduced. The car brings the royalty from the invention. As cars are coming on the roads the accidents rate are also increased. As per the reports of National Highway Traffic Safety Administration (NHTSA) nearly 1.25 million accidents occurred per year due to the human driving error. In order to reduce the road accidents autonomous vehicle have come into picture.

A completely autonomous vehicle is one in which a computer performs all the tasks that the human driver normally would. The one has to enter the destination into a computer and enabling the system from there the car would take over and drive to the destination with no human input. The car would be able to sense its environment and make steering and speed changes as necessary. A lane detection to aid in passing slower vehicles or exiting a highway; obstacle detection to locate others cars, pedestrians, animals etc; adaptive cruise control to maintain a safe speed; collision avoidance to avoid hitting obstacles in the road way.

In addition, sensors would be needed to alert the car or weather conditions to ensure safe travelling speeds. The system architecture comprises of many sensor like LIDAR, RADAR etc, Video camera, Electronic Control Unit, CAN bus and various application. The benefits of this vehicle are Reduced Accidents, Reduced Traffic Congestion, Reduced CO2 Emissions, Increased Lane Capacity, Lower Fuel Consumption, Last Mile Services, Transportation Accessibility, Reduced Travel Time and Transportation Costs.

The communication technology involved in autonomous vehicle is Dedicated short range communication (DSRC) and Cellular V2X (C-V2X). As per the research C-V2X is more suitable for autonomous vehicle where it cover short as well as long range of up to 2km. The Applications of autonomous vehicle are intelligent transporting, Military application, transportation in hazardous places, shipping, public transportation, taxi services. nuTonomy, AutoX., Drive.ai., Optimus Ride.,

Waymo these are the examples of driverless cars.

There are certain fundamental challenges to introduce fully autonomous vehicle on roads such as sensors, localization and mapping, machine learning, security, social acceptability, data flooding, data congestion etc. Due to these challenges such vehicles are not on the road. Still research is going on to overcome all the potential challenges and to make a car as fully autonomous car. There is a very good future scope in this field because apart from fully autonomous vehicle now flying air car also came into existence. This article is very helpful to the students and faculties to gain knowledge on new technology and mostly for the research scholar who are working in the same domain.

Mrs.Mubeena Begum
Assistant Professor

College Notification App

-U. Narasimhulu



The goal of Article is to use an E-notice board to replace the traditional notice board. Now there's no need to keep track of many accounts to share information and all college-related news; it'll be available everywhere, at any time, with just a single click on your Android device. Installing the "College Notification App" on your Android device will allow you to quickly and easily access all of your college's notices. The notification manager has been added by the administrator. Faculty and students will receive notifications on scholarships, admissions, exams, staff meetings, holidays, events, timetables, successes, and other notices from the notification manager, which will be checked by the admin first. Faculty and students get and can view their connected notices. It produces a high level of organization and speed amongst the instructor, faculty, and students. It saves time and effort by connecting the Android application to the university's educational database utilizing cutting-edge technologies.

Traditional notice boards necessitate a lot of pen and paper labour, as well as paper waste. In most institutions, traditional paper-based notice boards are used, thus we may utilize an Android-based application to address the drawbacks of this traditional notice board. Faculty and students are both affected by the college notification system. The goal of this Android-based software is to notify students and instructors. Users can use the E-Notice Board from anywhere on campus to receive notices. E-Notice Board is a programmed that can run on any computer system connected to the internet via a local area network, wired or wireless. Notice boards are commonly used to communicate a message in schools, colleges, and other organizations. The traditional notice board requires students to visit it every day, whereas the E-notice board allows students and instructors to access notices from everywhere.

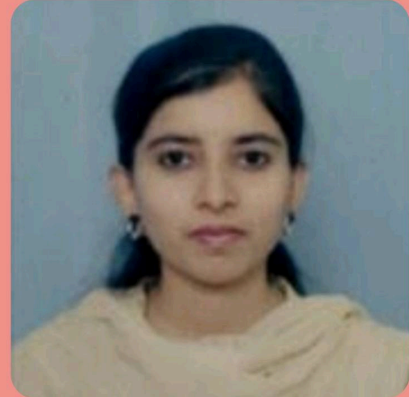
U Narasimhulu,
Asst. Professor.,





Women empowerment through education

-Shazia Anjum M S



Women empowerment through education is the pivotal part in any society, state or country. It is a woman who plays a dominant role in the basic life of a child. Women are an important section of our society.

As per united national development fund for women (UNIFEM) the term women's empowerment means:

- Acquiring knowledge and understanding of gender relations and the ways in which these relations may be changed.
- Developing a sense of self-worth, a belief in one's ability to secure desired changes and the right to control one's life.
- Gaining the ability to generate choices exercise bargaining power.
- Developing the ability to organize and influence the direction of social change, to create a more just social and economic order, nationally and internationally. Thus, empowerment means a psychological sense of personal control or influence and a concern with actual social influence, political power and legal rights.

Education as means of empowerment of women can bring about a positive attitudinal change. It is therefore, crucial for the socioeconomic and political progress of India. The Constitution of India empowers the state to adopt affirmative measures for prompting ways and means to empower women. Education significantly makes difference in the lives of women. Women Empowerment is a global issue and discussion on women political right are at the fore front of many formal and informal campaigns worldwide. The concept of women empowerment was introduced at the international women conference at NAROI in 1985. Education is milestone of women empowerment because it enables them to responds to the challenges, to confront their traditional role and change their life. So we can't neglect the importance of education in reference to women empowerment. To see the development in women education India is supposed to upcoming super power of the world in recent years. The increasing change in women education, the empowerment of women has been recognized as the central issue in determining the status of women. For becoming super power we have mostly to concentrate upon the women's education. By which it will force on women's empowerment.

"When girls are educated, their countries become stronger and more prosperous."

– Michelle Obama

Shazia Anjum M.S
Assistant Professor

It's time to say Good Bye..

-Mrs. Arati .S.B



The day I got appointed at BIET was such a remarkable memory. It excited me a lot, having expectations beyond the sky. They say "Expectations are never fully satisfied", but for me it was more than what I actually expected. Being a fresher to the new state, new people, new language & new college was very difficult for me. After the years, suddenly it happens. One fine day our admin in charge came to me and he said you are the new class in charge for III section. What should I do? Should I take or not? Yes, I did. One year passed after that and today as we bid them goodbye, I would like to share a few words for them.

Never thought this day would knock on our doors so soon. We never had the time to pause and reflect on how much we would miss the moments we spent with this batch but here we are. As we grow comfortable with our present surroundings, life demands change and we must unwillingly or willingly comply. I do admit that we have learned from them as much as they have learned from us. Their ethics and working style were appreciated by the entire college. They were loved by everyone and were our very own little geniuses.

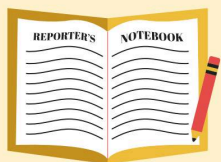
I still recall the tough times when there were changes in the curriculum but despite the increased pressure of workload, they took up the challenge positively and expressed that nothing could deter us. They are blessed with immense talent apart from their excellence in academics and sports. My fellow faculties would always pick the batch as volunteers for important events; this was the great impact they had on the college and the fellow faculties.

We have seen their dedication towards work in all spheres, be it academics or extracurricular activities. They happily managed their time to contribute to all the spheres of the organization. Their ability to take criticism proves they will become excellent leaders in the future. The understanding shared with them was a wholesome and enriching experience for me. Living the last few moments of your college life, I would like to share something that you may find useful in determining your path in the process of learning.

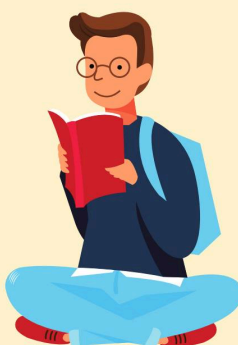
Hey my students, your life is going to change completely when you head off to college. Instead of having parents around to remind you to wake up and get a decent amount of sleep, you're suddenly completely on your own, with a lot of freedom and a whole new world of opportunities to embrace. College life has prepared you for a battle ahead called life... It is a perfect blend of joy and hardships. You will meet different people, you will interact with them, and you will learn about their cultures and grow as a person. You will understand how to talk to different people, how to judge their behaviour, thus helping you with important life skills.

One fine day, when we look back... we'll definitely end up smiling silently reminiscing the memories of this batch. Will meet you soon as an alumnus in the near future. Wish you all the best.

Regards
Mrs. Arathi S.B



STUDENTS CORNER



Students Achievements

Hearty Congratulations to the Team selected in National level Hackathon 'Crack the COVID-19 Crisis' organized by NASSCOM in association with IBM.

Guided by:

Shilpa Sudeendhran

Project Title:

E saloon for mobile application during Pandemic Situation



Ch.Hemanth

17E11A0542

IV A



C.Prabhu Kumar

16E11A05D4

IV A



Mudavath Babu

17E11A0536

IV A



V.Naveen Kumar

17E11A0532

IV A

GATE QUALIFIED



Krishna
4th year, IT

**Forge your Future, Focus on your
Vission, Find your Carrer**

Congratulations

Data analyst

-M.Jahnavi



WHAT DOES A DATA ANALYST DO?

Nowadays data is increasingly shaping the systems that we interact with everything whether you are searching for something on Google, using messaging services, scrolling down your Facebook feed or browsing your Instagram, you are both consuming and generating the data at the same time. We have reached an era where we're generating 2.5 quintillion i.e 2.5×10^{18} Bytes of it everyday. Now that's a heck lot of data, so what to do with all that data? Well that's where data analyst comes into the picture.

A data analyst delivers value to the companies by taking information about specific topics and then interprets, analyses and presents findings and comprehensive reports. Many different types of businesses use data analysts to help, as experts data analysts often called on use provided skills and tools to give competitive analysis and magnified trends within the industries.

Depending on their level of expertise, data analysts may:

1. Determine organizational goals
2. Mine data from primary and secondary sources.
3. Clean or cleanse the data.
4. Analyse and interpret results.
5. Pinpoint trends, correlations and patterns in complicated data sets.
6. Provide concise data reports and clear data visualizations.
7. Design, create and maintain relational databases and data systems.

So if you are thinking of changing your career to data analyst, it is definitely a good idea, there are so many jobs being opened for data analyst. There are many people transitioning from mechanical engineering or B.com or different backgrounds to a data analyst career, if that is something that excites you, you should definitely consider this as an option. On internet there are many graduates who have chosen to become a data analyst without a computer science background and now working for big companies. Having a computer or phone with internet connection is enough to gain skills and excel as a data analyst.

Cryptocurrency

-Aryan Batheja



The new wave of Cryptocurrency!

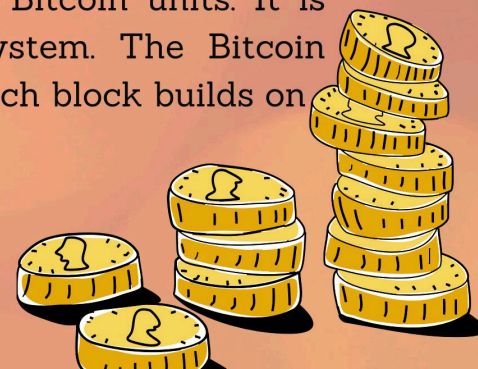
Nowadays everywhere we go we just come around this word “cryptocurrency” or bitcoin, some of us know a little bit about it that it is some kind of a digital payment method but let me tell you it’s more than just that. So let’s find out what actually all of this means and what’s our interest in knowing all of this information. First let’s start with the term “Cryptocurrency” Google tells that it’s nothing but a digital asset designed to work as a medium of exchange wherein individual coin ownership records are stored in a ledger existing in a form of a computerized database using strong cryptography to secure transaction records. There are many types of Cryptocurrency available in today’s age, but for the sake of understanding we will be focusing on Bitcoin.

Bitcoin originated with the white paper that was published in 2008 under the pseudonym “Satoshi Nakamoto”.

It was published via a mailing list for cryptography and has a similar appearance to an academic paper. The creators’ original motivation behind Bitcoin was to develop a cash-like payment system that permitted electronic transactions but that also included many of the advantageous characteristics of physical cash.

Bitcoin is a virtual monetary unit and therefore has no physical representation. A Bitcoin unit is divisible and can be divided into 100 million “Satoshis,” the smallest fraction of a Bitcoin. Bitcoin was invented by Satoshi Nakamoto and hence the unit Satoshi’s.

The Bitcoin Blockchain is a data file that carries the records of all past Bitcoin transactions, including the creation of new Bitcoin units. It is often referred to as the ledger of the Bitcoin system. The Bitcoin Blockchain consists of a sequence of blocks where each block builds on



Its predecessors and contains information about new Bitcoin transactions. The average time between Bitcoin blocks is 10 minutes. Because everyone can download and read the Bitcoin Blockchain, it is a public record, a ledger that contains Bitcoin ownership information for any point in time. The notion of “public record of ownership” also has to be qualified because the owners of Bitcoin units usually remain anonymous through the use of pseudonyms.

It is open sourced. Let us now understand how one can use a bitcoin system .

To use the Bitcoin system, an agent downloads a Bitcoin wallet.

A Bitcoin wallet is software that allows the receiving, storing, and sending of (fractions of) Bitcoin units.

The next step is to exchange fiat currencies, such as the U.S. dollar, for Bitcoin units. The most common way is to open an account at one of the many Bitcoin exchanges and to transfer fiat currency to it.

The account holder can then use these funds to buy Bitcoin units or one of the many other crypto assets on the exchange. Provide order books and many other financial tools that make the trading process transparent.

There are currently 4500+ different types of cryptocurrencies in existence, and the reason for that is Blockchain technology is open source, meaning any software developer can use the original source code and create something new with it. Isn't it just amazing.

This is just the tip of the iceberg . Crypto currency and bitcoin is a very vast topic and I would suggest my reader to further gain some knowledge on the above .



Mental Health Struggles in College

-Mahima



Breathe in, breathe out. You're headed off to college, and your mother won't always be there for a good cry session when everything seems overwhelming. College will bring on a lot of new emotions and stressors. What if your friends want to go out drinking but you don't? How far is too far with that cute guy from English class? It isn't always easy to find your place in college, and often mental health struggles can arise as students deal with social stress along with academics and extracurriculars, and also trying to keep in touch with old family and friends...phew. Take a deep breath and pay attention. The most common struggles students face are anxiety, substance abuse, depression.

NOW THE QUESTIONS THAT ARISE:
WILL PEOPLE JUDGE ME IF I SPEAK OUT ABOUT MY MENTAL HEALTH STRUGGLES?

In college, you may find it easy to fall back into a high school mentality of that closed-in environment where everyone pays attention to what everyone else is doing. But everyone in college is so busy securing an internship or keeping their grades up that no one will judge you just for dealing with anxiety or depression. People can't even tell that you have these struggles just by looking at you, so walk around with confidence as best you can while you deal with these problems.

WHO SHOULD I TALK TO FIRST?

If you're feeling hesitant about talking to a professional, feel free to reach out to your parents or your friends, or anyone you can trust with these issues. Talking about your feelings with your support system helps. If negative emotions and excessive worrying persist, your trusted support system can ultimately help you reach out to someone trained to help you with these mental health struggles.

HOW MANY OTHER STUDENTS STRUGGLE WITH MENTAL HEALTH ISSUES?

More than you would think. One in four students struggle with mental health issues, but many statistics say that only 50% of students suffering from an illness report their negative feelings. So actually, it could be that up to half of your fellow students could feel exactly like you at least some of the time. One of the most discouraging parts of mental illness is its ability to make you feel isolated in your experience. Even if you don't feel comfortable speaking out yet, just know that you literally are not alone in your struggles.

ARE MY PROBLEMS REALLY IMPORTANT ENOUGH?

In short, yes. I hesitated to go to therapy at the beginning of my college experience because I knew I had never been diagnosed with anxiety or depression, and I felt like I was wasting the therapist's time when they could be dealing with "more serious" issues. But at the end of the day, only you experience your mind on the intense level that you do, and if you don't take care of it, no one else can reach out for that help for you in the same way that you can. Your problems are important enough, no matter how big or small.

WILL THIS AFFECT MY SCHOOLWORK AND MY "COLLEGE EXPERIENCE?"

Not if you don't let it. Especially if you attend sessions with a school-sanctioned therapist, who is required to give you a diagnosis so that you can use it when needed. For example, my therapist this year didn't find I had anxiety or depression, but she labeled me with "adjustment issues" letting me cite this to a professor if I ever felt I needed a night off and just truly couldn't handle the paper that night.

HOW TO GET OVER IT

1. CAPS

Many universities offer CAPS (Counseling & Psychological Services), a free Health and Wellness center whose main focus is to make sure you feel, well, healthy and well. CAPS is a useful gateway if you're completely lost as to how you can feel better. Whether you just need to vent during a particularly stressful week or if you need help getting in contact with a more regular therapist, the helpful people in these departments will take you step-by-step through whichever process you choose while letting you in on some of the secrets of human psychology that you may not have learned in Psych 101.

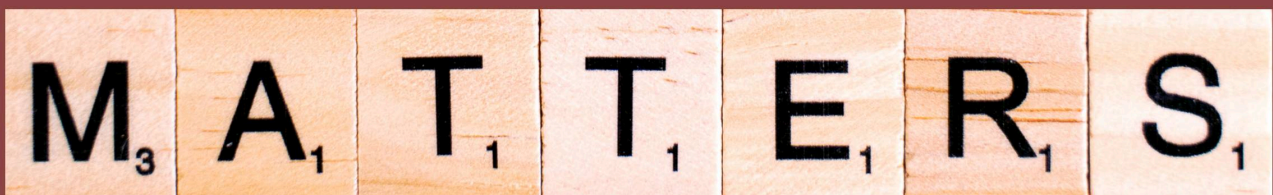
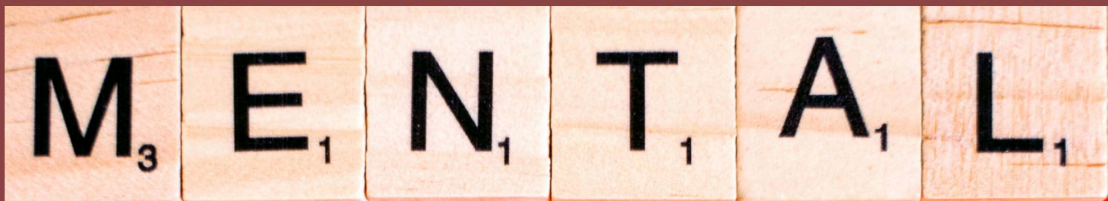
2. THERAPY

Once you determine how you want to fight your mental health struggles, therapy can often be a useful tool. Check to see if your school offers at least a limited number of free sessions with an on-campus therapist or can refer you to someone within walking distance of the campus. In addition, you might also decide that group therapy will ease your mind, in which you can share your own problems with students pulling the words right out of your mouth.

3. TALKING TO FRIENDS AND FAMILY

Even if you don't think you're ready to seek formal treatment yet, seeking out your closest friends and family for guidance can never hurt. If these people are worth keeping in your life, they'll appreciate your reaching out, and you could even become closer once you explain the reasons behind some of your behavior.

BECAUSE MENTAL HEALTH IS IMPORTANT!!!!!!!!!!



What can a \$1 billion investment buy?

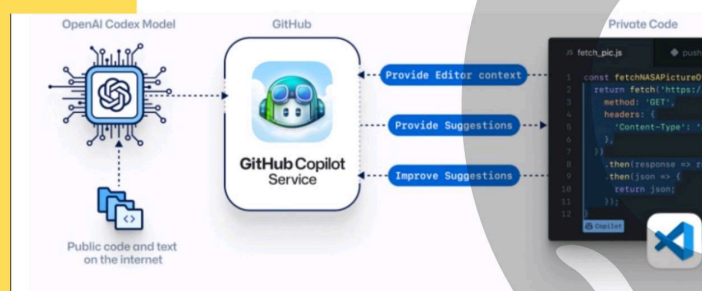
-K Pavan



OpenAI and GitHub answered this question boldly with the preview of a new AI tool — GitHub Copilot. It can write user-compatible code and is much better at the task than its predecessor — GPT-3.

Microsoft and OpenAI released the technical preview of GitHub Copilot, GitHub Copilot is powered by OpenAI Codex, a new AI system created by OpenAI. OpenAI Codex has broad knowledge of how people use code and is significantly more capable than GPT-3 in code generation, in part, because it was trained on a data set that includes a much larger concentration of public source code. This AI-based assistant to help programmers write better codes. Not to be confused with autofill, this assistant takes context from the code being worked on to suggest successive lines of code and functions. It works well with languages such as Python, TypeScript, Javascript, Ruby, and Go. It learns and adapts to the user's coding habits, analyzes the available codebase, and generates suggestions backed by billions of lines of public code it has been trained on.

Currently, it is a Visual Studio Code extension



How Artificial Intelligence Play a Role in the COVID-19 Pandemic

-Shashank Kulkarni



In the present covid-19 situation, health delivery needs support from new technologies like artificial intelligence, machine learning, the Internet of things(IoT), big data., etc. Among all these new technologies, artificial intelligence plays a crucial role in decisive technology to analyse, prepare us for prevention and fight with COVID-19 (Coronavirus) and other pandemics. Presently AI can be defined as the combination of Machine Learning (ML), Natural Language Processing (NLP), and Computer Vision applications to teach computers to use big data-based models for pattern recognition, explanation, and prediction.

AI has played a crucial tool in the fight of covid 19 pandemics. This new technology of AI helps to solve the problems of this virus. It is helpful to provide a daily update of an infected patient, area-wise, age-wise, and state-wise, with proper surveillance systems. The significant applications are applied to track data of confirmed, recovered, and death cases. It also plays a vital role in understanding and suggesting the development of a vaccine for COVID-19. These Artificial intelligence technologies provide many innovative ideas and solutions for fighting local and global medical emergencies.

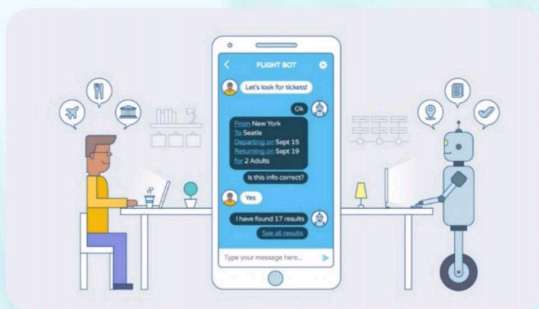
Chatbots for Learning

-Mr.Sai Kiran



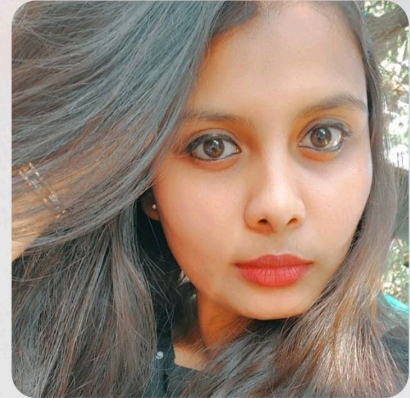
With the exponential growth in the mobile device market over the last decade, chatbots are becoming an increasingly popular option to interact with users, and their popularity and adoption are rapidly spreading. A chatbot is a software tool that interacts with users on a certain topic or in a specific domain in a natural, conversational way using text and voice. For many different purposes, chatbots have been used across a wide range of domains, including marketing, customer service, technical support, as well as education and training. Current developments in this area suggest that interaction with technologies, either by natural language or by speech, is possible because technology develops, and users become more used to interacting with digital entities. Rather than creating a human-like smart machine application, it is about creating effective digital assistants who are able to provide information, answer questions, discuss a specific topic, or perform a task. Each chatbot was classified by language, subject matter and developer's platform. Finally, we evaluated 47 educational chatbots using the Facebook Messenger platform based on the analytic hierarchy process against the quality attributes of teaching, humanity, affect, and accessibility. We found that educational chatbots on the Facebook Messenger platform vary from the basic level of sending personalized messages to recommending learning content. Results show that chatbots which are part of the instant messaging application are still in its early stages to become artificial intelligence teaching assistants. The findings provide tips for teachers to integrate chatbots into classroom practice and advice what types of chatbots they can try out.

Personal digital assistants like Siri from Apple, Alexa from Amazon, Microsoft's Cortana or Assistant from Google are at the forefront of technology of voice recognition and artificial intelligence. These digital assistants use machine-learning techniques and are able to manage some day-to-day tasks of traditional assistants or secretaries (such as email prioritization, highlighting the most important content and interactions) to help their users become more effective. Chatbots have had a long history of use as pedagogical agents in educational settings. From the early 1970s, pedagogical agents within digital learning environments known as Intelligent Tutoring Systems have been developed. Conversational pedagogical agents use artificial intelligence techniques to enhance and personalize automation in teaching. The design and research knowledge are important in developing engaging, useful, and valuable pedagogical agents that not only make the most of technological advancements, but also understand emotional, cognitive, and social educational. In addition, conversational agents have been built into software and devices. Moreover, in recent years more and more organizations have started to exploit their capabilities beyond simple querying of information followed by a programmed response. However, understandings of these innovations are frequently untheorized and immature. Incorporation of chatbots into the educational area over the last decade implies an increase in interest in the ways in which chatbots might be implemented for teaching and learning. Useful chatbot systems can provide benefits of instant availability and ability to respond naturally through a conversational interface with the same advantages as an interview. Additionally, chatbots demonstrate the ability to create easygoing interactions with users so that they can be leveraged to support engagement, as well as setting out goals, strategies and outcomes of learning and training.



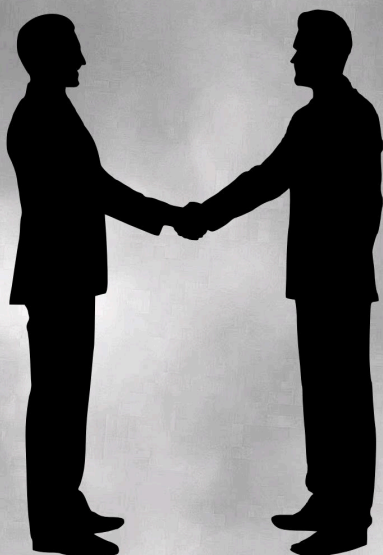
Last words before I leave..

- Mythri Reddy



I don't know from where to start... because it's about college! It's impossible to put all my bunch loads of memories with college in this article. For every person college life has different meaning for me, it's most remarkable and lovable times of my life. It's a transition. college gave me various challenges. One of the most memorable moments was when we got selected in SIH 2019. We went to Delhi for SMART INDIA HACKATHON and had an amazing time. I would definitely thank my lecturers for pushing us to register for SIH without them we wouldn't have gone their. It's so amazing that our college will equally focus on both academics and non- academics as well. We have so many clubs to expose our talent and gain confidence. faculty has always encouraged us to participate in clubs. And coming to ambience...our college is "THE BEST" it's full of greenery. looking at the college entrance itself brings us peace. But it's so unfortunate that we have got only 3 years to spend in college. It's very emotional and unbearable to say goodbye through zoom. I'll miss everything about college. Finally, I'm thankful to each and every faculty and my friends who always encouraged me.

THANK YOU!



CAMPUS DRIVE

COMPANIES VISITED

S.no	Name of the company	No. Of Students selected
1.	TCS	6
2.	MULTIPLIER IT SOLUTIONS	47
3.	NNIT	27
4.	DHRUVSOFT TECHNOLOGIES	5
5.	INFOSYS	13
6.	ACCENTURE	4
7.	BYJU'S	8
8.	FACE INDIA PVT LTD	7
9.	CONTEN TERRA	2
10.	CSS CORP	1
11.	WIPRO	1
12.	MINDTREE	2
13.	PENTAGON SPACE PVT LTD	22
14.	GRIFEO	13
15.	ELEATION INDIA PVT LTD	24
16.	TECH MAHINDRA	5
17.		1

STUDENTS PLACED 2020-2021

TATA CONSULTANCY SERVICES

S. No	Hall ticket no.	Name of the Student	Department
1.	17E11A0522	Satya Sai Sindhura Peddinti	CSE
2.	17E11A0551	D. Divya Sravani	CSE
3.	17E11A0519	V. Pavan Sai	CSE
4.	17E11A1204	Shraddha Joshi	IT
5.	17E11A1235	Poornachander Poola	IT

MULTIPLIER IT SOLUTIONS

S. No	Hall ticket no.	Name of the Student	Department
6.	17E11A0503	G.Swathi	CSE
7.	17E11A0504	Pranavi Miriyala	CSE
8.	17E11A0521	D.Vidya Sagar	CSE
9.	17E11A0527	Gunda Srujan	CSE
10.	17E11A0530	Abhishek Nirale	CSE
11.	17E11A0531	Kommagoni Rajesh Goud	CSE
12.	17E11A0533	Chilukuri Vikas Mohan	CSE
13.	17E11A0543	Pavan Kalyan	CSE
14.	17E11A0560	B.Chandralekha	CSE
15.	17E11A0564	P.Raj Kiran Reddy	CSE
16.	17E11A0572	Jakkula Chanti Kumar	CSE
17.	17E11A0573	Shivakesh	CSE
18.	17E11A0587	Nimmala Rakesh Reddy	CSE
19.	17E11A05A9	Likki Vigneshwar Reddy	CSE
20.	17E11A05B0	Aligeti. Sai Kiran Reddy	CSE
21.	17E11A05B2	Ravi Teja	CSE
22.	17E11A05B3	Pottupalli Vamshi	CSE
23.	17E11A05C0	Pilli Sandeep	CSE
24.	17E11A05D1	B Sai Sankar	CSE
25.	17E11A05D1	B Sai Sankar	CSE
26.	17E11A05D2	Aravind Reddy	CSE
27.	17E11A05G1	Govindu Karthik	CSE
28.	17E11A0506	Bethi Srinusha	CSE
29.	17E11A0554	T.Sai Varshitha	CSE
30.	17E11A05A5	Sindhura Reedy	CSE
31.	17E11A05A8	Gidde Neil Sprunith	CSE
32.	17E11A05C5	Daniel Paul	CSE
33.	17E11A05D0	Rahul	CSE
34.	17E11A05D6	Thippireddy Harika	CSE
35.	17E11A05H1	Mohammed Imroze	CSE
36.	17E11A1209	Yanugula Manasa	IT
37.	17E11A1213	R. Mounika	IT
38.	17E11A1215	Sindhu Ch	IT
39.	17E11A1216	Amulya.Kanaparthi	IT
40.	17E11A1239	Venkatapuram Sai Srujan	IT
41.	17E11A1220	D Mithusri	IT
42.	17E11A1220	R.Sainath Reddy	IT

NNIIT

S.No	Hall Ticket No.	Name of the student	Department
43.	17E11A0506	Bethi Srinusha	CSE
44.	17E11A0528	Vamshi Reddy	CSE
45.	17E11A0546	Swetarani Lenka	CSE
46.	17E11A0557	Vallaboju Ruthika	CSE
47.	17E11A0558	I Sri Poorvaja	CSE
48.	17E11A0594	Gavinolla Keerthi Reddy	CSE
49.	17E11A05A6	K. Mythri Reddy	CSE
50.	17E11A05A8	Sprunith	CSE
51.	17E11A05B0	Rahul Rai	CSE
52.	17E11A05D6	Thippireddy harika	CSE
53.	17E11A05E1	Gatla Jagruthi	CSE
54.	17E11A1201	M.Soumya	IT
55.	17E11A1206	P. Mahitha Reddy	IT
56.	17E11A1215	Ch. Sindu	IT

DHRUVSOFT TECHNOLOGIES

S.No	Hall Ticket No.	Name of the student	Department
57.	17E11A0545	B. Sreenidhi	CSE
58.	17E11A0572	J. Chanti kumar	CSE
59.	17E11A0589	Shaik. Karishma	CSE
60.	17E11A0597	T. Geethasri	CSE
61.	17E11A0599	G. Manisha	CSE

INFOSYS

S.No	Hall Ticket No.	Name of the student	Department
62.	17E11A0548	C.Ramya	CSE
63.	17E11A0551	D.Divya Sravani	CSE
64.	17E11A0599	G.Manisha	CSE
65.	17E11A0519	V.Pavan Sai	CSE
66.	17E11A0549	V.SAHITHYA	CSE
67.	17E11A0568	A.Sai Kumar	CSE
68.	17E11A05D1	B.Sai Sankar	CSE
69.	17E11A0545	B.Sreenidhi	CSE
70.	17E11A0529	Venkateshwar Reddy	CSE
71.	17E11A1202	A.Manisha	IT

ACCENTURE

S.No.	Hall Ticket no.	Name of the student	Department
72.	17E11A0503	G.Swathi	CSE
73.	17E11A0589	Shaik Karishma	CSE

BYJU'S

S.No	Hall Ticket no.	Name of the student	Department
74.	17E11A1204	Shraddha Joshi	IT
75.	17E11A0521	D.Vidyasagar	CSE
76.	17E11A0546	SWETARANI LENKA	CSE
77.	17E11A05D2	Jita Aravind Reddy	CSE

CONTEN TERRA

S.No	Hall Ticket no.	Name of the student	Department
78.	17E11A05F5	Bhanu Prakash Reddy	CSE
79.	17E11A1228	Krishna Viswanatham V	IT

FACE INDIA PVT LTD

S.No	Hall Ticket no.	Name of the student	Department
80.	17E11A0503	G.Swathi	CSE
81.	17E11A0531	Kommagoni Rajesh Goud	CSE
82.	17E11A0558	I Sri Poorvaja	CSE
83.	17E11A1239	V. Sai Srujan	IT

WIPRO

S.No	Hall Ticket no.	Name of the student	Department
84.	17E11A0562	Nyalapatla Sushma	CSE

MINDTREE

S.No	Hall Ticket no.	Name of the student	Department
85.	17E11A0572	Chanti Yadav	CSE
86.	17E11A1233	Vamshi Krishna	IT

PENTAGON SPACE PVT LTD

S.No	Hall Ticket no.	Name of the student	Department
87.	17E11A0505	Likhitna R.	CSE
88.	17E11A0521	D.Vidya Sagar	CSE
89.	17E11A0552	N. Mounika	CSE
90.	17E11A05A3	M.Sneha	CSE
91.	17E11A05D9	Reddy Srivarshini	CSE
92.	17E11A05G4	Vuppu Shivasai	CSE
93.	17E11A1201	M. Soumya	IT

GRIFEO

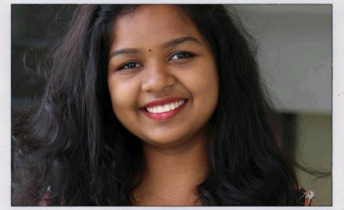
S.No	Hall Ticket no.	Name of the student	Department
94.	17E11A0519	Pavan Sai	CSE
95.	17E11A0527	G. Srujan	CSE
96.	17E11A0557	Vallaboju Ruthika	CSE
97.	17E11A0560	B Chandralekha	CSE
98.	17E11A0599	G. MANISHA	CSE
99.	17E11A05B3	Pottupalli Vamshi	CSE
100.	17E11A1228	Krishna Viswanatham V	IT

TRAINING AND PLACEMENT CELL

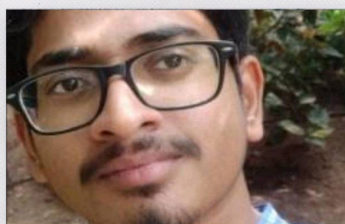
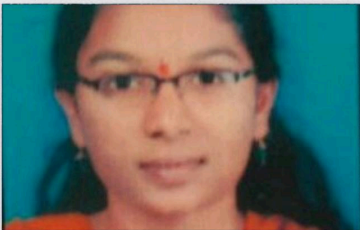


Training and Placement Divisions Endeavour has been to ensure that maximum number of students is placed in reputed companies. Towards this end, we have put our efforts to enhance employability skills among students which have yielded good results.

We are Glad to note that our students have been placed in best of the best companies over the year. They include TCS, WIPRO, INFOSYS, and TECH MAHINDRA etc. In order to encourage students we do felicitate students from time to time. The Displayed picture is an occasion where our Ex-Director felicitates students who got selected in TCS.



ALUMNI



The voice

T. HARITHA



I am T. Haritha, currently working as A.S.E Trainee at TCS Hyderabad. I thank my college for allowing me to groom my skills as it was my first step of learning. I believe that we should learn all the things from the scratch and later we need to build our interest to get the things done. By saying this, I would recollect a common saying: "We can take a horse to the pond, but we can't make it drink". My advice is to get connected to the college atmosphere and then everything would be easy as there will be a very good echo relationship between the faculty and student, in simple words faculty and your friends would be your family. Mainly, just enjoy the thing that you are in, it might be coding or it might be any kind of workshop as these kinds of activities will boost up your skills and also enhance your knowledge. As we are in a very competitive and computerized world we need to know each and everything. Particularly, about the things that we face in the real world after graduation. Thank you B.I.E.T...!!



AMRUTH VARANASI



My experience at BIET is,

"The experience that you will never experience again".

My name is Amruth Varanasi and I am currently working as a Customer Operations Associate with Amazon. I got this job in my final year of engineering. I would describe my experience at Bharat institute of engineering and technology as "The experience that you will never experience again".

College life at BIET is not only limited to education rather it is much more than academics. The most important thing that I think each of us have learnt in our college life is the 'importance of friendship'. Coming miles away from our house, the friends are the only ones who help you every time when you get screwed in any problem. Meeting different kinds of people and exploring new cultural clubs, facing every day challenges, volunteering in annual day college fests, enjoying late night college fests, learning to present yourselves on stage by the art of public speaking and gossips at the old canteen were some major highlights.

For a potential student BIET is like an AWM gun in a PUBG player's hand. With the tremendous support of wonderful faculty a student can just workout wonders. Cheers!

Amruth

2020 passed out



ANUGU ARPITHA REDDY



BIET is much beyond an institution. It actually denotes a “culture” ...culture of excellence, empowerment and enrichment. Being a Bietian makes me feel proud. The experience here turned me to a more curious and achieving person. The support of the faculty members not only helped me to score good marks but also helped me to be bold and confident. I would like to thank my friends for making those 4years memorable.

- Anugu Arpitha Reddy

DEEKSHITHA JULLURI



BIET is a perfect place for discovering the hidden talent in us, it helps to inspire and think differently. College is one time experience as long as you desire to explore rather than going on wrong track. ALL THE BEST!

-Deekshitha Julluri



DESHAGONI GOWTHAMI



Looking back at the 4 years that I spent in Engineering, there are so many memories that flash in my head. I had the pleasure of completing my graduation from BIET under the guidance of highly efficient Professors and Management. From the first day itself the institution has surprised me with such a phenomenal step by step learning process. I feel very fortunate and thankful to all my professors. All of it was possible with the right direction provided by all the faculties right from the beginning of this journey. Different personality development sessions conducted in college helped me in becoming a professional student. The placement activities are pretty good and come with a training given on how to assess oneself and face interviews confidently. I would like to express my gratitude and extend my warm regards to the management. I am proud to be part of BIET :)

Deshagoni Gowthami
14E11A05G6



V AISHNAVI PULLURI



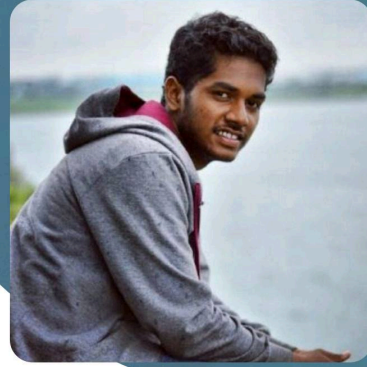
Hi all,

My name is Vaishnavi Pulluri. I am an alumni of "Bharath Institute of Engineering and Technology" college from Computer Science Department. Currently I am working in Anthem Inc as an Associate Software Engineer. First of all I would like to thank all the staff members of my department for being very supportive and friendly throughout my degree program. Apart from the normal lectures there were lots of workshops, guest lecturers which built confidence among us. Summer trainings like SAP and python training were very useful. Besides these technical trainings there are CRT classes which improve our soft skills and there are many sports events where I have participated in few of them. And our college fests every year really plays a major role to bring out different talents among students technically and culturally. And last but not least besides all these, in 4 years span of my degree I have cleared all the 3 levels of NCC and I got full support from institution side to attend NCC Parades and Camps. Finally I would like to thank the institution for giving me such great opportunity and experience and I wish all the best for all the prospective students who are going to join the institution.

P.Vaishnavi
2020 passed out



PRANAY SHANKAR



First of all, I wish to thank BIET for molding me into a successful professional that I am today. As per my knowledge a 'combination of discipline and education can only build a successful professional', on this way here professors are truly cared about each and every student's discipline & education, where they didn't see as just a number. For providing me with lifelong mentors who I know I could always go to any point in my career by carrying the moral's and knowledge thought my professors, Once again I should really thank all the professors of IT department for helping me to achieve excellence in education which provided me a successful career and happy family.

Pranay Shankar
2014 passed out

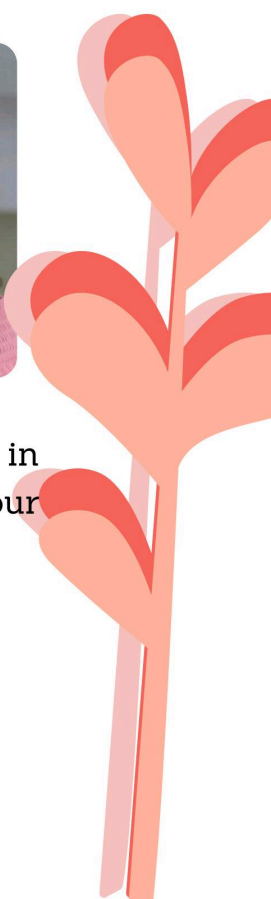


TEJU PREETHI BATLANKI



College inspired me to think differently. It's like no other time in your life. Explore the wonders of life and always nurture your thoughts and imaginations!

Best of Luck!
- Teju Preethi Batlanki



CHANDANA



I would like to express my heartiest thanks to the faculty. Along with constant supply of support and guidance, they inspired me to have a clear conscience and importance of being authentic

Experiences at BIET let us open the window of our mind and venture out the opportunities that we were put forward with.

College life at BIET was one of a kind. It exposed us to new experiences that we earlier were not familiar with. and now, it is one of my favourite places to be at.

The past 4 years not only helped me broaden my horizons on my knowledge but also helped with management abilities necessary to be able to compete in this world. As a bietian I would not hesitate to say that this is the greatest home-away-from-home that anyone could ever have.



The Views

HOW TO CRACK?

Campus Placements



Campus Placements are crucial for a final year student. It gives them their first job. Some might even have their dream companies. To get into any company some basic attentions are needed which often confuses a fresher.

Do we need to research on a company? Just simple research on company would be enough. Company core works, processes and employee culture in it are included in simple research. Deep and intense investigation about the company is not necessary.

How a CV or resume should look like? A resume can be simple with your basic data and add-ons. Add-ons may include Hackathons, ideas, internships, certifications or courses (paid or free) attended. It should have your true things then only you can explain the choices better. Don't make your resume bulky or with weird formats in intention to make it look attractive. A fresher resume can hardly be of a page or two.

From how long we need to start our preparation? As referred to non-technical aspects like Group Discussion, JAM we need to follow latest world updates, technical as well as non-technical. Confidence and presentation play a major role. It is not something which we can get overnight. It should be a part of a regular day. We need to constantly practice getting on to stage, communicating with people and find multiple ways to present any information.

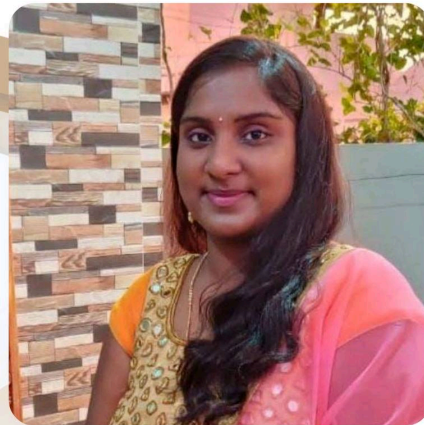
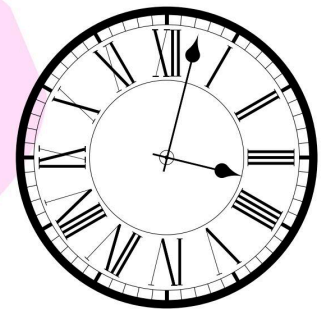
As part of technical preparation, you must be good enough with your domain and be confident to solve things with in your domain knowledge. Practicing exercises, learning new formulae available from online and some recommended books can help with Aptitude and logical reasoning. When you are not able to answer a question, you can ask interviewer if you can solve it in any other way you know. For suppose if you are asked to write a program logic in Java but you are confident to do it in C language, you can ask interviewer if you can proceed with C language and ensure him that you will learn Java better when you have an opportunity. You can give basic information if you don't have clear idea else you can convey that you don't have any idea on the topic in a polite way. Always have ease and flexibility to learn any technology. Ensure your interviewer about your interest to learn the things you don't know.

When asked to solve anything or questioned about anything, more than giving right answer we have to check with our approach or presenting our answer. Listen carefully and collect your thoughts on it, arrange them in an order and present them accordingly. Don't speak out anything randomly out of nervousness.

Does Physical appearance, body language and gestures matter? Decent clothing helps in good ice breaking with interviewer. Stay as normal and simple as you can. Don't stiff yourself too much or behave homely. Minimal hand gestures and eye contact while communicating is really needed. Avoid using fillers while speaking. Handling stress is more important than ever in an interview. Your answers may or may not give you a job but nervousness will definitely steal your job. Stay calm, concentrated to what you are asked and act accordingly. Maintain positive attitude. Spend some time on analyzing yourself. Know your choices and why is it your choice. Know your strengths, weaknesses, interests and your expectations.

Can we ask interviewer if we need clarification? Absolutely Yes. We can seek for clarifications if we don't understand rather than guessing the things and giving inappropriate answers. More questioning helps you explain in a better way. Finally, while closing the interview, you can ask any general questions, but better to keep it short.

EFFECTIVE TIME MANAGEMENT TIPS



In today's busy world, time management skills for students are increasingly important. Like our energy and money, time is a finite resource and as such, it needs to be effectively managed. Time management is about planning and controlling the amount of time you spend on specific tasks.

1.Create a Master Schedule

Make a master schedule your child can use to block off time to work on his or her assignments. This will help your child prioritize projects and provide a structure to help keep him or her on track to meet due dates. Use a different color for each subject so your child can follow the schedule quickly and easily.

2.Use an Agenda

Help yourself to look ahead for all upcoming assignments and record the due dates in an agenda. Use the agenda to schedule in computer time too—this will help you to avoid falling into a trap of wasted hours in front of a screen instead of working on assignments.

3. Eliminate Distractions

Between cell phones, social media, and friends, there are a lot of activities that can distract you from your goal. When it's time to get down to work, have your cell phone turned off and sign out of social media accounts. Any time on the master schedule that is dedicated to working on studies should be cell phone and television-free!

4. Set Goals For Each Study Session

Help yourself to set specific goals for each day, like how many pages of a book report to write or how many math questions to complete. The agenda and master schedule will help with planning your daily goals so assignments can be completed on time.

5. Start Working On Assignments Early

Good time management skills mean not leaving assignments until the day before they are due. Sit down each week to review upcoming assignments and tests and add them to your master schedule and agenda. Schedule time to start working on them well before they are due so you will not be stressed and scrambling to meet the due dates.

6. Work On One Thing At A Time

It might seem like more is being accomplished with multitasking, but splitting attention between more than one task isn't an effective way to learn. You should work on one task at a time, giving it full attention. Focusing on one task will help you to complete it more efficiently and effectively.

7. Study In Shorter Bursts

For every 30 minutes of study work, schedule a short 5-10 minute break to recharge. Trying to work on one thing for too long can actually cause students' minds to wander more. Taking short breaks is a good way to give your brain a chance to recharge so he or she can come back more focused.

8.Start Early In The Day

Encourage yourself to work on assignments earlier in the day, or right after college. Have a look over your agenda and master schedule to find out what needs to be completed that night and get started early. Waiting to start until later in the evening means you have less time (and energy), leading to delayed bedtimes, unfinished assignments, and more stress.

9.Get 8-10 Hours Of Sleep

Getting enough sleep is important to help you recharge your mind and have the energy needed to stay on track the next day. Use your master schedule to mark a cut-off time for homework each night as well as a set bedtime. Following this routine will help make sure you have time to unwind at the end of each day and get the sleep you need.



Student Alumni Interaction



Student Alumni Interaction is a regular affair in the college. The aim of this particular interaction is to connect dots that are in between industry and academia. Alumni are invited to interact with our Pre-final and final year students. During the course of such interaction real time experiences are shared by the Alumni.

It has been found that these interactions have brought about the awareness among students with regard to the expectation of industry from the fresher's & the needs to master's the skills to adapt to the changing technologies. Such interaction have also helped in making the students realize that they need to learn emerging technologies in addition to the academics subject to face the challenge of change. This picture is one of such session conducted by the training committee for the benefit of students.

MISCELLANEOUS

Industrial Visit



BHARAT
INSTITUTE OF ENGINEERING AND TECHNOLOGY
NAAC Accredited, NBA Accredited for UG Programmes - CSE, ECE, EEE, IT & ME
Approved by AICTE, New Delhi, Affiliated to JNTUH

25TH AND 26TH
VIRTUOTSAV
2021
CSE AND IT

TECHNICAL
JOY WITH TURTLE
HUNTERS FOR HIRE
INTERLOCUTION
SYMPOSIUM
BLANK CODING
MYSTIFY
ESPION THE CODE
LOGO CONTRIVE
POSTER PRESENTATION
ERROR CORRECTION
TECH QUIZ

NON TECHNICAL
RAPID FIRE
Y2BRI METER
MUSIC TRIVIA
JUDGEMENTAL
BLACKOUT TRUTH OR DARE
WORDS WORTH
FASTEST FINGERS FIRST
IRRELEVANT ANSWER
MURDER INVESTIGATION
ILLUSTRATE WITH THE BINARY

CHAIRMAN
Shri.CH.Venu Gopal Reddy

Admin I/C
Suyash Agrawal

Academic I/C
Shilpa Sudheendran

STUDENT CO-ORDINATORS
Ch.Usha Sowmya Sri 18E11A0558
Kandukuri Pavan 18E11A05F4
D.Sai Nandhan 18E11A1208
G.Sai Charith 18E11A0544

FACULTY CO-ORDINATORS
Mrs.Arati.S.B (Assistant Professor)
Mrs.Jincy Denny (Assistant Professor)

College Level Tech Fest Coordinator
Dr.J.P.Singh (Principal) | Dr.Sanjay Kumar Suman (College Admin In-Charge) | Arati.S.B(Assistant professor)

Contact info:
virtuotsav_2k21 | virtuotsav2021@gmail.com | 9676861780, 8074279316, 7660877420

VIRTUOTSAV 2021

Tech Fest 2021

Honour Board -2021



4th Year



Nandini
17E11A0509



Ramya
17E11A548



T.Geethasri
17E11A0597



Dokuri Sunitha
17E11A05D3



Krishna
17E11A1228

Honour Board -2021



3rd Year



Shravya Reddy Gurram
18E11A0516



Kandakatla Nandini
18E11A0565



Chetty Nikitha
18E11A0596



B.Anusha
18E11A0565



Murarishetti Neha
18E11A1125

Honour Board -2021



2nd Year



Vadiyala Sahithya
19E11A0547



Harshitha Olety Nagendra
19E11A0569



Gajjala Nandini
19E11A05B8



Karankote Nagekar Srilekha
19E11A05G



K.Nishitha reddy
19E11A1217



Gracias!



A Final Note...!

BIET has yet again succeeded in providing the students with a meticulously and carefully planned mix of academics and extra-curriculars through which all BIETians have proved yet again that, it's not just studies that they excel in, but every single endeavour that they choose to do. Mid-way through editing and designing a pile of articles which I was nose deep in and with the thoughts of the zillion things that 'JUST HAD TO BE DONE'; I pulled at my hair for the very first time. This was the first of many such moments (hours)! Putting a magazine together was no cake walk. I along with my editorial team members have spent sleepless nights to make this magazine stand out. The name of the magazine, "EPISTEME" may seem difficult, but it just means "Knowledge and understanding", a clear vision. This magazine gives an insight into the CSEians' way of life, their creativity and activities. It is a platform that exhibits the literary skills and innovative ideas of faculties and students. "EPISTEME" presented the hard work and dedication of students and contributions of faculties. I appreciate the hard work put in by my editorial team, contributors and concerned faculties for shaping this issue of EPISTEME and I would like to thank all my editorial team members for their sleepless hard work. I express my considerable appreciation to all the authors of the articles in this magazine. These contributions have required a generous amount of time and effort. It is this willingness to share knowledge, concerns and special insights with fellow beings that has made this magazine possible.

My deepest gratitude to everyone for their unwavering support, which motivates us to strive for excellence. Placing in your hands, a thing of beauty, source of joy and expression of heart. I hope you enjoyed the issue and have a great year ahead. Will meet you soon in the next issue...!

Regards
Ms.Jincy Denny
Faculty Incharge

GOOD BYE TO 2017-21

CSE - A



CSE - B



CSE - C



CSE - D



IT





BIBLIET

2021