



JYOTHISHMATHI
GROUP OF INSTITUTIONS
ENGINEERING | PHARMACY | MBA | B.Ed
AUTONOMOUS
Engineering College



NEURANEX

Jan-June 2024 (Vol-II)

Department of Computer Science and Engineering(AI&ML)

Jyothishmathi Institute of Technology & Science started its academic journey in 1997 with a quest to impart technical education to the rural youth. The commitment towards providing the highest quality of education through innovative teaching methods to its students has always brought laurels. Jyothishmathi Institute of Technology and Science (autonomous), Karimnagar, has signed a Memorandum of Understanding (MoU) with T-Hub, Talent Farm, TASK, Edunet Foundation, and SAP - Centre of Excellence in Hyderabad.

MAGAZINE OVERVIEW

Landmark Achievements	1
Training and Placements	2
Guest lectures	6
Innofest 2024	8
JITS UTSAV 2024	
Faculty Achievements	10
Student Internships	11
Research Publications	12
Beyond classroom	13
Horizons	14
Technical content	15

Program Educational Objectives (PEOs)

Fundamental Knowledge: Graduates will build a strong foundation in mathematics, computer science, and artificial intelligence principles to analyze, model, and solve complex problems in AI and Machine Learning.

Core Competencies: Graduates will gain expertise in core areas of Artificial Intelligence and Machine Learning, enabling them to design and implement intelligent systems for real-world applications.

Breadth: Graduates will acquire interdisciplinary knowledge to integrate AI/ML solutions across various domains such as healthcare, finance, robotics, and smart environments, adapting to emerging technologies and global needs.

Professionalism: Graduates will demonstrate ethical behavior, teamwork, leadership, and communication skills, contributing effectively in collaborative and multicultural work environments.

Learning Environment: Graduates will pursue lifelong learning through higher education, industry certifications, and innovation-driven projects in a dynamic and inclusive learning environment that nurtures creativity and entrepreneurial thinking.

INSTITUTE VISION

To be a premier engineering institution striving continuously to deliver quality technical education, nurturing competent engineers capable of achieving global excellence with societal consciousness

INSTITUTE MISSION

- To embrace emerging teaching techniques that equip students to face technical challenges with confidence and competence.
- To cultivate a culture of innovative thinking that inspires students to develop creative solutions to real-world problems.
- To instil leadership qualities and foster an entrepreneurial mindset in students, enabling them to contribute positively to society.

DEPARTMENT VISION

To emerge as a center of excellence in Artificial Intelligence and Machine Learning, offering quality technical education that empowers future innovators to achieve global excellence and drive intelligent solutions for societal advancement

DEPARTMENT MISSION

- To provide quality education in AI and ML, equipping students with advanced computational skills to excel in a globally competitive environment.
- To foster a spirit of innovation and critical thinking, enabling students to develop practical solutions that benefit society.
- To promote strong collaborations with industry and academia, nurturing an entrepreneurial mindset and continuous professional growth in the field of AI and ML.

LANDMARK ACHIEVEMENTS



Jyothishmathi Institute of Technology and Sciences (JITS), Karimnagar, has made significant strides by signing a Memorandum of Understanding with Louisiana Tech University (LTU), USA. This academic partnership aims to enhance collaboration in education, research, innovation, and admissions to MS programs. Louisiana Tech University, established in 1894 and located in Ruston, Louisiana, USA, is a distinguished public research university renowned for its engineering, science, and business programs. Accredited by ABET, LTU ensures high quality and rigor in its engineering education, recognized nationally and internationally. JITS, founded in 1997, is Telangana's first Autonomous Engineering College in Karimnagar, accredited by NBA and NAAC with A Grade. As a pioneer in academic trends, JITS becomes the first institution in its region to partner with a US university for the benefit of its students.

The MoU, signed by Mr. James Henderson, President of Louisiana Tech University, and Mr. Juvvadi Sagar Rao, Chairman of JITS, solidifies their commitment to fostering academic excellence. Key initiatives under this agreement include:

1. Master's Program (M.S) Admissions: Facilitating JITS students' admission to Graduate Certificate and Master's programs at LTU with guidance from LTU faculty advisors and International Student Office staff.

2. Financial Assistance (Scholarships): LTU will endeavor to provide financial support such as graduate assistantships to JITS students.

3. Faculty Exchange: Promoting exchanges to strengthen collaboration, potentially establishing Centers of Excellence in specific fields.

4. Professional Development: Organizing workshops, seminars, and training programs to enhance the skills and knowledge of students and faculty from both institutions.

This partnership marks a significant milestone in advancing educational opportunities and research collaborations between JITS and LTU, benefiting students and faculty alike.

TRAINING AND PLACEMENTS

R&D (RESEARCH & DEVELOPMENT)

Dr. V. Neelima's research on **Advanced cluster-based routing protocols for wireless sensor networks** was published in the Journal of Technology, referencing ISO:7021:2008 and ISO No:10123407 with Paper ID JOT:4409. Meanwhile (16/2024, dated 19-4-2024) details enhancing network security through blockchain technology (application number 202441030409), focusing on improving auditability and traceability within network security frameworks.

OFFLINE TRAINING & CERTIFICATION PROGRAM ON POWER BI

The Department of Computer Science and Engineering(CSE(AI&ML)) at Jyothishmathi Institute of Technology and Science hosted an **Offline Training and Certification Program on Data Analytics (POWER BI)** from February 9, 2024, to March 4, 2024. This program was conducted at the Computer Center from 09:30 AM to 04:15 PM daily. The training program featured expert facilitators A. Mallikarjun, Azure Data Engineering specialist, and Shourav, Data Analyst. It was organized in collaboration with ICT Academy and supported by Paypal, under the women empowerment scheme by ICT Academy. The primary objective of the program was to equip female students with foundational skills in **data visualization and analysis using Microsoft Power BI**.



Participants engaged enthusiastically in the comprehensive training sessions, covering essential aspects of POWER BI, practical applications in data analytics, and hands-on exercises to reinforce learning. The program concluded successfully with all participants receiving certificates, acknowledging their commitment and achievement. This initiative not only aimed to enhance technical skills but also fostered confidence and empowerment among the female students, preparing them for future opportunities in the field of data analytics. The collaboration between the academic institution, industry experts, and supporting organizations underscored a commitment to advancing gender diversity and skill development in emerging technologies.

TRAINING AND PLACEMENTS

TRAINING PROGRAMME ON IBM CLOUD AND PYTHON PROGRAMMING

Event Name: A Five Day *TRAINING PROGRAMME on IBM CLOUD AND PYTHON PROGRAMMING*

Date: 10th June 2024 to 14th June 2024

Organizers: JYOTHISHMATHI INSTITUTE OF TECHNOLOGY AND SCIENCE

Accreditations: Accredited by NBA (National Board of Accreditation) and NAAC (National Assessment and Accreditation Council)

Support: Proudly supported by SAP (Systems, Applications & Products in Data Processing) and organized in association with TASK (Telangana Academy for Skill and Knowledge) and code unnati foundation.

Trainers: *Mr. N. Laxman and Mr. S. Harikrishna*



Training Outcomes:

- Build and publish a chatbot in IBM Cloud.
- Build data analysis on CSV data using Python programming.
- Achieve Global Badges in a Weldy account to showcase on social media platforms.

Develop practical Skills:

- Gain practical knowledge in Python programming for preparing Data Analysis.
- Publish chatbots in IBM Cloud.



Mr Laxman interacting with the students and explaining about the objective outline of a systematic process encompassing data reading.



Students learning Introduction to IBM cloud Cloud services, Models, Methods



Students learning data pre-processing, this entails data Introduction to IBM CLOUD Cloud services, Models, Methods



Mr S Hari Krishna interacting with the students and explaining about the objective of Data analysis on CSV data in python programming.

TRAINING AND PLACEMENTS

ONE WEEK TRAINING PROGRAM ON “CAREER GUIDANCE & PROGRAM SKILL DEVELOPMENT”

EventName: One week Training Program on “CAREER GUIDANCE &

PROGRAM SKILL DEVELOPMENT” (PYTHON, JAVA) in association with Code-Trantra and Edunut-foundation.

Dates: June 24, 2024, to June 29, 2024 **Trainers:** - P. Harikrishna Reddy (Bapatla) - V. Phanidra (Guntur) - Nagaraju (Vijayawada) - Devadas (Guntur) - S. Durga Prasad (Vijayawada) - G. Kiran (Guntur) - Santhosh (Karminagar) **Organized by:** Department of Computer Science and Engineering, Jyothishmathi Institute of Technology and Science.

Venue: Department classrooms: DG-2, DG-005, DG-220, DG-221, DG-006, DG-3, DG-007

Convener: Dr. V.Nellima, Professor and Head - CSE (AI&ML). **Event Coordinator:** Dr. G. Srilatha, Associate Professor. **Number of Participants:** 186



This event helped the students to:

- Understand the objective outline of a systematic process encompassing data reading, model training, prediction generation, and visualization through plots.
- Learn how to initiate the process by employing the Pandas library to ingest data from the CSV file, ensuring it is structured and amenable for analysis.
- Understand the steps to ensure the integrity and quality of the data, laying a solid foundation for subsequent analysis. At end of the session, students were able to create their projects and plot the graphs in Python programming using Google Co-Labs

Event Overview: The One Week Training Program on “CAREER GUIDANCE & PROGRAM SKILL DEVELOPMENT” was conducted from June 24 to June 29, 2024, at Jyothishmathi Institute of Technology and Science. The program was organized by the Department of Computer Science and Engineering, in collaboration with **Code- Trantra** and Edunut-foundation, aiming to equip students with essential programming skills in Python and Java, while providing comprehensive career guidance. The event featured an esteemed panel of trainers including **P. Harikrishna Reddy, V. Phanidra, Nagaraju, Devadas, S. Durga Prasad, G. Kiran, and Santhosh**, who imparted their expertise and insights throughout the sessions. The training sessions were held across various department classrooms, facilitating interactive learning and practical skill development. Under the able leadership of **Dr. V. Neelima** as the Convener and **Dr. P.Pranitha** as the Event Coordinator, the program saw active participation from **186 enthusiastic students** from the Department of CSE(AI&ML). It was a week filled with learning, hands-on exercises, and valuable career advice, empowering participants to excel in their future endeavors in the field of technology and programming.



TRAINING AND PLACEMENTS

"A Seminar on Awareness of Higher Education in Louisiana Tech University, USA"

- Date: March 20, 2024
- Number of Participants: 215

The seminar titled "Awareness of Higher Education in Louisiana Tech University, USA" took place on March 20, 2024. Dr. K. S. Rao, the Principal of Jyothishmathi Institute of Technology and Science in Karimnagar, addressed the event. A total of 215 participants attended this informative session.



Training programs:

A five-day training program on "**Python Programming and OOPs Concepts**" from January 22, 2024, to January 27, 2024, was conducted. The sessions were led by Mr. Manikanta Akula, a Technical Trainer from Code Tantra, Hyderabad. This intensive training program aims to provide participants with a solid foundation in Python programming along with a comprehensive understanding of Object-Oriented Programming (OOP) principles.



Faculty Development program:

"One-week Faculty Development Program on Python programming" was held from January 22, 2024, to January 27, 2024. The program will be led by Mr. Steven Singh Boda, a Technical Trainer from Code Tantra, Hyderabad. This program is designed to enhance the Python programming skills of faculty members, providing them with the latest knowledge and teaching methodologies to effectively educate their students in this essential programming language.



GUEST LECTURES

GUEST LECTURE

The Department of **CSE(AI&ML)** has organized a series of events for the academic year 2023-24, catering to various aspects of modern computing and professional development.

The first event, scheduled from February 9, 2024, to March 4, 2024, is an **Offline Training and Certification Program on Data Analytics using POWER BI**. Sri A. Mallikarjun, an Azure Data Engineering expert, along with Shourav, a Data Analyst had conducted this and 115 attendees had participated.

On March 2, 2024, a Power Seminar on "**Applications of AI**" is set to take place, with 108 attendees from II CSM. The seminar was led by Mr. Madhu Vadlamani, the Practice Manager at **Miracle Software Solutions, Inc.** An Alumni Talk on "**Application Development in IT Engineering**" was scheduled for January 1, 2024.



Mr.Dudipala Sharath explaining various opportunities and scope in the field of IT sector



From January 22 to January 27, 2024, there were concurrent Five-Day **Training Programs on Python Programming and OOPs Concepts**. These programs each hosted 175 attendees from III CSE and III CSM respectively. The sessions were facilitated by Manikanta Akula, a Technical Trainer from CODETANTRA, and D. Nikhitha, another Technical Trainer from **CODETANTRA**.

Additionally, on January 1, 2024, there was a Guest Lecture on "**Career Counselling**" attended by 215 participants from IV CSE & CSM (AIML) and II & III CSE. The lecture featured **Mr. Dudipala Sharath**, the Senior Delivery Head and HoD for ADM at Colruyt, Hyderabad, alongside **Dr. Dandu Shivaramaraju**, a Professor of Mechanical Engineering.

These events were designed to enhance the **skills** and **knowledge** of the students, preparing them for advanced roles in the industry.

A Technical seminar on "**DEVOPS**" organized by the Department of CSE(AI&ML) in collaboration with **ICT Academy**. The seminar, which took place on April 20, 2024, was led by **Dhanunjaya Vangaveti**, an Engineering Manager from **HoneyWell**.

GUEST LECTURES

“DevOps” Technical Power Seminar:

Date: April 20, 2024 (Saturday)

Organized by: Department of Computer Science and Engineering (AI&ML) in association with ICT Academy

Venue: AC Seminar Hall

Resource Person: Dhanunjaya Vangaveti (Engineering Manager at Honeywell)

Participants: 190



Seminar Title: Applications of AI

Date: March 2, 2024 (Saturday)

Organizer: Department of Computer Science and Engineering (AI & ML), Jyothishmathi Institute of Technology and Science (JITS)

Venue: Seminar Hall, Department of CSE (AI & ML), JITS

Resource Person: **Mr. Madhu Vadlamani**, Practice Manager, Miracle Software Solutions, Inc.

Audience: II-year students from the CSE (AI & ML) program

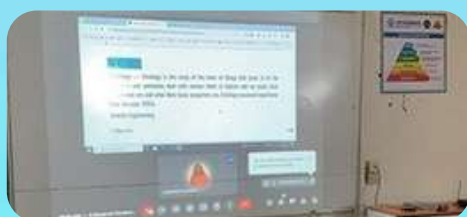
Coordinator: G. Sindhusa, Assistant Professor

Summary: The **“Applications of AI”** seminar, held at JITS, provided valuable insights into the diverse applications of artificial intelligence (AI) across various domains. Mr. Madhu Vadlamani, Practice Manager at Miracle Software Solutions, Inc., discussed how AI technologies, including machine learning, natural language processing, computer vision, and robotics, are transforming industries. The seminar covered specific use cases, challenges, and future prospects of AI applications, emphasizing their profound impact on society and the economy.



Webinar on Fundamentals of Artificial Intelligence

The Department of Computer Science and Engineering at Jyothishmathi Institute of Technology and Science organized an enlightening guest lecture on the “Fundamentals of Artificial Intelligence.” The lecture series, held on January 1, 2024, to January 3, 2024, attracted a participation of 215 eager learners.



Dr. D. Laxmi, a seasoned Senior Associate Professor from the School of Computer Science and Engineering at VIT Bhopal University, served as the resource person. Dr. Laxmi covered a wide range of topics, including an **Introduction to AI, challenges faced in AI research, reasoning and ontology, practical applications of AI, various AI techniques, and the intricate relationship between intelligent agents and their environments.** Her expertise enriched the understanding of AI principles among the participants, leaving a lasting impact.

INNOFEST 2024

INNOFEST 2024 EVENTS

Ø A **Poster presentations** succinctly showcases research findings or project outcomes through a visually engaging format. It combines concise text, graphics, and images to communicate key points effectively, fostering interactive discussions and knowledge exchange.



Ø A **Project expo** provides a platform for innovators to showcase their projects, spanning various disciplines such as technology, science, engineering, and design. Attendees can explore diverse projects, interact with creators, and gain insights into emerging trends and solutions shaping the future.

Ø A **Crossword puzzle** is a popular word game that challenges players to fill in a grid with words or phrases based on clues. It combines vocabulary, logic, and problem-solving skills, offering entertainment and mental stimulation for enthusiasts of all ages. The crossword event, **organized by** faculty members from various departments, featured K. Vanitha (CSE), K. Bhagya (CIVIL), R. Ramesh (EEE), B. Raju (EEE), and E. Chandana (Mech) as key organizers. The winners of the event were T. Rohith, V. Sridhar, and M. Sushreeth.



Ø A **CODE-O-QUICK** event was a dynamic coding competition designed to test participants' programming skills. **Organized by** Mr. P. Bala Kishan, Associate Professor, the event provided a challenging yet supportive environment. It aimed to foster innovation, critical thinking, and collaboration among students, encouraging them to apply their theoretical knowledge in practical scenarios.

Ø **TREASURE HUNT event** was a thrilling competition **organized by** faculty members from various departments, including K. Geetha (CSE(AI&ML)), V. Rathan Kumar (CIVIL), R. Sridhar (MECH), G. Ramesh (EEE), and S. Subramaniam (ECE). The event saw enthusiastic participation from students, with Faida Muskan emerging as the **winner**, demonstrating exceptional skills in solving the challenges and locating the treasure. Ø A **Sports fiesta** is a vibrant celebration of athleticism and camaraderie, featuring a variety of sporting events and activities for participants and spectators alike. From friendly competitions to exhilarating matches, it fosters a sense of community spirit while promoting fitness and healthy lifestyles among participants of all ages and skill levels.



INNOFEST 2024 & JITS UTSAV 2024

Ø A **Coding hackathon** is an intensive event where programmers collaborate to solve specific challenges or create innovative projects within a limited timeframe, often ranging from a few hours to a few days. Participants bring their coding skills and creativity to the table, working under pressure to develop solutions, compete for prizes, and network with peers in the tech community.



Ø A **Paper presentation** involves the delivery of research findings, theories, or ideas to an audience in a formal setting, typically at academic conferences or seminars. Presenters share their work through structured oral presentations, supported by visual aids such as slides or handouts, fostering scholarly discourse and knowledge dissemination. This event, **coordinated by** D. Kalpana (CSE (AI&ML)), K. Kalyan (CSE), Dr. T. Sammaiah (ECE), and B. Sampath (EEE). The **winners** of the event were K. Srinidhi and D. Pranavi, whose poster stood out for its clarity, design, and innovative content.

JITS UTSAV 2024

A **Photography event** is a gathering where enthusiasts and professionals alike come together to celebrate the art and craft of photography. Through workshops, exhibitions, and photo walks, attendees have the opportunity to learn, share, and showcase their work, fostering creativity, inspiration, and connection within the photography community.



A **Classical dance event** is a mesmerizing display of grace, tradition, and cultural heritage, featuring performances steeped in centuries-old traditions. Dancers showcase their mastery of intricate movements, storytelling, and rhythm, captivating audiences with the timeless beauty and elegance of classical dance forms such as Bharatanatyam, Kathak, or Ballet.

A **Singing competition event** is a thrilling showcase of vocal talent and musical prowess, where contestants vie for recognition and prizes through captivating performances. From soulful ballads to powerful anthems, singers display their range, technique, and stage presence, captivating audiences and judges alike with their passion for music.



A **Rangoli event** is a vibrant celebration of creativity and tradition, where participants craft intricate and colorful designs on the ground using powdered colors, rice, or flower petals. These beautiful artworks, often inspired by folklore, nature, or religious motifs, adorn homes and public spaces during festivals, symbolizing prosperity, auspiciousness, and community spirit.

FACULTY ACHIEVEMENTS

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Let's acknowledge some Faculty achievements. " Dr. V. Neelima (Professor) obtained certification in "Industry 4.0: Internet of Things" through NPTEL. G. Pranavi (Assistant Professor) excelled in cloud computing, IoT, edge computing, and machine learning under NPTEL.

ALUMNI TALK SERIES

Career Guidance in Software Environment in MNCs

On January 10, 2024, a highly informative session titled "Career Guidance in Software Environment in MNCs" was conducted, featuring **Ms. Vemuganti Sirichandana (19761A0597)**, a Trainee Test Engineer at Colruyt, Hyderabad. The event aimed to provide aspiring software professionals with valuable insights and guidance on navigating and succeeding in the software environment of multinational corporations (MNCs).

Speaker Background:

Ms. Vemuganti Sirichandana, currently a Trainee Test Engineer at Colruyt, Hyderabad, shared her personal experiences and career journey, offering a real-world perspective on working in an MNC. With her firsthand knowledge and professional expertise, she highlighted the various aspects of the software industry, particularly focusing on the challenges and opportunities within MNCs.



Key Topics Discussed:

- ***Introduction to MNCs in the Software***
- ***Industry Career Pathways in Software***
- ***Engineering Navigating the Work***
- ***Environment Essential Skills for Success***
- ***Networking and Mentorship Challenges and Opportunities Workplace***
- ***Dynamics Career Progression and Advancement***

STUDENT INTERNSHIPS

Students are encouraged to undertake internships or industrial training at various industries during the summer break of their sixth semester, as approved by the HOD and Principal. The institute supports this initiative by granting permission for industry visits, enabling students to gain practical knowledge. The department facilitates these internships and industrial training programs, which last from one week up to a maximum of 20 days. These opportunities provide invaluable exposure to professional environments and industry practices, enhancing students' practical skills and preparing them for their future careers.

H.T.NO	NAME OF THE STUDENT	NAME OF THE COMPANY	START DATE	END DATE
21271A6652	THRISHA	Codsoft	4/15/2024	5/15/2024
21271A6650	Sushma Sriramula	Octanet	5/1/2024	1/6/2024
21271A66B4	Anjana Boga	Shripriiti Educational & IT Hub	5/15/2024	6/15/2024
21271A6604	Shaik Afnan	CseEdge	4/20/2024	5/20/2024
21271A6645	Palamakula Sravan	Cognifyz	5/1/2024	6/1/2024
21271A6637	Saiprasanna Samudrala	OCTANET	4/1/2024	6/1/2024
21271A6637	Saiprasanna Samudrala	OCTANET	4/1/2024	6/1/2024
21271A6604	Shaik Afnan	CseEdge	4/20/2024	5/20/2024

RESEARCH PUBLICATIONS

S.N.	Name of the Student & Semester	Name of the Publisher	Name of the Journal/ Conference, etc.	Volume No. & Issue No.
1	Konkata Mohan Reddy Sirumalle Anvitha Syed Fardeen Ahmed Farooqi Janke Ashwitha (IV-II)	IJRAR Publication	International Journal Of Research And Analytical Reviews	Volume 11, Issue 2, 2024, 2349-5138
2	Kunarapu Raju Sirigineni Ruchitha Srigadhi Savya Alladi Joseph (IV-II)	Drishtikon Prakashan	Heritage Research Journal	Volume 72, Issue 5, 2024, 0474-9030
3	Boddula Ambika Uppula Rohitha Mohammad Afthab (IV-II)	IJRAR Publication	International Journal Of Research And Analytical Reviews	Volume 11, Issue 2, 2024, 2349-5138
4	Kankanala Sathwik Reddy M Nithin Chandra Kanneboina Bhanuja (IV-II)	IJRAR Publication	International Journal Of Research And Analytical Reviews	Volume 11, Issue 2, 2024, 2349-5138
5	Kotte Srinitha Thangallapalli Shivani Bhukya Vijay Thupakula Vikas (IV-II)	IJNRD Publication	International Journal Of Novel Research And Development	Volume 9, Issue 5 2024, 2456-4184
6	Ankam Saikrishna Mende Srinath Kasturi Rohit Chigurla Manasa (IV-II)	IJRAR Publication	International Journal Of Research And Analytical Reviews	Volume 11, Issue 2, 2024, 2349-5138
7	Atla Praveen Kankanala Sri Chandana Mydam Anuhya Mule Vyshnavi (IV-II)	Drishtikon Prakashan	Heritage Research Journal	Volume 72, Issue 5, 2024, 0474-9030
8	Shafiya Samreen Thumma Samatha Yennam Shirisha Pothireddy Siddarth (IV-II)	Xi'an University of Architecture and Technology	Journal Of Xi'an University Of Architecture & Technology	Volume XVI, Issue 5, 2024, 1006-7930

BEYOND CLASSROOM HORIZONS

JITS college NSS volunteers donate blood for children with Thalassaemia:

A blood donation camp was organised on the occasion of World Blood Donors day by the NSS volunteers of Jyothishmathi Institute of Technology and Science (JITS) (Autonomous) on 14/06/2024 (Friday). During the camp, 51 units of blood were collected from the NSS volunteers including the girl students by the Prathima Institute of Medical Sciences (PIMS), Nagunoor, Karimnagar for the children who were patients of sickle cell and Thalassaemia. JITS Chairman Sri. J Sagar Rao lauded the commitment and service of the young NSS volunteers of the college for the cause of society. He appreciated the noble cause of volunteers to donate blood to save lives of patients suffering from Thalassaemia.



Yoga Day

JITS chairman J Sagar Rao, principal Dr KS Rao, **Yoga Teacher M Ramesh and meditation expert D Sudhakar**, faculty members and students practiced yoga and the meditation session. JITS Chairman Juvvadi Sagar Rao emphasized the importance of Yoga and advised all students and faculty to practice yoga everyday to keep healthy and fit. Mr KS Rao emphasized the importance of practicing yoga on daily for the improvement of both physical and mental health. He inspired the gathering to practice **yoga every day** in order to achieve balance of minds, body and soul.



Anti-Drug Awareness Programme Conducted at JITS

The Karimnagar rural police in association with the NSS wing of the Jyothishmathi Institute of Technology and Science (JITS) (Autonomous) organised an **anti-drug awareness programme** on the college premises on 24/06/2024 (Monday). Karimnagar Rural ACP P.Venkata Ramana, LMD Inspector R.Swamy, Women Police Station Inspector Srilatha, LMD SI Cheralu, MD Neuro Dr. Shiva Kumar, JITS Chairman J.Sagar Rao and Principal Dr.K S Rao, NSS Programme officer Dr.Pranitha and others were also present.



TECHNICAL CONTENT

Biotechnology: Engineering Life for a Better Future

Biotechnology is a field at the intersection of biology and technology, offering groundbreaking solutions in medicine, agriculture, and environmental sustainability. Genetic engineering allows scientists to develop crops that resist pests, while in medicine, gene editing tools like CRISPR have the potential to cure genetic diseases. Biotech innovations are also being used to create sustainable biofuels and biodegradable plastics, helping to reduce environmental impact. With rapid advancements, biotechnology raises ethical considerations, especially around genetic modification, but it remains a critical field for addressing some of the world's most pressing challenges.



Cloud Computing: Powering Digital Transformation



Cloud computing has become a backbone of digital transformation, allowing organizations to store, manage, and process vast amounts of data over the internet instead of local servers. Services like Amazon Web Services (AWS) and Microsoft Azure offer scalable, cost-effective solutions for businesses of all sizes. Cloud computing supports technologies like Big Data analytics, AI, and remote work platforms, enabling organizations to be more agile and collaborative. However, concerns about data privacy and vendor dependency highlight the need for careful cloud strategy planning. As companies increasingly rely on cloud services, mastering this technology will be crucial for future IT professionals.

Internet of Things (IoT): Connecting the World

The Internet of Things (IoT) is transforming everyday objects into connected devices, enabling them to collect, share, and analyze data. From smart homes that control lighting and temperature to wearable health monitors tracking vital signs, IoT technology is making life more convenient and efficient. Industries like agriculture are also benefiting from IoT, with sensors that monitor soil health and weather conditions to optimize crop yields. However, the vast amounts of data generated by IoT devices pose privacy and security challenges, as hackers increasingly target connected systems. As IoT continues to evolve, ensuring data safety and robust networks will be essential to harness its full potential.



ALUMNI TALKS & EDITOR'S NOTE

My time at college was a transformative journey, laying the foundation for both my professional and personal growth. The Computer Science Department (AI&ML) wasn't just a place of learning—it was a hub of innovation, collaboration, and exploration. The opportunities we had to work on real-world projects, participate in technical events, and engage in research were unparalleled. These experiences helped me develop not only technical expertise but also problem-solving and teamwork skills that have been invaluable in my career. What truly set the college apart was the support and guidance from our faculty. Their mentorship extended beyond academics, shaping us into confident, industry-ready professionals. The friendships and connections I made during those years continue to be a source of inspiration and support in my life.



It is with great pride that we present this edition of the Computer Science (AI&ML) Department Magazine. Each article, project highlight, and success story featured here is a testament to the hard work and passion of our students and faculty. As technology continues to reshape the world, this magazine serves as a platform to showcase the ideas and innovations that keep us at the forefront. Dive in and be inspired by the journey of our vibrant community. We also feature the incredible projects, hackathon victories, and internship experiences that showcase the talent and dedication of our department.

Sri Juvvadi Sagar Rao

Chairman

Sri Juvvadi Sumith Sai

Secretary & Correspondent

Dr. K. S. Rao

Principal

Dr. P. K. Vaishali

Dean (Academics & Audit)

Dr. V. Neelima

Head of the Department

CSE(AI&ML)

Best regards,

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Akshith Shanagonda, III B.Tech CSE (AI&ML)-A



17th NOV, 2021 - 17th NOV, 2022