INSTITUTE OF ENGINEERING & TECHNOLOGY (TCC Autonomous)

(Accredited by NAAC, Approved by AICTE & Permanently Affiliated to JNTUH)

SPECIAL POINTS OF INTEREST:

- Technology Trends in 2021
- Department
 Events
- Technical Interview questions
- Student Articles

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Department of CSE

VOLUME VII ISSUEI

DECEMBER 2021

About JBIET

As one of the top ten most preferred institutions in Telangana, JBIET continues to strive to impart technical (engineering) and professional education of very high standards. The aim of JBIET is to mould young learners into globally competitive professionals who are professionally deft, intellectually adept and socially responsible.



Sri. J.V.Krishna Rao HRA (USA) -Secretary J.B. Educational Society

The expert faculty at JBIET inculcate the best values and principles, ascribing to a modern curriculum; while the students imbibe pragmatic perception and a pro-active nature, which spurs them towards exploration and advanced inquiry, resulting in valuable insights. The Placement record of JBIET over the years is proof of our right efforts in enabling the best in class engineering, technical and professional education to aspirants. The College offers various UG & PG Courses.

JBIET'S VISION & MISSION

Vision

To be a center of excellence in engineering and management education, research and application of knowledge to benefit society with blend of ethical values and global perception.

Mission

- To provide world class engineering education, encourage research and development.
- To evolve innovative applications of technology and develop entrepreneurship.
- To mould the students into socially responsible and capable leaders.

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About Department



The Department of Computer Science & Engineering was started in the year 2015. It offers Undergraduate Programmed, B. Tech Computer Science & Engineering, which prepares students for the recent and forthcoming demands of industry and the research world.

The Department offers a Master's Programme namely, M. Tech in Computer Science & Engineering. This programme prepares students to become leaders in knowledge driven professions.

The immensely dedicated and highly professional faculty members in the Department are active in the Research Areas of Artificial Intelligence, Machine Learning, Data Science, Network Security, Wireless Networks, Block Chain Technologies, Big Data, Data Mining, Data Analytics, Cloud Computing etc.

Department has well equipped and state-of-the-art Laboratories to train students in various technologies. The Department also makes use of the Innovation Laboratories to train its UG and PG students in the respective technology areas and research.

The Department has many Adjunct Professors/Professor of Practice who typically have positions at Industry or other Premier institutions to bring in the industry expertise and research rigor in our programmes provide specialized supervision of student projects.

The students of CSE Department are placed in various top MNCs like IBM, Accenture, Cap Gemini, Cognizant, Wipro, Infosys, Mind tree, etc. with an emolument in the range of 2.86 Lakhs to 9.75 Lakhs per annum.

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Vision

To meet the emerging trends in computer Scienceand Engineering, strive forself-reliance enabled through high end research by adapting a futuristicapproach.

Mission

M1: To impart qualitative education, prepare students refurbish their latent talents and aspire

for a pragmatic career in Computer Science and Engineering.

M2: To provide an ambiance to develop strategic areas of advance study with perception to foster industry

centric education in Computer Science and Engineering.

M3: To inculcate self-learning among students to make them self-reliant and socially responsible.

Program Educational Objectives (PEOs)

Program outcomes are narrower statements that describe what students are expected to know and be able

to do upon the graduation. They are formed in line with the graduate attributes of NAAC. These relate to

the Skills, knowledge, attitudes, values and behavior outcomes that students acquire through the program.

PEO1	To prepare graduates to apply the knowledge and skills acquired in Mathematics, Basic Science and Engineering to succeed in their career, pursue research and or obtain higher / advanced degree.
PEO2	To prepare graduates to learn emerging technologies, work in multidisciplinary fields, apply computer engineering solutions within a global, societal, environmental context, acquire leadership qualities and enable them to become successful entrepreneurs.
PEO3	To prepare graduates communicate effectively, exhibit professionalism with integrity, morals, ethical conduct and engage in lifelong learning.

Program Specific Outcomes (PSOs)

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PSO 1	Ability to design and develop computing system using mathematical knowledge and expertise other disciplines.
PSO 2	Ability to test and analyse quality of various systems to integrate them in larger computer systems.

About Department

Program Outcomes (POs)

PO1	Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO2	Problem Analysis: Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
PO3	Design / Development of Solutions: Design solutions for complex engineering problems
	and design system components or processes that meet specified needs with appropriate
	consideration for public health and safety, cultural, societal, and environmental
PO4	considerations. Conduct investigations of complex problems: using research-based knowledge and
rU4	research methods including design of experiments, analysis and interpretation of data and
	synthesis of information to provide valid conclusions.
PO5	Modern Tool Usage: Create, select, and apply appropriate techniques, resources and
	modern engineering and IT tools including prediction and modelling to complex
DO	engineering activities with an understanding of the limitations.
PO6	The Engineer and Society: Apply reasoning informed by contextual knowledge to assess
	societal, health, safety, legal and cultural issues, and the consequent responsibilities relevant to professional engineering practice.
	relevant to professional engineering practice.
PO7	Environment and Sustainability: Understand the impact of professional engineering
	solutions in societal and environmental contexts and demonstrate knowledge of and
	need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities
PO9	and norms of engineering practice. Individual and Teamwork: Function effectively as an individual, and as a member or
10)	Individual and Teamwork . I direction effectively as an individual, and as a memory of
	leader in diverse teams and in multi-disciplinary settings.
PO10	leader in diverse teams and in multi-disciplinary settings. Communication: Communicate effectively on complex engineering activities with the
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Dr.Putti Srinivasa Rao,Ph.D Hod Department of CSE

> "People worry that computers will get too smart and take over the world, but the real problem is that they're too stupid and they've already taken over the world."

Message from HOD

I feel privileged to head the Department of Computer Science and Engineering. The department has consistently maintained an exemplary academic record. The greatest asset of the department is its highly motivated and learned faculty.

The objective of the department is to prepare students for successful careers in industry, research and academics to meet the needs of growing technology.

"We are what our thoughts have made us. So take care about what you think. Always be a part of the solution, do not be the part of problem. Always try to update your knowledge else, you will be outdated. If you want success do all the things you are supposed to do, then you need not search for shortcuts".

Technology Trends in 2021

Bioinformatics

A fascinating application of big data, bioinformatics, or the use of programming and software development to build enormous datasets of biological information for research purposes, carries enormous potential. Linking big pharma companies with software companies, bioinformatics is growing in demand. Professionals in bioinformatics examine, preserve, and analyze biological data.

Bioinformatics is a multidisciplinary discipline that combines computer science and biology to hunt for patterns in genetic material such as DNA, genes, RNA, and protein sequences. Bioinformatics professionals create the methodologies and software tools that enable these activities to be completed.

Bioinformatics computer science technologies serve the medical and pharmaceutical, industrial, environmental/government, and information technology industries considerably. Bioinformatics aids doctors in preventative and precision medicine by allowing them to detect ailments early and treat them more effectively.



Mr. S. Satish Kumar, M.Tech

Assistant Professor, Dept. of CSE

Faculty Accomplishments

Research paper - related activity done:

- Dr. G. Arun Sampaul Thomas published a paper on the topic "Fast and Correspondence Capable Computation for Scattered Support Vector Machine" held at The International journal of analytical and experimental modal analysis, Volume XIII Page No: 290 ISSN NO:0886-9367 in September 2021.
- Dr. Niraj Upadhayaya, published a paper on the topic "An Energy Efficient And Deadline Constrained Heuristic Algorithm For Dynamic Offloading Of Tasks In Mobile Cloud Computing Environment" held at Webology, Printed in SCOPUS Journal, Volume 18,4302, 1735-188X in November 2021.
- Mr.A.Ramesh Babu Published a paper on the topic "An Energy Efficient And Deadline Constrained Heuristic Algorithm For Dynamic Offloading Of Tasks In Mobile Cloud Computing Environment" held at Webology, Printed in SCOPUS Journal ,Volume 18,4302 , 1735-188X in November 2021.
- Our CSE faculty Dr. G. Arun Sampaul Thomas presented a e paper entitled "Classifying Fake News Articles Using Natural Language Processing and Machine Learning" held at IJIRT, Volume 10,Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320- 6710 in July 2021.
- Our CSE faculty Dr. G. Arun Sampaul Thomas presented a e paper entitled "Visual Question Answering through Memory Augmented Networks" held at IJIRSET, Volume 10,Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320- 6710 in July 2021.
- Our CSE faculty Ms.G.Soujanya, presented a paper entitled "Time Series Analysis and Prediction of Covid19 Using Sarima Model" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE faculty Mr.M. Raj Kumar, presented a paper entitled "3D Game Development Using Unity Engine" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE faculty Dr.R.Vijayanand Presented a paper entitled "Decentralized Intrusion Prevention (DIP) Against Co-ordinated Cyber Attacks On Distribution Automation Systems" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE faculty Mr.M.Raj Kumar, presented a paper entitled "Shortest Path Computation Based on Live Traffic Circumstances" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.

(Conference / Patent / Paper / Book Publication Etc.,)

Patents

• Dr.Niraj Upadhayaya filed a patent on the topic "Intelligent System & Method For Recognizing Fake Speech Using Artificial Intelligence & Block Chain Technology" dated on 25-08-2021.

Publications/Conferences

- Dr.Niraj Upadhayaya,has Published A Paper "Novel Hybrid Artificial Intelligence-Based Algorithm To Determine The Effects Of Air Pollution On Human Electroencephalogram" In the Environment Protection And Ecology journal, Volume: 22Issue: 51825- dated 1st Nov 2021.
- Dr. P. Srinivasa Rao,has Published A Paper "Event Management App Using Flutter" In the Journal Of IJSREM, Volume: 05 Issue: 07 | July - 2021 ISSN: 2582-3930- Dated 1st July 2021.
- Dr.D.Sasikala,has Published A Paper "Detection of Epileptic Seizure using EEG and Machine Learning Algorithms" In the Journal Of IJSREM, Vol no. 10, Issue no. 7, pg nos.8818-8823dated 1st July 2021.
- Dr.G.Arun Sampaul Thomas has Published A Paper "Fast And Correspondence Capable Computation For Scattered SVM " In the Journal Of IJSREM, Volume: XIII, Issue: IX, ISSN: 0886-9367.- dated September 2021.
- Mrs.Shaik Asha, has Published a Paper entitled "Development of Data Quality Federation for Adaptive Product Search Engine Using Big Data and Fuzzy Logic Algorithms" in the Journal Revista Geintec-Gestao Inovacao E Technologies' ISSN: 2237-0722 Vol. 11 No. 3 in August 2021.

FDP (One Week / 2 or 3 Day)

- Dr. Niraj Upadhayaya, has Participated in the Continuing education programme on"**Design Thinking and Innovation**" held from 12-06-2021 to 27-11-2021.
- Dr.Putti Srinivasarao, has Participated in the AICTE FDP on "Skill Development and Rural Technology Innovation" organized by NITTR, Chandigarh from 26-07-2021 to 30-07-2021.
- Mr.M.Raj Kumar, has attended 6 days Online Faculty Development Program on "**Multi Technology**" by BVRIT College for women Hyderabad from 28-06-2021 to 03-07-2021.
- Mrs.Shaik Asha, has attended 6 days Online Faculty Development Program on "Multi Technology" by BVRIT College for Women Hyderabad from 28-06-2021 to 03-07-2021.

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Seminars/Workshops/FDPS

1.Workshop

The Workshop Programme on "LIFE SKILLS" held from 04th October 2021 to 09th October 2021.









Life Skills Programme

2.Seminar:



Seminar on Digital Piracy

Seminars/Workshops/FDPS

3.Guest Lecture

The Department of CSE conducted an online Guest Lecture on the topic "Android Application Development" organized by ACM chapter & CODE HUB Club on 13/08/2021 by Mr.L.Raghu Kumar, M.Tech ,Assistant Professor (CSE Dept.), KG Reddy College of Engineering & Technology.



Guest Lecture on"Android Application Devolopment" Conducted on 13-08-2021.

4.Workshop

The Department of CSE conducted an online 2 Days Workshop on the topic "Python Programming" organized by ACM chapter & CODE HUB Club from 24/09/2021 to 25/09/2021 by Dr.B.Vijay Kumar, M.Tech ,Ph.D.



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"Books allow you to fully explore a topic and immerse yourself in a deeper way than most media today"

Faculty Accomplishments

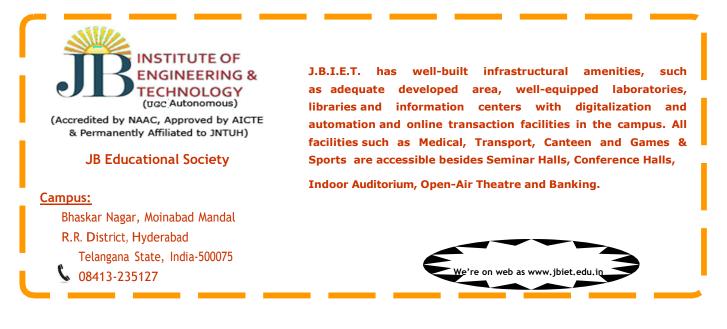
- Our CSE faculty Dr. G. Arun Sampaul Thomas presented a e paper entitled "Classifying Fake News Articles Using Natural Language Processing and Machine Learning" held at IJIRT, Volume 10,Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320- 6710 in July 2021.
- Our CSE faculty Dr. G. Arun Sampaul Thomas presented a e paper entitled "Visual Question Answering through Memory Augmented Networks" held at IJIRSET, Volume 10,Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE faculty G.Soujanya, presented a paper entitled "Time Series Analysis and Prediction of Covid19 Using Sarima Model" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE faculty M. Manoj Kumar, presented a paper entitled "3D Game Development Using Unity Engine" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE faculty Dr. R.Vijayanand Presented a paper entitled "Decentralized Intrusion Prevention (DIP) Against Co-ordinated Cyber Attacks On Distribution Automation Systems" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Mr.P.Prem Kumar, presented a paper entitled "Leaf Disease Detection Using Machine Learning" held at IJSREM, Volume: 05 Issue: 07 ISSN: 2582-3930 in July 2021.
- Our CSE faculty M. Raj Kumar, presented a paper entitled "Shortest Path Computation Based on Live Traffic Circumstances" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Mr.NeelamThirumalarao, has Participated in the Online FDP on **"Block chain and IOT"** Organized by Vasavi college of Engineering Hyderabad from 12/7/21 to 22/7/21.
- Mr.M. Raj Kumar, has attended 6 days Online Faculty Development Program on "Multi Technology" by BVRIT Hyderabad College of Engineering for Women from 28-06-2021 to 03-07-2021.
- Mrs.Shaik Asha, has attended 6 days Online Faculty Development Program on "Multi Technology" by BVRIT Hyderabad College of Engineering for Women from 28-06-2021 to 03-07-2021.

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Student Triumphs

- Our CSE Students T.N.Nithish Kumar,K.Paramesh ,K.V.Gopi, P.Niranjan presented a e paper entitled "Classifying Fake News Articles Using Natural Language Processing and Machine Learning" held at IJIRT, Volume 10,Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE Students N.S.S.D.Bhargav ,R.Snehith ,T.Durga Prasad ,V.Ganesh presented a e paper entitled "Visual Question Answering through Memory Augmented Networks" held at IJIRSET, Volume 10,Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320- 6710 in July 2021.
- Our CSE Students T.Bala Sai Kumar, L.Uday Kiran ,A.Adharsh ,S.Jaya Sayee Teja, presented a paper entitled **"Time Series Analysis and Prediction of Covid19 Using Sarima Model"** held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p- ISSN: 2320-6710 in July 2021.
- Our CSE Students M.Shekar Reddy, G. Ranjith, J. Manoj Yadav, A. Anusha, presented a paper entitled **"3D Game Development Using Unity Engine"** held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p-ISSN: 2320-6710 in July 2021.
- Our CSE Students B. Pravallika, B. Bhargavi, N. Eshwitha Ritika KalyaniPresented a paper entitled "Decentralized Intrusion Prevention (DIP) Against Co-ordinated Cyber Attacks On Distribution Automation Systems" held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753, p-ISSN: 2320-6710 in July 2021.
- E. Karthik Reddy,L. Rohith,T.Sharath Kumar, V. Shiva Kumar, presented a paper entitled "Leaf Disease Detection Using Machine Learning" held at IJSREM, Volume: 05 Issue: 07 ISSN: 2582-3930 in July 2021.
- Our CSE Students, A.Sreshta Reddy, B.Suharsha,K.Ruthwika,K.Akhila presented a paper entitled **"Shortest Path Computation Based on Live Traffic Circumstances"** held at IJIRSET, Volume 10, Issue 7 e-ISSN: 2319-8753.
- Our CSE Students Ch.Anuritha, K.Sandhya Rani ,R.Radhika , S.Aishwarya , Published e-paper entitled "Character Text Generation Using Machine Learning", held at IJIRCCE , Volume 9 Issue 6 | e-ISSN: 2320-9801, p- ISSN: 2320-9798 in June 2021.
- Our CSE Students G. Nikhila ,A.Prasanna, Manideep, Published e-paper entitled "Creating an autonomous agent using machine learning" held at conference IJIRCCE ,Volume9 Issue 6 | ISSN: 2320-9801, p- ISSN: 2320-9798, in June 2021.
- The Students of CSE B.Sainath reddy,Bodapati Charan Sai,Komuraju Shiva ,Published e-paper entitled "Identification and Classification of Drones Using KNN" held at IJIRCCE,Volume 9,Issue 6 |e-ISSN: 2320-9801, p- ISSN: 2320-9798, in June 2021.

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Network Detection and Response Solutions

Networks are the foundation of today's connected world, making them a prime target of cyber attackers looking to cause disruption and a key source of data for threat detection and analysis. IBM Security QRadar Network Detection and Response (NDR) helps your security teams by analyzing network activity in real time. It combines depth and breadth of visibility with high-quality data and analytics to fuel actionable insights and response.

Benefits of NDS:

1.Eliminate blind spots: Get comprehensive, real-time visibility for improved network detection and response by combining event and flow data across on-perm and cloud environments.

2.Detect threats faster: Use machine-learning based analytics to help determine a baseline of normal network activity to identify suspicious behaviour quickly before attackers cause disruption.

3.Use existing investments: Enable broad threat visibility, detection and response in a unified solution that helps eliminate pivot between tools while optimizing and scaling security investments.



Mrs.Shaik Asha, M.Tech

Assistant Professor, CSE Dept.