

First Edition

TECHY VERSE 2022



TKR COLLEGE OF ENGINEERING & TECHNOLOGY
Approved by AICTE. Affiliated to JNTUH. Accredited By NBA
Accredited by NAAC with "A" Grade

ABOUT TKRCET:

TKRCET was established in 2002 and is affiliated to JNTUH. It is spread across an area of 30 acres. It is located in Meerpet near LB Nagar. The college is accredited by the National Board of Accreditation. The college has an updated infrastructure, which helps in research and development. The faculty are dedicated to teaching and research and are well qualified and experienced. The students have exhibited praise worthy academic performance, working in popular MNC's, top level industries and companies in India and abroad. As a result of the relentless hard work of the management, faculty and students the college attained autonomy in the year 2017 and is also accredited by NAAC.

The college gets grants for projects from AICTE, UGC because it has been granted 2(f) and 12(B) status. The campus provides Artificial Intelligence based personalized learning. The campus is connected to the outside world through Wi-Fi. The institute has spacious classrooms which are computerized with internet connection. Laboratories are well equipped. The library is digitalized with online video conferencing on recent technologies. It has a huge reading room. The institute provides safe drinking water and washroom facilities which is hygienic. There are various sports activities carried on in the sports center. In between academics, students are encouraged to participate in sports. Students are motivated to join NSS and camps are made for blood donation so that it creates social awareness in them.



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Message From Chairman

It gives me immense pleasure to pen a few words as a prologue to our magazine 'TECHYVERSE' exclusively meant for churning out the latent writing talent of students which bears immense potentiality of sharpening their communication skills while playing a crucial role in honing their personality. I congratulate all the contributors and editorial board for bringing out such a resplendent magazine.

Empowerment of students through education for their overall development is our cherished motto. Today education means much more than merely acquiring knowledge. It is acquisition of knowledge and skills, building character and improving employability. The keen interest of the college management in imparting quality education, the willing contribution of the teaching and non-teaching staff and the overwhelming response and enthusiastic participation of our students in all college activities are appreciable.

I feel honoured being the chairman of such a wonderful society dedicated to the cause of uplifting the society. Through our diligence, devotion and dedication, let's do our best and make these institutions modern temples of learning



Teegala Krishna Reddy
Chairman

Wishing you all the best...!



Message From Secretary

The TKR Group of Institutions have completed twenty years of dedicated service in the field of education and are bringing out their college magazine "THE TECHYVERSE - 2022". The college magazine reflects the various phases of development of the student in academics and co-curricular activities. I heartily congratulate all of you who are responsible for the compilation and completion of TECHYVERSE - 2022.

The TKR Educational Society's persistent effort has been to leverage the intellectual and emotional capabilities of students. The designing of TECHYVERSE - 2022 has created an ambience for the students to ameliorate their latent creative talent.

Each one of us are born with a unique skill, which we need to identify and sharpen incessantly. TECHYVERSE - 2022 has helped in exhibiting the inborn talent and quality of work of its compilers.

I encourage and extend my warm wishes to the entire team who have worked for bringing out the TKRCET Magazine - 2022



Dr. T. Harinath Reddy
Secretary

I wish you all the best !!

Message From Treasurer

I am very happy to meet you through this page. TKRES Institutions have been exceptional in their approach to education and in their pedagogies. The way we teach and the ways our students learn are unique and creative

Indian in Character and International in Excellence – The TKR Educational Society's motto is well defined through TECHYVERSE - 2022. This magazine showcases the ingenuity, the collaborative teamwork, and diligence of our students.



T. Amarnath Reddy
Treasurer

TECHYVERSE - 2022 has provided an excellent opportunity to demystify the student's in-born talents and bring out the best in them.

I Congratulate and Wish all the best!

Message From Principal

On the eve of the 20th Annual Day Celebrations of the TKR Educational Society, I whole heartedly congratulate the student's and the editorial team who have supported and made it possible for us to release the college magazine TECHYVERSE - 2022.

It will do well for all of us to remember always that success never comes easily for anyone. Success knocks our door only when we do our work with passion keeping a specific achievable goal in our mind

“Hard work always pays.”

TECHYVERSE - 2022 is a product of shared experience, innovativeness thinking out of the box and active participation. Working for the magazine has instilled confidence in our students and helped them to portray their topics of interest and share their ideas.

Our Educational Society always works for educational excellence. The teaching - learning process is evolving constantly and with the changing times. we aspire to mould our students to become global leaders.



DR. D.V. Ravi Shankar
Principal

All the best!

Message From Vice Principal

I feel extremely happy to speak to you through this college magazine, as TKR College of Engineering brings out the Annual college magazine, for the academic year 2021-22.

Publishing a magazine is a herculean task. The college has grown over the years but has not aged; it continues to be prestigious, pursuing excellence and professionalism. It has provided and continues to provide an ideal environment for each one of you to blossom into fine flowers, whose fragrance should spread wherever you go.



Dr.A.Suresh Rao

Vice Principal

The memories of days spent in the college will remind you of the quality of care, upbringing and value system, which will help you shape your entire life. The experience of life teaches us the universal truth that there are “no shortcuts to hard work and no gains without pains”.

All the best!

Editorial Note

Welcome to the 1st edition of TECHYVERSE, the student magazine of TKRCET. It is said that "There is no failure except in no longer trying". This edition is nothing short of a milestone in tapping the creativity of the young student community

The identity of educational institutions is reflected in college magazines, which are an important part of the educational system. The works of students and teachers in college publications reflect the institution's traditions. When teachers raise and praise the titbits of student creativeness at the correct time, the students will ignite like a volcano, and expel beautiful literary work. Each young student brings in enormous potential and creativity, which teachers in colleges must properly explore and develop. College magazines provide an excellent platform for these young writers to demonstrate their abilities as writers and express themselves in a group setting.

College magazines allow young and bright writers to express themselves uniquely by thinking deeply and analyzing sharply. The college magazine plays a vital role in channelizing the creative energy of writers and assists in boosting their writing capabilities through evaluation, inspiration and motivation . Finally, educational institutions must provide an opportunity for young gifted individuals by publishing college magazines at least once every year and providing encouragement to creative writers



A Pramod Reddy

Assistant Professor
Dept-CSE

I wish you all the best !!

Team TechyVerse

Faculty Co-ordinators

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Message From DRDO Scientist

Dr.A.Ramchander Rao
Scientist F , RCI, Hyd



It gives me immense pleasure to note that TKR College of engineering is bringing out the Magazine. A college magazine reflects the consolidated efforts of the teachers and the students to contribute articles to the magazine in a creative manner. It will also exhibit the latent talents of the teachers and the students as storytellers, poets, essayists and so on.

My message is " Aim always High", as high as the sky to be good citizens and leaders of our beloved country. Dr APJ Abdul Kalam, the missile man of India and former president of India, remains an inspiration for many people across all age groups. His dedication and service towards science and technology was what made him the missile man of the country. Here I would like to share the famous quote of Dr Kalam, "Teaching is a very noble profession that shapes the character, caliber, and future of an Individual. If people remember me as a good teacher that will be the biggest honor for me." Dr Kalam resumed his role as a teacher the next day after resigning from the post of the President of India.

I congratulate the convener, teaching, non-teaching staff, students and the committee members on their successful effort to bring out the magazine.

**Government of India
Ministry of Defence
Defence R & D Organization
RESEARCH CENTRE IMARAT
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Data Science – The Future



Prasad Thipparthi
Data Scientist-AI



We are in a “data-driven” world where data play a significant role in this modern era. It has become the most precious resource. Every Internet user generates a massive amount of data. As long as tremendous data exists and one has capability to utilize it for solving problems, one can have a prominent position in the IT Industry. In the current trend, Artificial Intelligence and Machine Learning have become highly integrated in our daily lives and economy. Companies must incorporate analytics to enhance their business operations or use them for strategic decisions, a massive shift in many industries - healthcare, finance, marketing, business, etc. The “most in-demand, high-paying jobs in 2022” are data scientist and data analyst. From a couple of years ago, Data Science has become extremely popular. People from diverse backgrounds were rushing to make the transition to data science and those pursuing masters/certifications in Data science increased rapidly.

Data science is the process of extracting insights/knowledge base from the data. We must first ensure the process of cleaning or curating/organizing the data for analysis. As far as Data Science vs. Data analytics is concerned, both deal with data. Data Analytics is a statistical analysis or extraction of insights from the curated data for better business decision-making. Data Science involves the development of algorithms and several models which best fit data for predictions, dealing with structured and unstructured data, for example, drawing inferences/sentiment analysis from articles/news/structured data sources/historical data of the particular organization.

Data Analysis involves:

- Analysing the data sets.
- Collecting and Interpreting the insights from the data.
- Querying the data via SQL/Other Querying Languages.
- Organizing & Cleansing the data (pandas/numpy libraries).
- Visualization using libraries like matplotlib, seaborn, bokeh, and tools such as Tableau, Power BI, Excel, d3.js, etc.

Data Science involves:

- Processing and Validating the data.
- Data Mining Techniques.
- Analysis with ML Algorithms
- Exploratory Data Analysis.
- Deep Learning Techniques.
- Extracting the Insights from data.

Artificial Intelligence (AI) is the other term we get to hear often when discussed about data science. It refers to the programming of the software systems to think like a human. AI systems learn on its own by incorporating Machine Learning Algorithms/data models. NLP (Natural Language Processing) - A branch of Artificial Intelligence that is capable of understanding the human conversations and it trains itself based on the previous FAQs/Organizational Data/Conversation chats etc and answers the questions. These chatbots automate the Q&A Process and enhance and engage customer interactions with less human intervention. Opensource libraries in python such as nltk, and spacy provide basic NLP operations, whereas Pytorch for advanced development functions include text mining, text classification, text analysis, sentiment analysis, word sequencing, speech recognition & generation, speech to text, and text to speech. Several cloud service providers like IBM Cloud, Google, Azure, AWS, etc have the NLP-based tools to develop the chatbot systems and AI systems.

A typical data scientist should be familiar with one of the Programming languages like Python, R, and Scala.

To become a data analyst, one should have strong skills in statistics, databases, modelling, and predictive analytics. While data scientists must have skilled in Math, Advanced Statistics, Predictive Modelling, ML Algorithms, Deep learning techniques. In addition to the above listed, Data Engineer or a Data Scientist must also have additional knowledge of Big data tools like Hadoop, and Spark systems. To capture the real-time data from sources like IoT devices, transactional databases, social platforms, etc, Big data streaming pipelines were used. Expertise in SQL and NoSQL databases like Cassandra, and Mongo DB. Visualization tools like QlikView, D3.js, and Tableau is required. Companies are looking for people who can solve the problems better with the data for the strategic decisions and enhance business operations. To conclude, "There is no automation tool that can replace the skillset of a Data Scientist"

The Tech Revolution : Quantum Computing

Dr.Chaganti B N Lakshmi
Prof. Department of CSE



The problems, which are not handled by the world's most powerful supercomputers are tackled by Quantum computers. Quantum computing is a new computing paradigm that uses the principles of quantum mechanics for performing computations in parallel fashion.

Quantum computers offer exorbitant processing power by manipulating qubits. The Conventional computers use bits to represent 1's and 0's but they cannot handle multiple data streams. Quantum computers use Qubits which are volatile and changeable in nature and can store values of 1 and 0 at the same time which can handle multiple calculations, each with multiple inputs simultaneously.

The quantum computing techniques leads to solve many complex problems such as designing and development of drugs and its reaction on humans, combating the cybersecurity threats with quantum cryptography mechanisms , analyzing the market variables and to get expected profits before investing the money in the risky financial industry, optimizing the logistics and scheduling workflows associated with the supply-chain management by Quantum annealing and universal quantum computers, enhancing weather system modelling to predict the changing weather patterns with excellent accuracy and in no time , solving the critical problems like creating a room temperature superconductor, solid state batteries etc occur in pharmaceutical research. The advancements in quantum computing technology have it's uses across industries including healthcare, computing, finance and mobility, but most primarily in security. How the quantum computing is transforming the cyber security and the substantial challenges to address and fundamental breakthroughs still required to be made are narrated in this article.

Conventional random number generators typically rely on algorithms known as pseudo-random number generators, which are not truly random and thus potentially open to compromise. Companies such as Quantum Dice and IDQuantique are developing quantum random number generators that utilize quantum optics to generate sources of true randomness

To provide secure communication, the conventional security methods Share cryptographic keys between two or more parties and allow them to privately exchange their information. Quantum Key Distribution (QKD) utilizes aspects of quantum mechanics to enable the completely secret exchange of encryption keys and can even alert to the presence of an eavesdropper. QKD is currently limited to fiber transmission over 10s of kilometers, with proofs of concept via satellite over several thousand kilometers. KETS Quantum Security and Toshiba are two pioneers in this field..

RSA relies on the fact that the product of two prime numbers is computationally challenging to factor. It would take a classical computer trillions of years to break RSA encryption. A quantum computer with around 4,000 error-free qubits could defeat RSA in seconds. However, this would require closer to 1 million of today's noisy qubits. The world's largest quantum computer is currently less than 100 qubits; however, IBM and Google have road maps to achieve 1 million by 2030. A million-qubit quantum computer may still be a decade away, but that time frame could well be compressed. Additionally, highly sensitive financial and national security data is potentially susceptible to being stolen today – only to be decrypted once a sufficiently powerful quantum computer becomes available. The potential threat to public-key cryptography has engendered the development of algorithms that are invulnerable to quantum computers. Companies like PQShield are pioneering this post-quantum cryptography.

The cost of training deep models grows exponentially as data volumes and complexity increase. Open AI's GPT-3 used as much carbon as a typical American would use in 17 years. The emerging field of quantum machine learning may enable exponentially faster, more time- and energy-efficient machine learning algorithms. This, in turn, could yield more effective algorithms for identifying and defeating novel cyberattack methods.

The most immediate challenge is to achieve sufficient numbers of fault-tolerant qubits to unleash quantum computing's computational promise. Companies such as IBM, Google, Honeywell and Amazon are investing in this problem.

Quantum computers are currently programmed from individual quantum logic gates, which may be acceptable for small quantum computers, but it's impractical once we get to thousands of qubits. Companies like IBM and Classiq are developing more abstracted layers in the programming stack, enabling developers to build powerful quantum applications to solve real-world problems.

Arguably, the key bottleneck in the quantum computing industry will be a lack of talent. While universities churn out computer science graduates at an accelerating pace, there is still too little being done to train the next generation of quantum computing professionals.

The United States's National Quantum Initiative Act is a step in the right direction and incorporates funding for educational initiatives. There are also some tremendous open-source communities that have developed around quantum computing – perhaps the most exciting and active being the IBM Qiskit community. It will take efforts from governments, universities, industry and the broader technology ecosystem to enable the level of talent development required to truly capitalize on quantum computing.

The quantum revolution is upon us. Although the profound impact of large-scale fault-tolerant quantum computers may be a decade off, near-term quantum computers will still yield tremendous benefits. We are seeing substantial investment in solving the core problems around scaling qubit count, error correction and algorithms. From a cybersecurity perspective, while quantum computing may render some existing encryption protocols obsolete, it has the promise to enable a substantially enhanced level of communication security and privacy. Organizations must think strategically about the longer-term risks and benefits of quantum computing and technology and engage in a serious way today to be ready for the quantum revolution of tomorrow.

Blockchain Technology

Dr.D. Anitha Kumari
Prof. Department Of CSE



Blockchain: is a shared, unchanging ledger that simplifies the process of recording transactions and tracking assets on a business network. Property can be direct (house, car, cash, land) or invisible (intellectual property, patents, copyrights, branding). It is a public ledger, we can't do any modifications, edit, delete, etc. Because the same data stores in multiple devices, like computers or nodes, it is a collection of blocks. In computer disk or folder save our data, that can't be modified and maintains high security and it is having a present data and previous data hash value. Each and every node generates a unique code. All the blocks or nodes are connected through the chains. When we start the new transaction it will verify which block has involved in the transaction and also it is verified by the data miner. Third party or hackers are trying to do edit /modify data it is not possible such that this hash value stored in different system.

The use of applications :Blockchain in Banking and finance:International payments, trade finance, regulatory compliance and audit, money landing protection, capital market, insurance, peer to peer transaction.

Blockchain in Business:Supply chain management, health care, real estate, media, energy
Blockchain in Government:Record management, identity management, voting,taxes
non-profit agencies, compliances.

Blockchain in industries:Financial management and accounting, cyber security,bigdata, IoT
Database vs. Blockchain Architecture: The traditional database architecture, World Wide Web uses a client-server network. In this case, the server keeps all the required information in one place so that it is easy to update, due to the server being a centralized database controlled by a number of administrators with permissions.In the f blockchain architecture, each participant within the network maintains, approves, and updates new entries. The system is controlled not only by separate individuals, but by everyone within the blockchain network. Each member ensures that all records and procedures are in order, which results in data validity and security. Thus, parties that do not necessarily trust each other are able to reach a common consensus.

The architecture of blockchain: A blockchain is an open financial ledger or record in which every transaction is authenticated and authorized. A blockchain is designed as a decentralized network of millions of computers, commonly referred to as nodes. It's a distributed database architecture in which each node plays the role of a network administrator who voluntarily joins the network. Since there's no centralized information in a blockchain architecture, a blockchain is literally impossible to hack

The blockchain architecture supports a growing list of ordered records known as blocks. Each block maintains a timestamp and a link to the previous block.

What the Future for Blockchain: Blockchain is an emerging technology, so predictions are still mixed about its potential. Through 2022, only 10% of enterprises will achieve any radical transformation by using blockchain, By 2022, at least one innovative business built on blockchain technology will be worth \$10 billion .By 2026, the business value added by blockchain will grow to just over \$360 billion, then by 2030 grow to more than \$3.1 trillion. These industries and then their functioning lookout for professional developers who can use and apply blockchain technology. The future of a developer for blockchain technology is immense and it is not going to decrease in the near future. Industries like banking, security, real estate, education, healthcare, supply chain and now even voting have started applying blockchain technology into their business and are going to continue using it. The scope for the professional developer is going to open up a lot of opportunities in the sectors and industries. The prospects will be large in number for the developer

Electrical Engineer and Their Career Opportunities

S. Manohar Reddy
Assistant Prof. Department Of EEE



As technologies continue to develop, the need for electrical engineers will also continue to increase. Those who pursue education in the field can work in a career where they design and maintain systems that support different electronics and electrical tools. As an electrical engineer, you have a lot of career paths available to you and may be able to find work in a variety of industries.

The Electrical Engineer is responsible for the designing and developing new electrical systems, test equipment and find solutions to electrical problems and devices. Electrical engineers usually work with large scale electrical systems which include motor control and power transmission. Throughout their career, they work on diverse range of technologies from designing household equipment, electrical power stations, wiring and lighting of building and satellite equipment's. Being an electrical engineer, one has to be extensively trained and pursue electrical engineering and their specialisations.

Electrical Vehicles will soon start ruling roads, and this career will definitely provide decent careers prospects. The Battery and Battery Management System of Electrical Vehicles is promising field in future. In coming future Electrical cars are economical when compare to conventional cars. Countries around the world are recognizing the importance and potential of electrical vehicles. International Energy agency expected that by 2030 ,80 million electrical vehicles on the roads and expected to get 1 crore jobs. And Renewable electrical energy generation is also a promising field.

Types of Jobs Roles of electrical Engineer

After attaining the electrical engineering degree, there are plethora of job profiles available for them on the basis of their knowledge and interests. These engineers work on multiple projects through out their career which includes the Artificial Intelligence, Electrical Smart Grids, Software and computers, Robots, IOT, IIOT, navigations etc.

The most popular electrical jobs profiles:

1. Electrical Vehicles
2. PV Design Engineer
3. Control Engineering
4. Project and Test Engineer
5. Design Engineer
6. Micro Electrical Engineer
7. System Engineer
8. Electronics Engineer, etc with ample opportunities.

1. Employment opportunities:

2. Electrical engineers can find number of job opportunities in various sectors include:
3. Engineering services
4. Electrical power generation stations
5. Railways
6. Automobiles Industries
7. Electrical Transmission and Distribution organisations
8. IOT, IIOTs
9. Airport Authorities
10. Architectural and Constructional firms etc

Career Insights

P Srinivas Reddy
Head - Campus
Relations & Placements



Career path differs from the job that a person holds. Your career path is made up of a series of educational or job-related learning experiences, professional responsibilities and job titles that interconnect.

Career path is made up of the positions you hold as you grow in your field. Your first job or college degree, for example, can mark the beginning of your career path. As you gain additional knowledge and skills, you may progress or “move vertically” into more advanced roles.

People can select jobs or experiences pertaining to passions in various areas including, design, mathematics, technology, education, medicine and much more. Ideally, your career path should lead you towards your larger professional goals.

Career path should account for your goals, future plans and personality. Considering these factors can help you choose the right starting position and make strategic decisions over time.

Follow these steps as you prepare a career path:

- Outline your career goals
- Create a five to 10-year plan
- Discover your personality type
- Review your previous experience
- Compare job requirements to your education
- Assess your current skill set
- Take note of your interests
- Identify your core values
- Consider your salary needs

It takes much more than Technical skills to be “successful” in corporate world.

A Right “Attitude” & “Approach” can save your career.



Interview Do's

- Ask questions and be honest in your approach.
- Be familiar with the company's profile and how well you can fulfill their requirement.
- Be Confident.
- Be comfortable while talking with your hand gestures.
- Be punctual and ensure that you reach at least 10 minutes before.
- Bring a copy of all relevant documents.
- Dress properly and look neat and clean.
- Express yourself in simple words and indeed.
- If you are being interviewed by a panel, ensure to make eye contact with the person who asks the question.
- Be attentive and listen to the questions and answer thoughtfully.
- Present your skills in a positive light, even your weaknesses.
- Make sure to fully understand the question and raise a question if you doubt a certain statement.
- In an interview, try to maintain the positive image that your CV has already created after the first round of short-listing.
- Show enthusiasm for joining the company and the position.

Interview Don'ts :

There are some points to remember, just as there are some do's. Go over them and make sure you don't make any of these mistakes on your big day.

- Don't sit in an inflexible posture.
- Don't answer questions with a simple yes or no.
- Don't dress casually.
- Don't interrupt the interviewer before they have finished asking a question.
- Don't lie when it comes to internship experiences. They can always cross-check.
- Avoid asking too many questions about salary, holidays, or bonuses. You may discuss these at length after an offer is made.
- Don't wear strong perfumes or fragrances.

Experiences of Alumni

I am Akshitha from branch CSE Batch(2017-2021). I wanted to share my placements experience so that this would be helpful to the upcoming batches. The first placement that I have attended from our college is Cognizant. I was not at all aware of written tests and interviews till that time. Before the Cognizant written test, we had a training specific to Cognizant from our college. I could say that was a major turning point in my preparation where I got a good learning and hands-on experience. However, I was not able to clear the Cognizant assessment because of a lack of time management skills. But I got a lot of hands-on experience after the Cognizant training. After that, I have attended many written tests for which I didn't receive any reply. So, patience is the key to achieve anything in this process. I recommend you to go through the previous year questions from YouTube before the written test for every company that you apply for. This helped me to get some idea of the questions before the written test and manage my time accordingly. Finally, in May-2021, I was placed in Accenture and TCS. I opted for Accenture and joined Accenture.



Akshitha Eldandi

My interview experience is simply fabulous. The placement department has thrived to get us into the best MNCs even we have proved that the covid pandemic is not a barrier to gaining knowledge and future-ready. Especially for placements, we have got training on aptitude and technical skill labs from 1st year itself. As I was from a CSE background initially It was difficult for me to understand the concepts but once we dive into technical training we have explored our vision in many different ways. When even I was in 3rd yr 2nd semester I was so ambiguous, later on, when campus placements begin I came to know what the corporate world wants from a fresher.


Then I realized that nothing is so precious as "self-study", be your own company. I have been placed into Cognizant and Accenture in the 4th yr 1st semester. For cognizant drive our placement department has given very intense training through a virtual medium, this has given a great impact on brushing my skills thus I have cracked campus drive. The interview lasted for me around 1 hour, whatever skills we added to our resume interviewer will focus on and test our minimal knowledge on that.

Moreover, any student with minimal basic knowledge can crack any MNC as they will not expect too much from freshers. So kindly stick to the basics with good communication skills. In my view just stick to the basic knowledge of technical concepts in C, C++, and java. This is more than enough to succeed and there is no end to learning.

A major barrier is "communication" just break it and we can see the best top-notch.



G Pavan Kumar



My name is Tejasri Jerripothula, and I graduated from TKR College of Engineering and Technology in 2021. First and foremost, thank you for providing me with this opportunity to share my thoughts and suggestions on interviews and placements.


I am presently employed with Accenture, and the majority of my classmates and acquaintances are also employed by other firms. I'm going to talk about my experience and ideas for getting positions.

I participated in the CRT programme during my third year, which gave me some ideas and understanding about the sorts of questions that would be asked in placement examinations and interviews. But during the initial days of my bachelor's 4th year, I was a little worried about the campus placement as the pandemic had hit us hard and our batch had been through in-person classes to online classes. It took time to get used to. Slowly, I used this opportunity to enhance my knowledge. We had to attend 4-5-hour online classes, and the rest of the time was for self-learning. Actually, the pandemic really helped a lot as I had focused more on self-learning from open resources available on the internet. And on my end, I simply had to concentrate on the subjects in which I am weak, but putting in extra hours of effort each day and using the knowledge I gained at our college helped me get to where I am now.

I would advise juniors, especially in regards to interview rounds, to ensure that the foundation of their "programming languages" or whatever expertise they have is robust and to be confident rather than panicking. Even if you don't know the answer, tell the interviewer in a professional and convincing manner. It's fine because we aren't required to answer all of the questions we are asked in an interview.

The key parts to cracking the placements are to produce a good/standard CV, do as many internships as possible, attempt to use the opportunity to learn any one of the technologies that you are enthusiastic about, and practise coding using many platforms that are available on the internet for free.

And for learning resources, you can find many on the internet, like "w3.schools, Tutorials Point, and FreeCodeCamp", as well as YouTube channels to cover each and every topic you are trying to prepare for. And also make use of the platforms like "Hackerrank, Leetcode," etc., which indeed helped me in preparing myself for exams and interviews



And I'd like to express my gratitude to TKR College of Engineering and Technology for providing me with so many job possibilities, even in such dire and unusual circumstances as pandemic times.

I would also advise you to register on several job platforms for off-campus placements, such as "TASK, nBoard", and others. You may also obtain job notifications from various telegram groups. Make the most of the resources and opportunities available to you.

It was the predicament that most of us finally encountered when our friends were placed in good companies and we weren't. It's okay, don't panic. You might be obtaining a better one than this which you failed. Try to locate the areas and put them on paper. Why are you actually not being placed? You can find the answer on your own and focus on those things. Don't lose hope if you are rejected by several companies; there is a tremendous item waiting for you. **"BELIEVE IN YOURSELF"** and **"Work Hard and Wisely"**. Best of luck with your placements.



Tejasri Jerripothula



D Himaja
Assistant Prof. Civil Dept.

The role of **Civil Engineering** to built modern world



Civil engineering is not just about constructing bridges, and roads, etc but civil engineering is a lot more than that. There are various concepts or topics included in this field to study. This field includes topics like structural engineering, architecture, surveying, control engineering, or quality checking or construction engineering, etc. Civil engineering students have to study various construction methods and designs that are generally applied within the civil engineering subject.. Engineering is a field where most students want to build their careers. It is a huge domain that comprises of several subfields like electrical, mechanical, chemical, aerospace engineering, and civil engineering. Civil engineering is one of the main streams of engineering. Though it is the oldest engineering discipline, many students still choose this as an exciting profession. This is inspiring as the engineers can see what they have done, be it a high-rise building, a strong bridge, or a subway station.

Important Branches of Civil Engineering:

1. Environmental Engineering
2. Water Resource Engineering
3. Coastal Engineering
4. Structural Engineering
5. Geo-technical Engineering
6. Material Engineering
7. Transportation Engineering

Software Used in Civil Engineering Assignment:

There is much software utilized in civil engineering, and they are increasing day by day as this branch of engineering is becoming more and more complex. This software proves vital and at times mandatory to complete an assignment. Our writers are experts in this software and have been providing assignments with their use. When you order an assignment with us, you can specify the software platform on which you want it developed and our writers will get it done for you. Following is a list of some of the major software in use for civil engineering.

AutoCAD: This is one of the most popular software among civil engineering students, its cloud feature renders it even more helpful. It is helpful for various tasks like 2D and 3D design, modeling, drafting, etc. Our repeat clients for civil engineering assignment help often demand the use of this software to get their assignments completed.

SAP2000: It is the most useful software for structural analysis and design. It includes features like advanced design analysis, embedded modeling templates, code-based assignment loading, etc.

Primavera: This software designed by Oracle is very important for an EPPM solution for civil engineering and construction projects.



Dr.MD.Qutubuddin
Assisstant Prof. EEE Dept.

What is **EEE** Branch Speciality?



EEE is all about learning and making device and equipments that uses electricity and electronics. The students of EEE get an opportunity to contribute to the growth of technology and the course itself facilitates new research ideas. It helps them develop an entrepreneurial mindset. There are many reasons why many students prefer Electrical and Electronics Engineering and make it their career. These reasons contribute to the growth of the field itself. It is important to understand those reasons to understand the future of this field. KIT, one of the top EEE Engineering colleges in India works round the clock to provide optimum quality of education to the students.

1. Developing new technologies

A EEE graduate is responsible for creating new technologies in a variety of industries. The students who are interested in making new inventions and getting involved in the development of unique technologies are bound to choose EEE course. The services of the EEE engineers are required in the field of robotics, transport, healthcare and construction.

2. Demand in the industry

The need for people who are able to create and control electrical systems have increased in the recent years due to the immense growth of technology. This creates a huge demand for the EEE graduates in different industries across the world and they all are paid a very good salary.

3. Contribution to the society

The EEE engineers get a wonderful opportunity to create new systems which benefits the society. If we take smartphones for example, the growth of it has enhanced our way of communication. The improvements in the medical industry has helped to diagnose and treat patients quickly and effectively.

What is **EEE** Branch Speciality?

4. Opportunities across the globe

The Electrical and Electronics engineers receive great job opportunities from top companies across the globe. They also get a chance to study in foreign countries. It is one of the reasons why people who are interested in studying and working abroad choose this course as their career

5. Good salary

The Electrical and Electronics engineers receive high salaries due to the demand for their support on a regular basis. The society requires them to solve the everyday electrical needs. Due to this reason, the students who are interested in securing a job with a higher pay opt for the EEE course.

Since this is a field in which the engineers can work in various industries, the scope of EEE is immense and the graduates in this course have a great opportunity to secure their wonderful future by working with the top organizations or starting their own business and becoming entrepreneurs. KIT, one of the best colleges for EEE in Coimbatore provides the right direction for the EEE students to achieve big in their life. There are certain expectations from Electrical engineers in the industry. If the graduates can upgrade their skills in order to meet the expectations, they will have a prosperous future in the field. Read the article below to understand why one should major in Electrical Engineering and what are the expectations from the Electrical engineers once they graduate



Dr.G.Gopala Krishna
Prof. & HOD Mechanical Dept.

What is

Mechanical Engineering

Branch Speciality?



Mechanical engineering is an engineering branch that combines engineering physics and mathematics principles with materials science to design, analyze, manufacture, and maintain mechanical systems. It is one of the oldest and broadest of the engineering branches.

Dynamics, thermodynamics, materials science, structural analysis and electricity. In addition to these core principles, mechanical engineers use tools such as computer-aided design (CAD), computer-aided manufacturing (CAM) and product lifecycle management to design and analyze.

Manufacturing plants, industrial equipment and machinery, heating and cooling systems, transport systems, aircraft, watercraft, robotics, medical devices, weapons, and others. It is the branch of engineering that involves the design, production, and operation of machinery.

Mechanical engineering emerged as a field during the Industrial Revolution in Europe in the 18th century; however, its development can be traced back several thousand years around the world.

In the 19th century, developments in physics led to the development of mechanical engineering science. The field has continually evolved to incorporate advancements; today mechanical engineers are pursuing developments in such areas as composites, mechatronics and nanotechnology. It also overlaps with aerospace engineering, metallurgical engineering, civil engineering, electrical engineering, manufacturing engineering, chemical engineering, industrial.

Engineering and other engineering disciplines to varying amounts. Mechanical engineers may also work in the field of biomedical engineering, specifically with biomechanics, transport phenomena, biomechatronics, bionanotechnology, and modelling of biological systems.



Dr. B. Swapna Rani
Prof. ECE Dept.

What is **ECE** Branch Speciality?



Electronics and Communication Engineering (ECE) is one of the streams where you learn almost about all the concepts of science. You learn about electronics, few of the electrical and computer science (data structures, functions, oops and more) based concepts. The best part is the communication. I don't think any other stream gives you this diverged yet trivial knowledge of all the fields.

In Engineering sector Electronics and Communication Engineering has its own importance. But in the present day, it becomes a basic need of all. Everyone is now familiar with electronic machines including mobile, home appliances, computer systems, security systems and many more. Electronics engineers is the one who is changing the world day by day by making it smart. "Clock controls the world; we control the clock". Now you can relate everything which you see in your surrounding is made by electronics engineer or we can say without electronics we can't imagine the world.

Many students imagine ECE to be full of cool stuff like Robotics, IOT, etc. Sure, you will get to spend sufficient time in the lab to solder circuits and to play with ICs, but that's about it. Most of the cool stuff is usually never covered and it's up to the student to take out some free time from an already tight schedule to learn something that's actually fun (Arduino, Raspberry Pi).

What's special about ECE huh!

- Without ECE you might not be able to make such an incredible machine for example F1 race car, supersonic jet, etc.
- Without ECE you might not be able to control things in nanoseconds.
- Without ECE we cannot increase the efficiency of engine anymore as most of the mechanical side work is almost completed.
- Without ECE you might never come to know what's there beneath the Earth, deep in the ocean and in the sky.
- Without Electronics and internet, one cannot even imagine life and now I think it's self-explanatory what's special about ECE.

What is ECE

Electronics and Communications Engineering (ECE) involves researching, designing, developing, and testing electronic equipment used in various systems. This process will help us to even face and solve any problems in our life too. Firstly, analyse the situation and know the consequences. Then prepare a plan according to the problem. Build your strengths and make efforts to develop the plan. And finally wait for the outcomes that shows up your efforts and ability to handle any situations. One thing we need to learn from an ECE Engineer is “When we apply positive input, we will get a positive output only”, so no matter what’s happening around you, try to spread positivity and in return you will get positive results.

ECE is also seen as a mishmash of various streams with its syllabus including basic requirements for software programming such as data structures and algorithms, electrical engineering topics such as power systems and core electronics subjects ranging from mobile telephony to Internet protocols. The supposed advice given to student is: You can always become a software engineer after studying ECE, or a network specialist, or even the area manager of a telecom company. We are witnessing education beginning to mimic a free market, judged solely on the basis of job potential.

Even in Mechanical based companies, Electronics plays an important role and have large number of opportunities for automation. Hence the study about electronics in every industry becoming smart and automated. Hence there are a lot of job opportunities in cars-based companies in future as there will be cars running only based on batteries/electricity from the recent development of TESLA cars. And the name itself tells that, ECE engineers are good in the Communication field. And in future, there will be lots of opportunities in the Internet of Things (IoT) and these things can be developed only by the computer engineer and ECE engineer.

Finally, I can conclude that an ECE Engineer has an ability to perform multitasking actions and think in a creative manner. This is a branch, where we learn all the electronic concepts by doing practically. And this freedom is not available for many branches as many learn their concepts in an imaginary state. ECE students have both the opportunities to work and start their career in software as well as in core field. Whatever you become, you will land up somewhere sooner or later depending on the hard work you put.

ECE = Computer + Automation + Electrical + Communication + Robotics + Wireless

“Engineering is not only the study of 45 subjects, but it is the moral study of intellectual life. And our potential does not drop across any resistance”.



K Shirisha Reddy
Assistant Prof. CSE Dept.

What is **CSE** Branch Speciality?



The advent of Computer engineering began in 1939 when John Vincent Atanasoff and Clifford Berry started developing the world's first electronic digital computer using the basic principles of physics, mathematics, and electrical engineering. The first computer engineering degree program in the United States was organized in 1971 at Case Western Reserve University in Cleveland, Ohio.

Computer science and engineering is an inter disciplinary branch that integrates several aspects of computer science and electronic engineering required to develop computer hardware and software. IoT , CYBER SECURITY , AIML & DS are few new branches of Computer science and engineering that are evolving and are in very high demand in the current decade with the emergence of smart & self-learning devices. The constant innovation and development of new technologies also mean that there is a perpetual need for brilliant computer & data scientists and computer engineers.

The term covers a range of intertwined professions. Two general branches would be hardware and software engineering, Network engineering might be considered the third. Computer engineers usually are trained in electronic engineering, software design, and hardware–software integration, network programming, evolving tools & technologies and the list is enormous with 'n' number of possibilities & opportunities. Computer engineers may choose among various degrees, thus training themselves the exact set of skills they wish to perfect themselves in.

What do computer engineers do?

Computer engineers build devices, design computer networks and develop new technologies. They are focused on computer hardware and understanding how to optimize hardware for different applications through an understanding of how software interacts with hardware. The future of computer engineering is bright.

“One of the best things about a career as a computer engineer is the choice and vast career options that are available to you. No matter which area of study you engage with, there will always be work.”



Dr.N. Satyanaryana
Prof. & HOD IT Dept.

Importance Of Information Technology

in today world



Information technology (IT) involves the study and application of computers and any type of telecommunications that store, retrieve, study, transmit, manipulate data and send information. Information technology involves a combination of hardware and software that is used to perform the essential tasks that people need and use on an everyday basis.

Information technology refers to anything related to computing technology, such as networking, hardware, software, the Internet, or people working with these technologies.

Since we live in the “world of information”, information technology has become a part of our daily lives. In the coming decades, many corporations will create so-called “IT departments” to manage computer technologies related to their business.

There are many facets of Information Technology, example:

1. Information Technology governance

The effective combination of policies and processes to run the IT systems smoothly and hand in hand with the needs of the organization.

Information Technology operations: Operation of IT can be seen in the daily work of an IT department. It provides tech support, security testing, network maintenance, and device management.

Hardware and infrastructure: The physical component of Information Technology comes under the hardware of IT. It includes setting up and maintaining the equipment like phone systems, routers, servers, and laptops.

2. Business Information Technology Definition

The importance of Information Technology in business is vast. It helps each and every business sector in automating their processes and their systems to target objectives, generate revenue and reduce inefficiency of their work. The value of Business information technology is increasing day by day in areas such as in commercial transactions, to fulfil demands of customers and regulatory requirements.

To maintain the balance between complex computer systems and right practices of business, employers eye on sound business information technology.

Importance Of Information Technology

in today world

With the proper technology management, serving customers more will become really easy as it helps in increasing employee engagement, gives access to information and provides flexibility in responding to business challenges.

To get success in any business field, there are two non-tangible things including relevant knowledge and information are very important. Business information technology effectively combines management skills, communication technology with the competency of information.

Why IT is important?

Information technology helps to build and grow the commerce and business sector and generate maximum possible output. The time taken by different sectors to generate business is now minimised with an advancement in Information technology. It provides electronic security, storage, and efficient communication.

To collect information, programming/coding, data conversion, data communications retrieval and storage, system analysis are used. The use of computers and the internet increases the quality of education. The pedagogical method of teaching and learning has been improving and IT contributes to improve school systems, students activities and teaching practices. Students are more open to learning with modern technologies and focusing on online teaching more. Their learning methods are dependent on live interaction with the teachers and special classes for special children.

The aura of Information technology can be seen in almost all fields including work, learning, leisure, and health. From ministries to classrooms, every sector uses IT for the best results.

Physicians also use Information technology to check record entries, patient history and their prescribed dose to move accordingly. The use of Information technology can also be seen in agriculture and to increase productivity. Satellites are connected with agriculture to predict monsoon and smog. Through drone technology, mass data collection, land survey, use of pesticides, seeds planting, water irrigation, and use of fertilizers are possible.

Each and every field needs Information technology. Without the internet and technical system, no business, education, agriculture work and health sector can produce an expected outcome. Technology in today's world is important



GREEN BUILDING TECHNOLOGY

A green building is an environmentally sustainable structure, which makes efficient use of land, materials, energy and water, while costing less in terms of maintenance charges.

A green building enhances energy efficiency, limits water consumption and makes maximum use of recycled and locally available, recyclable and non-toxic materials. It also generates as little waste as possible during the construction process.

A green building involves methods, resources and skills with the aim of reducing the negative impact on the environment.

Goals of Green Building:

1. Low maintenance and operation costs.
2. Life cycle assessment.
3. Siting and structure design efficiency.
4. Energy efficiency.
5. Water efficiency.
6. Materials efficiency.
7. Indoor environment quality and enhancement.
8. Operations and maintenance optimization.
9. Waste reduction.
10. Reduce impact on the electrical network.
11. Reduces strain on local resources.

Elements of Green Building:

It has four main components to make green building more sustainable

1. Materials for green building
2. Energy systems in green buildings
3. Waste management in green building
4. Health components of green building

Fundamental principles of Green Building:

There are five fundamental principles of Green Building

1. Sustainable site design
2. Water quality and conservation
3. Energy and environment
4. Indoor environment quality
5. Materials and resources



Importance of Green Building:

The growth and development of communities have a large impact on our natural environment. The manufacturing, design, construction, and operation of the buildings in which we live and work are responsible for the consumption of many of our natural resources.

Different Types of Green Building Technologies:

The below list strikes a perfect balance between eco-friendly building materials which can be used to building sustainable building structures and more advanced green technologies like solar which can go a long way in cutting down the energy consumption. These materials and technologies are being actively used by builders and developers across the world. Some of them are:

1. Net Zero Energy dependent and Carbon emitter
2. HVAC (Heating, Ventilation and Air Conditioning)
3. Low-Emitting Materials
4. Cool Roofs
5. Green Insulation
6. Solar Power
7. Smart Appliances
8. Conservation of Water

C Srikanth
18K91A0135
Civil



Green Energy Production From Sound Energy

Everyday we hear numerous sounds like listening to music on spotify , a barking dog chasing us on the road, a baby humming 'mumma', or a bowler appealing to umpire 'hows that' and many more kinds of sounds . But have you ever wondered could sound be used for solving the general life problems ? Do you know that sound energy can be utilized to generate electricity ? Yes you have heard us right.

PURE GREEN ENERGY:

we made a bold and novel move Green Energy Production From Sound Energy”.

Today, the world is going through a complete metamorphosis and solar energy are making a progress but there is very little research and developments in sound energy. This project will try to fill the vacuum and hope further developments will follow us.

This work will undoubtedly open ways for the development of suitable electricity generators locally. For future work, a high efficient sound-to-electricity converter and heat exchangers will be incorporated in the developed prototype in order to generate relatively higher power.



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Advanced Innovation in Mechanical Engineering

Industrial Revolution:

The first part of the new technology in Mechanical Engineering. It was a step-by-step journey from the start of the Industrial Revolution to the current Industrial revolution 4.0. Industrial revolution 4.0 is the era of smart industries. In this technology computers & electronics are inter-connected with mechanical technologies. Because of the industrial revolution, industries are becoming smarter. Technologies in every sector are becoming more advanced. Instead of manual work, people are using advanced robots. These robots are able to work faster than human beings with good accuracy. The way of doing work has completely changed. Due to that, mass production becomes very easy in manufacturing industries with minimum errors. More accuracy is going to be achieved. Industrial Revolution 4.0 consists of the Internet of things

4D Printing:

The Idea of 4D printing was first introduced in the MIT self-assembly lab. 4D printing is an advancement in 3D printing. In 4D printing, material plays a very important role. Because these materials are specially designed to react with the external medium. When a 4D printed object gets in contact with some external medium like heat, electricity & magnetic field, it may start transforming its shape because of the shape-changing property. In the future, this technology will be more preferred in various industries like biomedical. 4D printing plays an important role in new technology in mechanical engineering

5D Printing:

The concept of 5D printing is first implemented by the Mitsubishi Electric Research Lab (MERL). William Yezazunis (Senior Principal Research Scientist) explained that, in 5D printing, the object is built with the help of five different axes. It helps in creating a complicated object with good strength. It is one step ahead of 3D Printing. In 3D Printing, the base becomes stationary & the printing head moved in X, Y & Z direction to create an object. But in 5d printing, the Printing head moves in the X, Y & Z directions to create an object & the printing base also moves in the X & Y direction. 5D printed object having good strength rather than a 3D printed object. 5D printing plays an important role in new technology in mechanical



Solar Window:

The solar window is the new technology in solar panels & PV cells. In this, sun rays falling on the windows get transferred & electricity also generates. There is partially transparent solar panel technology & fully transparent technology is there. In this solar window system, we are getting a double advantage. It gives a bright future in the field of the car windows, large facades of the buildings & home windows.

3d printing:

3D printing is also called additive manufacturing. A three-dimensional object is made by using a setup of the 3D printer & computerized CAD model. In the early time, the use of 3D printing was only for making parts of polymers. In this process, the setup of the 3D printer makes the object layer on layer. But in today's time, the use of 3D Printing is for making metallic objects too. Instead of polymer, molten metal is used and an object is made layer by layer. There are various 3D Printing processes like Stereolithography, Digital Light Processing (DLP), Extrusion, Inkjet, Selective Deposition & Lamination (SDL) available in the market. Use of 3D Printing for application in the construction, aviation, automotive, consumer products & healthcare industry.

Samarasimha Reddy
Mechanical





SMART ELECTRIC VEHICLE

An electric vehicle (EV) is an automotive vehicle that uses one or more electric motors for propulsion .It can be powered by a collector system, with electricity from extravehicular sources, or it can be powered autonomously by a battery.(sometimes charged by solar panels, or by converting fuel to electricity using fuel cells or a generator). EVs include, but are not limited to, road and rail vehicles, surface and underwater vessels, electric aircraft and electric spacecraft.

EVs first came into existence in the mid-19th century, when electricity was among the preferred methods for motor vehicle propulsion, providing a level of comfort and ease of operation that could not be achieved by the gasoline cars of the time. Internal combustion engines were the dominant propulsion method for cars and trucks for about 100 years, but electric power remained commonplace in other vehicle types, such as trains and smaller vehicles of all types.

In the 21st century, EVs have seen a resurgence due to technological developments, and an increased focus on renewable energy and the potential reduction of transportation's impact on climate change, air pollution, and other environmental issues.

During the late 20th and early 21st century, the environment impact of the petroleum-based transportation infrastructure, along with the fear of peak oil, led to renewed interest in an electric transportation infrastructure. EVs differ from fossil fuels -powered vehicles in that the electricity they consume can be generated from a wide range of sources, including fossil fuels, nuclear power, and renewable such solar power and wind power or any combination of those. The carbon foot print and other emissions of electric vehicles varies depending on the fuel and technology used for electricity generation. The electricity may be stored in the vehicle using a battery, flywheel, or super capacitors. Vehicles using internal combustion engine usually only derive their energy from a single or a few sources, usually non-renewable fossil fuels. A key advantage of electric vehicles is regenerative braking, which recovers kinetic energy, typically lost during friction braking as heat, as electricity restored to the on-board battery.

Electric motor:

The power of a vehicle's electric motor, as in other machines, is measured in kilowatts (kW). Electric motors can deliver their maximum torque over a wide RPM range. This means that the performance of a vehicle with a 100 kW electric motor exceeds that of a vehicle with a 100 kW internal combustion engine, which can only deliver its maximum torque within a limited range of engine speed

Efficiency of charging varies considerably depending on the type of charger, and energy is lost during the process of converting the electrical energy to mechanical energy.

Usually, direct current (DC) electricity is fed into a DC/AC inverter where it is converted to alternating current (AC) electricity and this AC electricity is connected to a 3-phase AC motor.

For electric trains, forklift trucks, and some electric cars, DC motors are often used. In some cases, universal motors are used, and then AC or DC may be employed. In recent production vehicles, various motor types have been implemented; for instance, induction motors within Tesla Motor vehicles and permanent magnet machines in the Nissan Leaf and Chevrolet Bolt.

B Praful Kumar
19K95A0301
Mechanical





SHIZNAY-2018



2016



2017



2015



2014



2019

TKRES EVENTS





MAN TURNING INTO A SUPER FAST COMPUTER!!!

We often heard about how the robot works and turn out to be a human! Then what about this human turning into a computer system ,Do that change really exist in a real life?

Well yes! By the evolution of “NEUROMORPHIC COMPUTING!

Let's get connected with depth on how this technology can bring a great change to the future .VLSI-VERY LARGE SCALE INTEGRATION SYSTEM, which contains analog electronic circuits to mimic neuro biological architectures present in the nervous system.

Examining the disabled person or a person diseased with brain tumour...now this technology can give up a huge change in the person health development by placing the chip in the nervous system.

IMAGINING A FUTURE WITH BIOLOGICAL TECHNICAL MAN!

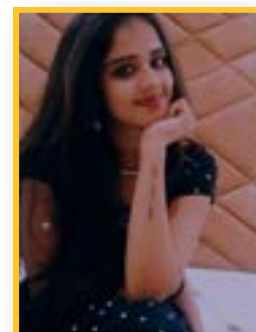
This neuromorphic technology can replace the missing eyes,arms,hands ,legs or joints just the way prosthetic works like. Placing this chip into the nervous system of a human it releases a drug with increases the glucose and insulin levels of a human.This works like a SUPER FAST COMPUTER!!!



Generally a human brain needs a power of 20 watts and a computer need 28mega watts neuromorphic chip is an analog data processor inspired by the biological brain .It performs on chip processing asynchronously using event driven processing models to address complex computing problems, May we don't need any other computers further , it could even save a very large scale of human suffering with health issues, "THIS ECE MAY GIVE BIRTH TO A WORLD WHERE LIFE SPAN OF TECHNOLOGY ", just imagine the world with this future technology! It do have the capability of learning continuously....

This was introduced by "CARVER MEAD" in the year 1980's.....one of the best companies INTEL and IBM are soon coming forward with the technology... "VLSI TURN TO BE A LIFE SURVIVAL" Electronic communication engineering coming with a graduated degree of Mbbs??? LETS SEE WHERE IT GOES ...HOPE AND WISH OUR SCIENTIST COME FORWARD WITH THE NEUROMORPHIC TECHNOLOGY HAVING NO RETURNAL EFFECT ON HUMANS ! STAY TUNED TO THE FUTURE

A Neha Reddy
19K91A0401
ECE




WELCOME!!! TO THE NEWBORN TECHNOLOGY

Every student right from the very born child to the old person is growing in the world full of technology. There was a generation having no phones for communicating with each other when comparing the present life to the past, as the same as the generation developing. Network communication has been playing a vital role till today. As ages and ages grow simultaneously generation from 1G ,2G ,3G and 4G come forward through the technologies. Now people are beginning to experience 5G and its capabilities.

5G technology offers remote management so that users can get better and faster solutions to the problems. It also supports the high quality services and the interactive Multimedia, Voice, Video, Internet and other broadband services. We are also seeing much faster adoption compared with the 4th Generation. For faster implementation of 5G technologies, India needs to introduce spectrum policy including long term support.

Only cities can benefit a lot from 5G network and remote areas may not get the coverage for some years. Moreover, the expenses for setting tower stations are high when compared to other networks. Over the next few years, 5G is positioned to become the standard for mobile communications technology. We came to know that the mobile networks will be up to hundred times faster and have a thousand times the capacity than we experience today. This technology may have adverse effects on the body as well as nature, as it is more complex and costs more when compared to earlier mobile technologies.





Only cities can benefit a lot from 5G network and remote areas may not get the coverage for some years. Moreover, the expenses for setting tower stations are high when compared to other networks. Over the next few years, 5G is positioned to become the standard for mobile communications technology. We came to know that the mobile networks will be up to hundred times faster and have a thousand times the capacity than we experience today. This technology may have adverse effects on the body as well as nature, as it is more complex and costs more when compared to earlier mobile technologies.

As this generation is wireless technology it uses higher radio frequencies and also greater capacity. In April 2019, South Korea was the first country to adopt 5G on a large scale. The 5G network is generally built using three different bands of spectrum which are low band, mid band and high band. This technology provides us uniform connectivity and supports more than 60,000 connections across the world. 5G is still under process and research on it is going on. Moreover, security and privacy issues are yet to be solved

B Sharvani
19K91A0422
ECE





Mind-Reading Robots

Robots are here to stay, and they're only getting smarter. But it'll be a while until they respond to our every verbal command, so until then we'll have to use our mind to communicate with them.

That's right, you'll be able to control robots using your mind in the future, as MIT figured out a way to combine brainwaves and hand gestures to allow humans to interact with machines effortlessly.

The idea here is to allow machines to easily correlate and interpret the brain signals and hand movements of a person and turn them into quick robotic actions. That way, humans would not have to master coding skills required to preprogram robots to perform specific tasks in direct response to human interaction.

But MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL) was quite successful.

"This work combining [electroencephalograph (EEG) and electromyography (EMG)] feedback enables natural human-robot interactions for a broader set of applications than we've been able to do before using only EEG feedback," CSAIL director Daniela Rus said. "By including muscle feedback, we can use gestures to command the robot spatially, with much more nuance and specificity."



The team, led by Ph.D. candidate Joseph DelPreto, used a humanoid robot called Baxter, from Rethink Robotics, during testing, and the project was funded in part by the Boeing Company.

The robot went from choosing the correct target from 70 percent of the time to 97 percent, MIT says. While robots can interpret EEG and EMG to trigger actions, it's the combination of the two that makes it all possible.

"By looking at both muscle and brain signals.

we can start to pick up on a person's natural gestures along with their snap decisions about whether something is going wrong," DelPreto said. "This helps make communicating with a robot more like communicating with another person.

The system could be used in the future by various types of people, including workers with disabilities or limited mobility, but also the elderly, according to the team. And who knows, this type of robot control could one day be used to conquer space.



B Likitha
19K91A0531
CSE

A vertical, close-up photograph of a microscope, showing the eyepiece, objective lenses, and part of the base. The image is in grayscale and occupies the left side of the page.

DeepBar™, a faster drug discovery technology and a prospective human Messiah.

The COVID-19 pandemic has highlighted the significance of speedier drug research and development procedures. New variants of disease-causing pathogens can wreak immeasurable havoc before discovering new and effective treatments. The emergence of new technology is assisting in speeding up the drug discovery process all the way to approval. New medications will only be effective if they bind to the body's target protein molecules. Machine learning and artificial intelligence are assisting in speeding up of calculations on medication molecules binding affinity to proteins in the body.

In the drug discovery and screening process, determining the affinity of a drug molecule is a critical problem. To overcome the challenge, scientists are using a combination of chemistry, related sciences, and machine learning. Scientists are using a novel approach called "DeepBAR" to quantify the binding affinity of drug candidates. This technology allows for significant time savings in the development and approval procedures by doing exact calculations in a fraction of time needed by previous approaches. According to researchers in the medical and pharmaceutical fields, "DeepBAR" is anticipated to quicken salient procedures in protein engineering and medication development. According to professors in chemistry at MIT and Harvard, the new protocol is several times quicker than previous methods. The affinity between drug molecules and target proteins is measured using a quantity referred to as "binding free energy." The calculation of the binding free energy of a drug candidate helps indicate the potential effectiveness of a drug.

DeepBAR uses machine learning frameworks called deep generative models to reduce the time necessary to learn the in-between states. Deep generative models are adopted from the field of computer vision. The models are remarkably similar to those used in computer image creation. According to the researchers, each chemical structure is treated as an image that the model can learn. The DeepBAR is building on the efforts of the machine learning and artificial intelligence communities. The DeepBAR project's key contribution is the application of computer vision to chemistry and drug development. DeepBAR computed binding free energy 50 times quicker than previously used approaches. And this can be widely incorporated in the drug screening procedures because of its effectiveness

In the context of the continuing COVID-19 epidemic, effective drug testing and screening would have sped up the development of therapies. DeepBAR's skills in conducting computations for larger proteins will be improved further by the researchers. Given its recent technological developments in machine learning and artificial intelligence, the potential exists. A shorter medication development cycle implies that more individuals will be able to get effective therapy, perhaps saving lives

CY Anish
19K91A0553
CSE





“BLUE BRAIN” Technology

Human brain, the most valuable creation of God. The man is called intelligent because of the brain. But we lose the knowledge of a brain when the body is destroyed after death.

“BLUE BRAIN”- The name of the world’s first virtual brain. That means a machine that can function as human brain.

What is BLUE BRAIN?

Is it really possible to create a human brain?

“YES”, IBM is now developing a virtual brain known as the BLUE BRAIN. It would be the world’s first virtual brain. Within 30 years, we will be able to scan ourselves into computers.

BLUE BRAIN TECHNOLOGY:

BLUE BRAIN The name of the world’s first virtual brain. That means a machine that can function as a human brain. The Blue Brain project was initiated by Henry Markram in May 2005 in Switzerland. IBM is now developing a virtual brain as BLUE BRAIN. It would be the world’s first virtual brain. Within 30 years, we will be able to scan ourselves into the computer. A machine that can function as a brain. It can make decisions. It can think and respond. It can keep things in memory

UTILIZATION To treat neurological disorders:

To retrieve data from people even after death. Also useful in situations of short term memory or volatile memory observed among aged people
HUMAN BRAIN STIMULATION With the usage of small robots as nanorobots, we will be able to provide an interface with computers that is as close as our brain. Nanorobots are very small robots whose components are to the scale of nanometer.

What is a virtual brain ?

A machine that can function as brain it can take decisions it can think it can respond it can keep things in memory

FUNCTIONING OF BRAIN:

Sensory Input: Receiving input such as sound ,image, etc through sensory cells .

Interpretation: Interpretation of the received input by the brain by defining states of neurons in the brain.

Motor Output: Receiving electric responses from the brain to perform any action.

HUMAN BRAIN SIMULATION:

- **Input:** Through the silicon chip or artificial neurons.
- **Interpretation:** By a set of bits in the set of registers.
- **MEMORY:** Through Secondary memory Ø**PROCESSING:** Through arithmetic and logical calculation and artificial intelligence.
- **OUTPUT:** Through the silicon chip. **UPLOADING HUMAN BRAIN:**
- The uploading is possible by the use of small robots known as the nanobots.
- They will be able to provide an interface with a computer that is as close as our brain.
- Nanobots could also carefully scan the structure of our brain, providing a complete readout of the connection. This information, when entered into a computer, could then continue to function as us.

HARDWARE AND SOFTWARE REQUIREMENT: A Super computer, Memory with a very large storing capacity. Processor with a very high processing power. A very wide network. A program to convert the electric impulses from the brain to input signal, which is to be received by the computer and vice versa. Very powerful Nanobots to act as the interface between the natural brain and the computer. Blue Brain Research Centre Eventually the aim of applying terrific computer power to the simulation of an entire brain is developing. Very soon this technology will be highly accepted all over the world. "

N Sri Bhuvan
19K91A1232
IT





TRENDING TECHNOLOGIES

Information technology is an industry on the rise business structure, job growth, and emerging technology will all shift in the coming years. Current trends are improving and presenting new functions in fields like medicine, entertainment, business, education, marketing, law enforcement, and more Information technology is advancing so rapidly that new developments are quickly replacing current projections.

CURRENT TRENDS IN IT :

1. CLOUD COMPUTING
2. MOBILE APPS AND COMPUTING
3. BIG DATA ANALYTICS
4. AUTOMATION

EMERGING TRENDS IN IT HISTORY :

1. ARTIFICIAL INTELLIGENCE AND SMART MACHINES
2. VIRTUAL REALITY
3. AUGMENTED REALITY
4. BLOCK CHAIN
5. INTERNET OF THINGS

IT is one of the most dynamic industries in this world. The jobs that exist today didn't exist 20 years back. Fast changes in technology are the main reason behind this. This is why we so many tech startups are commencing their business recently and growing massively.

Undoubtedly, Information Technology is a stream, which can change one's destiny in a positive way. There is no death for job options for qualified professionals in this stream. However, one has to accept the fact that the ability of the students plays a pivotal role in the success of their career.

The salary packages also vary depending abundantly on the competence and experience of the individual in the field.

Advanced innovation in Mechanical engineering

I NTERNET OF THINGS:

INTERNET OF THINGS(IOT) has a new paraigram that has changed the traditional way of living into a high tech life style.smart homes,smart automations,smart industries ,smart energy,pollution control are such transformations due to IOT.

The Internet of Things (IoT) is an emerging paradigm that enables the communication between electronic devices and sensors through the internet in order to facilitate our lives. IoT use smart devices and internet to provide innovative solutions to various challenges and issues related to various business, governmental and public/private industries across the world. IOT is progressively becoming a part of our life .moreover it is taking the advantage of quantum and nanotechnology in terms of storage and sensing of high speed.

A great transformation can be observed in our daily routine life along with the increasing involvement of IoT devices and technology. One such development of IoT is the concept of Smart Home Systems (SHS) and appliances that consist of internet based devices, automation system for homes and reliable energy management system [3]. Besides, another important achievement of IoT is Smart Health Sensing system (SHSS). SHSS incorporates small intelligent equipment and devices to support the health of the human being. These devices can be used both indoors and outdoors to check and monitor the different health issues and fitness level or the amount of calories burned in the fitness center etc. Also, it is being used to monitor the critical health conditions in the hospitals and trauma centers as well. Hence, it has changed the entire scenario of the medical domain by facilitating it with high technology and smart devices [4, 5]. Moreover, IoT developers and researchers are actively involved to uplift the future technologies.

Sridhar Reddy
19K91A1208
IT



TKR CENTRE FOR RESEARCH & INNOVATION - A CONFLUENCE FOR CREATIVE METAMORPHOSIS



Vision of TKR Centre for Research & Innovation:

TKR Centre for Research & Innovation at TKR College of Engineering & Technology intends to persuade students to be pragmatic by helping them to transform basic scientific, technological and abstract ideas to practical reality. TKR Centre for Research & Innovation will provide an Eco-System for the students to learn by doing and will support them in thinking critically, being innovative, visualizing products and developing and implementing prototypes. The Lab will serve as a cross-disciplinary and multiple stake holders' platform to enable student entrepreneurship, collaboration with the industry and commercialization.

A few of the innumerable facilities provided by TKR Centre for Research & Innovation are:

1. A platform to establish industry academia conclave.
2. A Room for knowledge sharing to support the ideas of innovations & societal needs.
3. A Location for nurturing their curricular knowledge to inculcate entrepreneurs skills.
4. Rapid prototyping facility.
5. Ultra-Modern measuring, metal joining and cutting facilities.
6. Induction furnace for design of materials of choice.
7. Ultra-modern facilities to cater to the needs of electrical and electronics hardware assembly and testing
8. To train students to imply design and analysis of various applications using high end computing facilities.



All this will go a long way in translating nascent ideas of students to new products and providing solutions to a plethora of technical problems. The workshops/ trainings, competitions and boot camps conducted by TKR Centre for Research & Innovation and the interaction between industry- Institute and linkages among Institutes will aid in bettering confidence among the young student entrepreneurs for implementing their thoughts and Ideas.

Constant mentoring and interactions with other research labs will help students to ingeniously choose raw materials and design products that will create an edge over similar products already available in the market - products that would turn out to be cost effective and environmental and user friendly. TKR Centre for Research & Innovation aims at collaborating students' activities with larger national goals and missions like serving the disadvantage sections of the society and will pave the way for students to enhance their ethical, social and cultural values. This biblical quote summarizes the motto of TKR Centre for Research & Innovation "Give a man a fish He will eat for a Day Teach a man to fish He will eat for the rest of his life".

Plan for sustenance beyond two years:

TKR Centre for Research & Innovation supports the phenomenon of life long learning, in promoting nation-building objectives, emphasizing the serendipitous collision of thoughts. Conveying developed knowledge to the community with the help of workshops, short-term courses, certain skill development activities. Extending the services of human expertise as consultants. Raising the level of laboratory to be test centers for Multidisciplinary and Intra-disciplinary research areas.



Programming Life

Code , oh, code,
Is this string a float?
Let me write a method to Check.
With numerous errors
The compiler, Reports back!
What the heck did i do,Wrong?
Give me a hint, atleast a little one!
After searching half the Day!
I got it fixed hurray!!



V Shravani
21R91A04P5

Dreams

It's complicated
But I see you every night
For all these dreams are filled
With you
Mirth that spreads across your face
Your smile,
Those twinkling eyes
They haunt me
For it's complicated
Because I see you
As I dream of you every night



Zaib unnisa
21DG1R00A2



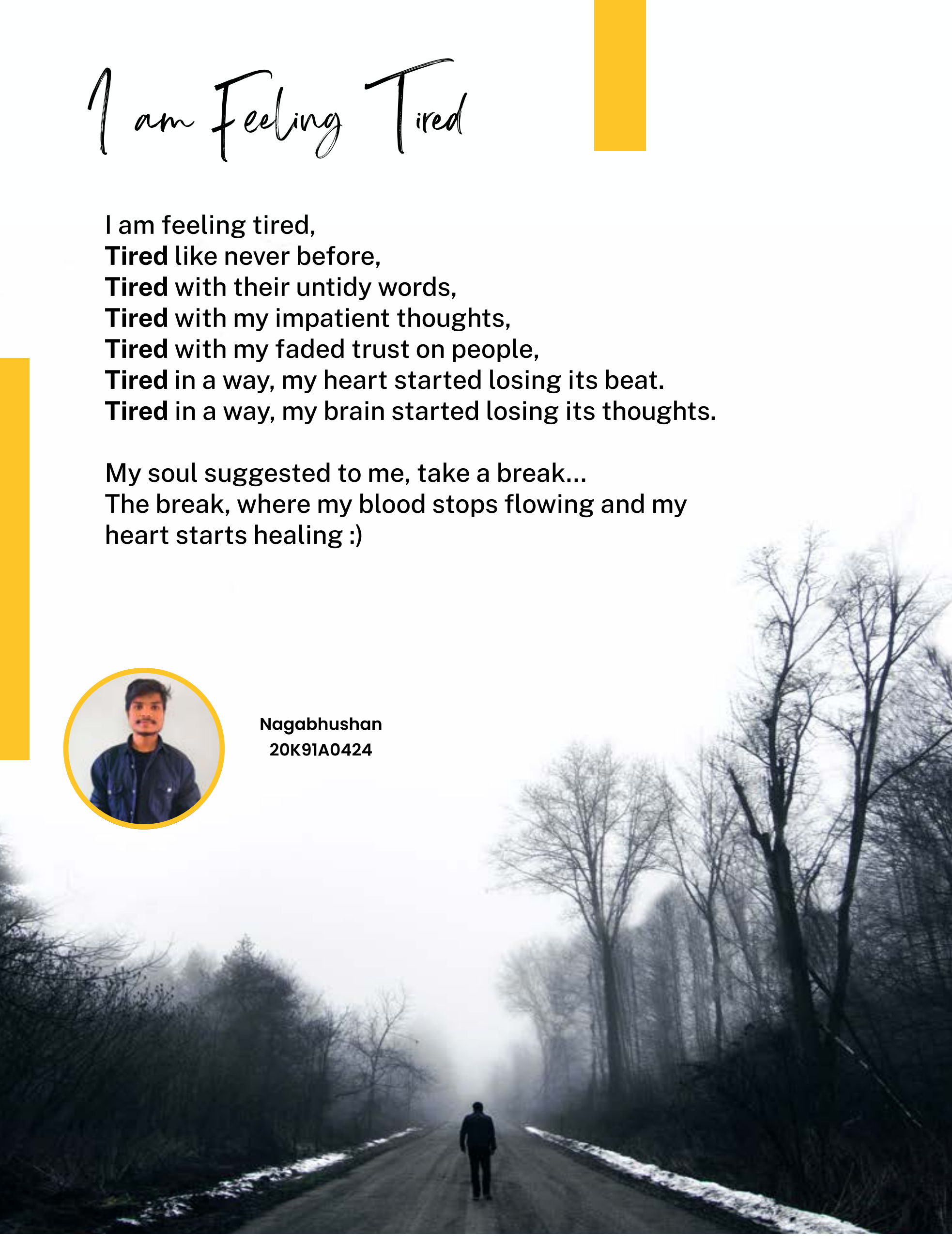
I am Feeling Tired

I am feeling tired,
Tired like never before,
Tired with their untidy words,
Tired with my impatient thoughts,
Tired with my faded trust on people,
Tired in a way, my heart started losing its beat.
Tired in a way, my brain started losing its thoughts.

My soul suggested to me, take a break...
The break, where my blood stops flowing and my
heart starts healing :)



Nagabhushan
20K91A0424



తెలుసు !

పడమరన
అస్తమించటానికి
తూర్పున సిద్ధమవుతున్న
సూర్యునికి తెలుసు
నువ్వె వరో కానీ
నీకు తెలీదు

సాయంకాలం
మేడలెక్కే నీ
నీడలకి తెలుసు
నువ్వెవరో కానీ
నీకు తెలీదు

నువ్వు నడిచేప్పుడు వచ్చే
నీ గుండె అడుగుల
శబ్దానికి తెలుసు
నువ్వెవరో కానీ
నీకు తెలీదు

నిన్ను దూరం చేసుకున్న
నీ శత్రువులకు తెలుసు
నువ్వెవరన్నది
కానీ నీకు తెలీదు

పుస్తకాలలో నువ్వు చదివేందుకు
ముద్రించబడ్డ ప్రతి అక్షరానికి
తెలుసు
నువ్వెం అవుతావో
కానీ నీకు తెలీదు

విజయం చేకూరేందుకు
వచ్చే అవరోధాలకిల తెలుసు
నువ్వు ఎలా అధిరోహించగలవో
కానీ నీకు తెలీదు

పెరుగుతున్న టెక్నాలజీ
పేట్రేగుతున్నా, తెలుసు
నువ్వెలా వాడుకొని
అడుకొగలవో
కానీ నీకు తెలీదు

స్ఫుర్తించే గాలికి
దోసిట్లో నీటికి
మోసే పుడమికి
కాచే ఎండకి
తల ఎత్తించే ఆకాశానికి
తెలుసు
తమ ప్రతి రూపమే నువ్వని
కానీ నీకు తెలీదు!

J Ashwik
21241-Ce-017



స్నేహం...!

చార్మినార్ నుంచి గోల్కొండ దాకా
గల్లీ నుంచి గోవా దాకా తిప్పి చూపించేవాడు
బైక్లపై షికార్లు
లెక్కరల్ల పై పుకార్లు
కొన్నిసార్లు రాముడికి లక్ష్మణుడిలా
మరికొన్నిసార్లు రాముడికి రావణుడిలా
తల్లిపాలు పంచుకోకపోయినా సోదరుడిలా
గొడవలో భీముడిలా
క్రికెట్ లో ధోనిలా
ముందుండి గెలిపించే వాడు
మన జేబులో కొట్టేసి మనకే బిర్యాని
తినిపించే వాడు
పానీ పూరి నుంచి పిజ్జాల దాకా
మనతో తినిపించి , తాపించి
పిలిస్తే సినిమాలకి పిలవకపోయినా పార్టీలకి
ఆపదలో దేవుడిలా వచ్చేవాడే స్నేహితుడు



B Rambabu
19K91A0519



Short Story

The Story of an Average BOY

There is a boy named Surya, with a cute, lovely and friendly family. He addresses his dad as Dosth and his mom as Mahakali. He is one of the best students during his schooling and pre graduation level. Now, it's the time he entered into his graduation. It's a hard thing for a student to stay away from family to get good education. His parents didn't even put on pressure or expectations on him to achieve something in his life. They're confident that no matter where Surya's life takes him, one way or the other he'll get what he deserves. But Life is not everything about planning and expectations. He fell in love or something with some random girl who didn't even have feelings towards him. Everyone thinks that whether a boy is in love, his studies and concentration gets distracted. But here, Surya proved it was all bullshit. He balanced everything that he could do (Studies, love, passion, etc.). He is very passionate about singing. All his eyes were craving for a chance to sing in front of whole college. On one random day, when he's waiting for the girl named Chandini, who he is loving, a senior came to rag him. As usual, that senior ragged on Surya till everyone laughed at him. Surya felt bullied. That's the day... Surya rebelled against that senior. His hand just transformed into a fist that can fight everything. His life's first fight started there. Until he was just a BOY. Now, he is a MAN. Slowly, his thoughts and actions also got changed. He was a teetotaler then. As his actions and thoughts transformed, so his habits too. On one fine day, he went to propose the girl he loved. He talked to her very politely, but that girl Chandini concluded that he was a rogue who teases girls and rejected his love. After a while, he got a phone call speaking, "Your father met with an accident and dead there itself. You have to come home." his relatives on the other side. He was literally broken. World around him filled with grief. Everything that's left for him was sorrow... He struggled to face the hardest truths that he had never been into before. All that he can do is show his love towards his father instead of crying, stay strong and take responsibilities.

Short Story

Suhasvardhan



After many days, he didn't even get out of that situation. Instead of facing the truth, he's hiding himself with every possible addiction. His studies got ruined, and the worst part is everyone are showing pity on him. Finally, college annual day has arrived. He went just to look at Chandini on the stage dancing. Audience got spellbound for her dance. She's like a peacock on the stage. Beautiful and marvellous. After she got finished, there was continuous applause. Right after her performance, the Anchor announced, "Now we have Surya from 1st year on the stage to sing a song make our ears get astonished". Surya got stunned by that announcement and after some seconds he got out fro the shock and went upon the stage to sing. All his father's memories are running in his mind. Now... He started singing song about his father who left the world. His eyes were filled with tears and his voice is filled with love towards his father. After his finishing, each and every student, stood from their seats and gave a standing ovation. His talent was noticed by a famous actor who came as a chief guest. That actor himself came onto the stage and promised Surya infront of everyone that he'll give a chance to Surya in his next film to sing. The light in his name came onto his face when he heard this promise. Surya's parents were right. Maybe he didn't get what he wanted but got what he deserved. He was left with a confusion that who told to enroll his name and started to get down from the stage. After his last step, somebody hugged him from back. It was.... Chandini. Yes, she always regretted herself of rejecting such a nice guy and she didn't got a right time to show her love.

Life gave Surya a second chance. He just started his journey, what about yours...?

Whatever the situation is... Face it. When life dips us into dark side of sorrow, just remember one thing, we have a hope that tomorrow's going to be a float in light of happiness. Everyone deserves a second chance, irrespective of situations.



M.Ajay Kumar
20K91A05B7



Akhilesh
19R91A0203



J Ashwik
21241-Ce-017



B Deepak
21R95A0506





Akhilesh
19R91A0203



G Suman
226019672049

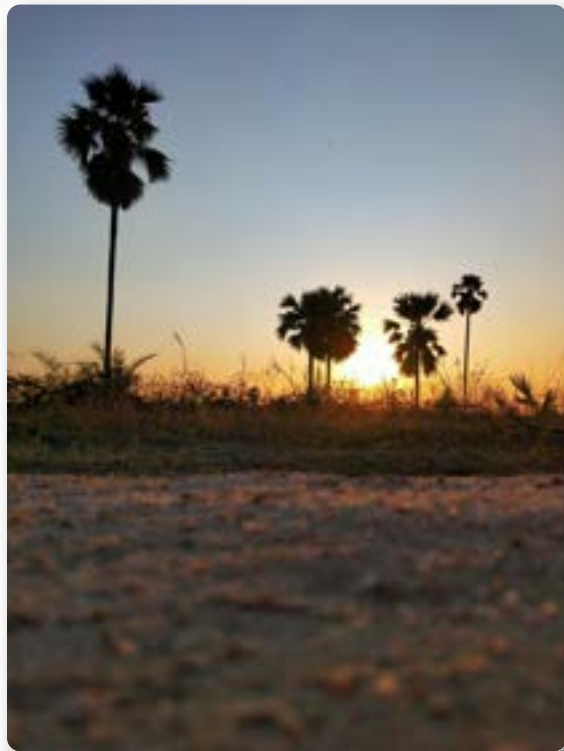




P Shiva Kumar
20K91A0337



D Raju
19K91A0555





G Datta Sai Kumar
19241-M-225



V Shravani
21R91A04P5





K Abhiram
21K91A04C0



R Charan Rddy
21R91A04K0




 P Deepanjali
20K91A05D4

 Gunashekar
19K91A1210






 CH Meghana
18K91A0438


 R Krishna Teja
21K95A0339




 R Bhargav
21R91A04K2





 J Rohini
20R95A0221



 Milan Manker
18K91A0529





Prashanth Reddy
19K91A0169



A Nikitha
20K91A0403




G Niharika
19K91A0586






 Sai Kiran




 Sapna Chowdary
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 B Sowjanya
20K91A0420




 V Shravani
21R91A04P5



 A Rakesh
18R91A0501





 M Sri Uday
19K91A0350



 B Pavan kalyan
20K91A0427



 R Nikitha
21K91A66A8

 R Aparna
21K95A0453



LIBRARY & INFORMATION CENTRE

Library is the heart, mind and soul of an Educational institution and a foundation head of innovativeness, inspiration and insight both for the student and the Staff.

The Library & Information Centre at TKR College of Engineering & Technology is well established and fully automated and is enabled with barcodes. The Library has a rich collection of 91,932 volumes (Text & Reference Books) with nearly 10,193 titles in all and caters to the needs of Polytechnic, B.Tech, M.Tech and MBA students as well as Research scholars.

The Library is kept open from 9:00am to 6:00pm. The Information Centre is a key learning centre and meets the information needs of more than 6,500 users. It plays a vital role in enhancing the academic growth and overall development of the students.



**“Books are for Use
Every Reader his/her Book
Every Book its Reader
Save the Time of the Reader/Staff
Library is a growing organism”**

G Srinivas Reddy
Chief Librarian
M.sc, B.Ed, MLISC,
PGDLAN, M.Phil(PhD)



A part from providing various information needs to the user, the Library subscribes for EBSCO- IEEE, DELNET, INFLIBNET N-List, J-GATE consortia online journals, conference proceedings and back volumes, National and International Journals are subscribed directly. Technical and Subject magazines and Daily's are also available. The Information Centre is digitized with multimedia systems and a high speed Internet facility with Wi-Fi enabled servers.

The AICTE and MHRD recommended e-Learning consortiums Like NPTEL-SWAYAM (Moocs), NDL (National Digital Library), SWAYAM PRABHA and other e - learning databases are also provided. Information Communication Technology provides virtual learning and shares knowledge to the students and staff

NCC Unit at TKRCET



The NSS unit at TKRCET helps develop the personality of students through community service. It helps the volunteers to develop a sense of belonging and respect for the people with whom they are working. They work in close collaboration with the local community and this helps the volunteers in understanding the problems of the vulnerable sections of the society.

During the pandemic, the NSS programme officer planned many activities to create health awareness among the local community. Many of the locals were unaware of what was social distancing and the importance of the use of masks and sanitizer. Campus was organized to create awareness among the locals regarding the health hazards caused by the pandemic. The NSS volunteers made sustained efforts to frequently visit local markets and make the local vendors and buyers understand the significance of maintaining social distance. The unit distributed masks and sanitizers in the slums and surrounding areas of the college premises. Essay writing competitions and a quiz competition on the topic "Covid-19 in India" were organized to make the college youth aware of the importance of physically protecting themselves from the pandemic

NCC Unit at TKRCET

If the volunteers need to create awareness in the local community, initially, the volunteers need to comprehend the problems that exist in the local community. A webinar was organized to make the volunteers understand the importance of fighting climate change through our diet.

The volunteers were provided information on how a balanced diet rich in vitamins, minerals, etc can help fight disease and boost immunity. This information was passed on by the initiative in organizing blood and plasma donation to help the sick people in hospitals.

In an effort to assist in the rehabilitation work undertaken by the municipality in Hyderabad. During the heavy monsoon season, the volunteers distributed food and blankets to the locals who were affected adversely at the time of the flooding of the city. To empower the local women socially and economically the NSS unit extended its support to donate sewing machines to women workers of the Sahodari foundation.

The National Service Scheme (NSS) was introduced in 1969 with the primary objective of developing the personality and character of the student youth through voluntary community service. 'Education through Service' is the purpose of the NSS. The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi. Very appropriately, the motto of NSS is "NOT ME, BUT YOU". An NSS volunteer places the 'community' before 'self'. NSS attempts to establish meaningful linkages between 'Campus and Community', 'College and Village', and 'Knowledge and Action'.

The NSS unit of TKR College of Engineering and Technology stands strong with a volunteer force of more than 150 volunteers from various departments. Under the guidance of Program Officer Smt. J. Sunitha Kumari, Associate Professor, Dept. of ECE alongside Asst. Program Officer Smt. Anitha Chowdary, Associate Professor, Dept. of ECE. The NSS program aims to instill the idea of social welfare in students and to provide service to society without bias. Youth has always been the bastion of development of our nation. This very youth is the soul of NSS. NSS volunteers work to ensure that everyone who is needy gets help to enhance their standard of living and lead a life of dignity. In doing so, volunteers learn from people in villages how to lead a good life despite a scarcity of resources. The volunteers also provide help in natural and man-made disasters by providing food, clothing, and first aid to the disaster's victims. The college NSS unit is active in organizing various community activities, where each volunteer learns civic responsibility and gains a sense of social service. The volunteers are trained to organize various events collectively. The volunteers are guided to find solutions for individual and community issues, to help the needy and the unreached. The volunteers are trained to train the students in Government schools in the adopted villages/nearby villages by helping them to keep their schools clean, teaching them advanced subjects and by providing career guidance. The Unit organizes blood donation camps on a regular basis in association with the Red Cross Society of India. The Unit is well supported by the college management who have supported the needy. such as and to be a helping hand to society.

NCC Unit at TKRCET



- NCC was established in 2016. The NCC at TKRCET has been recognized as a subdivision of Telangana naval unit NCC.
- Our students attended more than 100 camps- RD, LRDC, ATC, and EBSP, which would facilitate to procure B and C certificates.

The Achievements of the NCC at TKRCET are:

1. B- Certificate have been received by 43 cadets
2. C certificate having been received by 15 cadets
3. Gold Medals were awarded to 12 Cadets and Silver medals were awarded to 10 cadets

As part of the Swarnim vijay varsh, victory flames were lit And it was formally received by Rear Admiral V Raja Sekhar, Station Commander(navy) By the hands of Cadets Amruth from IT naval unit

SPORTS AND GYMNASIUM

Our Educational society has well equipped play grounds for cricket, basket ball, Volleyball, badminton etc. All the sports activities are constantly monitored by a qualified Physical Director Mr.P.Jhonson. Various competitions are conducted on the eve of Independence Day, Republic day and College Annual day.

Our Group of Institutions received the best sports award twice from among all the colleges in Telangana State.

Out of 127 cricket tournaments held between 2008 and 2022 our college has won 109, which is a commendable achievement.

The campus offers a salubrious environment for its students and faculty to tone their bodies and keep fit by providing a gymnasium

Mr. Bhagat Verma (20K91E0007) from MBA TKRECT got selected for IPL 2020\21 in the Chennai Super Kings Team and he played for Ranji Trophy. Mr. Rahul Buddi (21K91E0009) got selected for IPL for Mumbai Indians 2022,

Five of our students Mr. Prateek Reddy, Mr.Chandan Shani, Mr. Rahul Buddhi, Mr. Mickhil Jaiswal, and Mr.Saqlain were selected in to the Hyderabad Ranji Team

M/s Meghana Reddy from TKRCET and M/s Archana Reddy from TKREC were selected for the South Zone Inter University KABADDI TOURNAMENT, and were part of JNTU University Hyderabad kabaddi team.

Winners-ATHLITIMAS (boys) Sports Mania Tournament conducted by Sri Datta engineering college in 06-04-22 to 08-04-22 volleyball winners

M Tharun From TKREC CSE - 19R91A05K2, is

Chelo India youths games 2020 U-19 boys singles -quarter finalist in badminton

inter state south zone mixed team event-bronze medalist

selected for for Yonex singha Roza international challenge tournament at Thailand and Yonex jaya Rana junior grand fix tournament at Indonesia



Mind vs Intelligence

The biggest health challenge of our times is mental health. While some mental health problems need clinical attention, most can be addressed by improving our ability to manage our mind. Alerting us to the necessity of such inner management, the Bhagavad-gita (6.6) cautions that the undisciplined mind is our worst enemy.



When we understand how our mind distorts our perceptions, we become better equipped to detect and correct its misperceptions as soon as they start occurring. Ultimately, the most effective means for managing the mind is to become conscious of God and to strive to serve him. Devotional remembrance of God not only gives us the inner strength to regulate our mind's negative tendencies but also replaces them with positive tendencies. Through such regulation and redirection, when our mind becomes transformed, it stops acting as our foe and starts acting as our friend.





**“Indian in Character
International in Excellence”**

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