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# RELINE Connecting EECE

HALF-YEARLY TECHNICAL E-MAGIZINE

DEPARTMENT OF ELECTRICAL, ELECTRONICS AND COMMUNICATION ENGINEERING

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GITAM SCHOOL OF TECHNOLOGY GITAM (DEEMED<sup>O</sup>TO BE UNIVERSITY) HYDERABAD

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### **About the Department**

### **Department Vision:**

Excel in Electronics and Communication Engineering education to meet global challenges

#### **Department Mission:**

1. Impart technical skills and value-based education to satisfy the industry's ever-increasing needs.

- 2. Train the students to solve engineering problems with innovative solutions.
- 3. Conduct research continuously with industry and premier R & D organizations.
- 4. Inculcate professional and ethical values in engineering practices.

### **About the Department:**

The **Department of Electronics and Communication Engineering** (ECE) was established in the academic year **2009** and has since grown into a distinguished hub for education and research. The Department offers a comprehensive range of academic programs, including **B**. **Tech, M. Tech, and Ph.D.**, catering to students aspiring for electronics and communication engineering excellence.

The Department boasts **40 highly qualified faculty members**. Their expertise and dedication are instrumental in fostering a culture of innovation and academic rigor. The Department's emphasis on **research and development** is one of its core strengths, with a sharp focus on cutting-edge areas such as **VLSI Design**, **Embedded Systems**, **Power Systems**, **Power Electronics**, **Control Systems**, **Wireless Communications**, **Internet of Things (IoT)**, **Artificial Intelligence (AI)**, and **Machine Learning (ML)**.

The faculty members are actively engaged in high-impact research and have collectively published more than **500 research papers** in reputed journals and conferences, contributing significantly to the advancement of technology. This research output enhances the Department's reputation and creates opportunities for collaborative projects with industry and academia.

### About the Magzine

"**WIRELINE**- *Connecting EECE*" is the E-Magazine of the Department of Electrical, Electronics, and Communication Engineering at the School of Technology, GITAM University, Hyderabad Campus. It provides a great opportunity for the students and faculty of the Department to share their knowledge, literature, talents, achievements, motivations, and news related to technology on one common platform.

This magazine is an important means for students to express their inner feelings. It also helps them in developing positive & desirable qualities. This magazine contains ten segments: **Technical Events, Workshops, Guest Lectures, Seminar, Faculty Development Programmes, Achievements, Delegates Visiting, Cultural/Sports, Industrial Visits, and Placements.** 

This magazine can't cover everything. It's selective and shows our view of what Department of EECE in GITAM University Hyderabad Campus. If we've made any mistakes or left anything out, we apologize. We have acted in good faith at all times. We hope that you enjoy the reading.

-Editorial Committee

### **Pro-Vice Chancellor's Message**



**Prof. D. Sambasiva Rao,** Ph.D. Pro Vice-Chancellor, GITAM University, Hyderabad Campus

Dear Readers,

The Department of Electrical, Electronics, and Communication Engineering's Technical E-Magazine "WIRELINE" is a commendable initiative. This effort underscores the department's dedication to fostering technical expertise and skill development among students, equipping them to meet the evolving demands of industry and academia.

This E-Magazine offers a platform for students to share innovative ideas, and collaborate on projects beyond conventional classroom learning. It promotes creativity, technical proficiency, and critical thinking while preparing students for the challenges of a rapidly advancing technological world.

Congratulations to the department for this forward-looking initiative and to the editorial team and faculty members for their exceptional efforts in bringing this vision to reality. Their meticulous planning ensures the E-Magazine will serve as a dynamic forum for intellectual exchange and professional growth, encouraging students to articulate complex technical ideas effectively.

This venture promises to be a hallmark of the department's achievements, inspiring further innovation and excellence. I wish the department every success with this endeavor and am confident it will continue to motivate students and faculty to excel and contribute meaningfully to the advancement of their field.

### **Director's Message**



#### **Prof. Rama Sastry Vedala** Director – GITAM School of Technology, Hyderabad & Dean – Core Engineering, GITAM

Dear Readers,

My heartfelt congratulations to the Department of Electrical, Electronics and Communication Engineering, on the release of the Inaugural issue of the Technical E-Magazine "WIRELINE". This initiative provides a dynamic platform for students and faculty to collaborate, share ideas, and showcase their talents, for holistic development.

In today's world, education transcends the acquisition of knowledge, encompassing skill development, character building, and enhancing the employability of students. With the strong GITAM culture as our foundation, we are well-positioned to achieve these educational objectives and contribute to building a new Aatmanirbhar Bharat.

The rapidly changing global landscape compels us, as educators, to reflect and adapt our educational system to meet evolving challenges. I am confident, this E-Magazine will serve as a significant milestone, fostering creativity, innovation, and intellectual growth of students and Faculty. I am sure, each issue will not only mark our progress, but also ignite imaginations and bring aspirations to life.

I commend the editorial team for their dedication and hard work in realizing this vision. My best wishes to all faculty and students involved in this endeavour for continued success and a promising future ahead.

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### **TECHNICAL EVENTS**

### HAVANA 2024

The HAVANA Tech Fest 2024, a national-level inter-collegiate technical fest held at GITAM Hyderabad on the 22<sup>nd</sup> and 23<sup>rd</sup> of 2024, is a testament to the convergence of innovation, technology, and collaboration. Held under the esteemed presence of Chief Guest Smt. D Raja Rajeshwari – PGM of BSNL - Sangareddy, and distinguished guests of honor Mr. Ayush Goswami - Co-Founder & Director of Phoenix Global, Mr. Gangadhar Gude - Founder and CEO of AtAI Labs Pvt Ltd, and under the valuable patronage of Prof. Rama Sastry Vedala – Dean, core engineering, director of GST Hyd, Prof. T. Madhavi – HoD of EECE, Mr. M Naresh Kumar - Faculty Coordinator & Convenor of HAVANA, and this two-day extravaganza unfolded with a grand inauguration ceremony, setting the stage for an immersive journey.

HAVANA 2024 has conducted various Events such as;

- PROJECT EXPO
- ROBO RACE
- DRONE COMPETITION
- E-SPORTS
- ROBO SOCCER
- 24-HOURS HACKATHON
- QUIZ COMPETITION



#### **Project Expo: Showcasing Innovation and Talent**

The Havana 2024 Project Expo brought together teams from various states and colleges, creating a platform to display innovative skills across diverse domains. Students presented ground-breaking projects, demonstrating creativity, technical expertise, and problem-solving Abilities.



### **Robo Race: A Thrilling Display of Speed and Precision**

The Havana 2024 Robo Race witnessed enthusiastic participation from numerous each showcasing their meticulously teams, Designed robots. The event captivated audiences. As the bots navigated an allotted pathway, overcoming challenges with remarkable Agility and precision.



### **Drone Competition: A Showcase of Precision and Skill**

The Havana 2024 drone Competition brought together Talented students who demonstrated their innovative drone designs and piloting skills. Participants maneuvered their drones through a designated pathway, successfully navigating four critical Checkpoints before reaching the endpoint.

The competition's essence lay in speed and accuracy, with the drone completing the course in the shortest Time declared the winner. This exhilarating event underscored the participants' technical expertise and Creativity, leaving a lasting impression on the audience.



### E-Sports Tournament: A Thrilling 2-Day Gaming Extravaganza

The Havana 2024 E-Sports Tournament spanned an exciting two days featuring a series of competitive Gaming events. Students from diverse backgrounds came together to showcase their exceptional gaming skills, competing fiercely across various rounds to Emerge victorious.



#### **Robo Soccer: A Fusion of Robotics and Sportsmanship**

The Havana 2024 Robo Soccer event brought an exciting twist to the soccer field as students showcased their innovative bots designed to Compete in a thrilling match. Two bots faced off. in a dynamic contest, skilfully manoeuvring to Score goals and outwit their opponents.



### **24-Hour Hackathon: Innovating Under Pressure**

The Havana 2024 24-Hour Hackathon provided a platform for students to tackle real-world challenges With creativity and precision. Over an intense 24-hour period, participants worked tirelessly on diverse problem statements, developing innovative solutions through both software and hardware



#### **<u>Quiz Competition: A Battle of Wits</u>**

The Havana 2024 Quiz Competition was a thrilling The intellectual challenge that brought together sharp Minds from various institutions. Participants showcased their knowledge across diverse topics, Engaging in a battle of wits and quick thinking. The competition tested their ability to recall facts, Think critically and strategize under pressure, making it an exhilarating experience for both Contestants and the audience. This event celebrated the spirit of curiosity and learning, leaving a lasting Impression on all who attended.



showcase oratory skills and engage in thoughtprovoking. discussions. Participants passionately debated pressing topics, highlighting the power of effective communication and Critical thinking. This event celebrated diverse perspectives, leaving a lasting impact on all involved.

**DEPARTMENT OF ELECTRICAL, ELECTRONICS** 

**Debate: Voices of Reason and Persuasion** 

The Havana 2024 Debate Competition provided

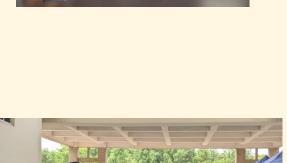
& COMMUNICATION ENGINEERING

### **Treasure Hunt: A Thrilling Adventure**

The Havana 2024 Treasure Hunt was an exciting Challenge where participants solved clues, navigated Tricky paths and uncover hidden treasures. Teams showcased problem-solving, strategy, and teamwork, making it a memorable and engaging highlight of the event.

### **Tech Talks: Inspiring Minds, Shaping Futures**

The Havana 2024 Tech Talks featured industry experts and innovators sharing insights on cuttingedge Technologies and emerging trends. These sessions inspired curiosity sparked innovation and fostered meaningful discussions, establishing the event's Hub for knowledge exchange and advancement.



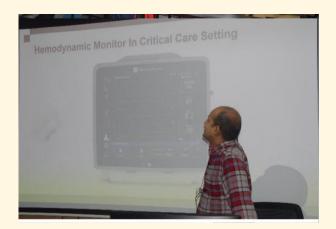


### IEEE

On the occasion of National Youth Day to commemorate the birth anniversary of Swami Vivekananda, the IEEE Student Chapter at GITAM University and the Department of EECE organized a guest lecture on Recent Advances in Signal Processing on January 12, 2024. The guest lecture was delivered by industrial expert Dr. Buddi Sai Kumar. Dr. Buddi obtained a master's and PhD from Arizona State University, USA. He works as a Distinguished Algorithm Engineer at Edwards Lifesciences, Irvine, California, USA.



Dr. Buddi explained different signal systems and applications in various fields. He explained practical insights into using signal processing in ventilators, pulse oximeters, and blood pressure meters. After that, he opened the floor for a truly remarkable and friction-full questionnaire, with students participating like an opportune light of wisdom to be taken in. Overall, it is not an exaggeration to say the event was a blooming success and generously contributed to the students and faculty.

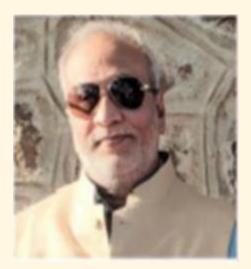


### <u>IETE</u>

IETE Hyderabad conducted a Guest Lecture on February 4, 2024, at 10:30 AM. The topic is "Exploring the domain of IOT: A comprehensive Overview." The speaker is Dr. B Indira, associate professor at Chaitanya Bharati Institute of Technology, Hyderabad.



IETE Hyderabad is conducting a guest lecture on March 24, 2024, at 10:30 AM. The topic is "Guest Lecture on Generative AI". The speaker is Dr Rajesh Kulkarni, MVSREC Hyderabad.



IETE Hyderabad is conducting a guest lecture on April 21, 2024, at 3:30 PM. The topic is "Guest lecture on Deep learning in image processing. " The speaker is Dr. Raj Kumar V, associate professor at Vidya Jyothi Institute of Technology, Hyderabad.

### <u>Workshop</u>

The new **B.** The tech program in Electronics Engineering (VLSI Design) from this academic year has taken significant steps to ensure the program's success and alignment with current industry trends. As part of these efforts, cutting-edge equipment related to VLSI design has been proposed to equip students with the tools and technologies necessary to excel in this specialized field.

To further enhance the faculty's expertise and prepare them to deliver high-quality education, a **Two-Day Hands-On Workshop on ''Understanding FPGAs and Their Capabilities''** was organized on **June 27-28, 2024**. The workshop focused on the fundamentals and advanced features of Field-Programmable Gate Arrays (FPGAs), which play a critical role in VLSI design and embedded systems.

Renowned resource persons from **CoreEL Technologies, Hyderabad**, led the sessions, providing in-depth training on FPGA architecture, design methodologies, and applications in real-world scenarios. The workshop also included practical sessions where participants gained hands-on experience in FPGA programming, design flow, and implementation of basic and advanced digital circuits.

This initiative empowered the faculty with technical know-how and aligned the teaching strategies with the program's objectives, ensuring students receive an education grounded in practical applications and industry relevance. Such proactive measures underscore the institution's commitment to fostering innovation and excellence in engineering education.





### **Guest Lectures**

Dr. P. SRIHARI, Associate Professor, NITK-Surathakal, delivered the guest lecture to the department faculty on "Research areas and funding agencies" on May 7, 2024.

Guest lecture on "**Unveiling Tomorrow Nexus: Interdisciplinary Research and HPC in the Gen AI Era**" on March 26, 2024. Resource person: Dr. Neelima Bayyapu, Assoc. Prof. MIT, Manipal.



### <u>Seminars</u>

G-Electra and The Institution of Engineers (India) Student Chapter has successfully organized a one-day seminar on 'India's Techade – Chips for Vikasit Bharat' at GITAM School of Technology (GST) in Hyderabad on March 13, 2024. The event was associated with the Department of Electrical, Electronics, and Communication Engineering (EECE) and Mechanical Engineering (ME).



The seminar was graced by Mr. Narendra Korlepara, Senior Director and Site Leader at Synopsys, Hyderabad, who delivered an insightful talk on 'Semiconductor Ecosystem; driven by Software and Chips.' Korlepara emphasized the bright future of the semiconductor industry, with an expected increase in the market value by 2030. He highlighted the importance of academia in producing talent for the industry and advised budding engineers to focus on core areas and develop strong communication skills.



### **Faculty Development Program**

Conducted a two-day faculty development program (FDP) on "**5G Technologies and Beyond**" during 08-09 Feb 2024. Resource persons from IITs and Industries such as DRDO have given expert talks related to the title



The Department of EECE conducted a two-day faculty development program (FDP) on "5G Technologies and Beyond "from 08-02-2024 to 09-02-2024. This FDP is coordinated by M. Raghupathy as coordinator and S. Haribabu as co-coordinator. Dr. T. Madhavi, HoD, EECE, was the convener, and Dr. S. Shyam Sunder Sagar, Deputy HoD co-convener, was the co-convener for this event.



### **Achievements**

### **NPTEL Courses**

Dr. Chandrasekhar Sirigiri completed the NPTEL certification course on "Deep Learning," A 12-week program carrying three academic credits. This prestigious online certification highlights Expertise and commitment to advancing knowledge.

Mr. R. Chandru has completed the NPTEL certification course on "Deep Learning," a comprehensive 12-week program carrying three academic credits. This achievement reflects his dedication to altering. Advanced concepts in the field of artificial intelligence.

Mr. Shaik Jhani Bhasha has completed the NPTEL certification course on "Deep Learning." A rigorous 12-week program worth three academic credits. This accomplishment demonstrates his commitment to Excelling in advanced technological domains.







SoT, GUH

Mr. B. Santosh Kumar completed the NPTEL certification course on "Deep Learning" offered by IIT Ropar, a comprehensive 12-week program carrying 4 Academic credits. This achievement highlights dedication to advancing expertise in cutting-edge Technologies.

Mr. V. Shiva Prasad completed the NPTEL certification course on "Programming in Java," a 12week program carrying three academic credits. This accomplishment underscores his commitment to enhancing his skills in software development and Programming.

Mr.K. Sathish Kumar has completed the NPTEL certification course on "Programming in Java," A 12-week program worth three academic credits. This achievement reflects his dedication to advancing. His expertise in programming and software development.

Dr. D. Anitha completed the NPTEL certification course on "Data Analytics with Python," a 12-week Program carrying three academic credits. This Accomplishment showcases her dedication to mastering. Data analytics and programming skills.









### **International Journals**

Professor T. Madhavi has published a research paper titled "A Novel Modified Marine Predator Algorithm (MMPA) Based Automated Atrial Fibrillation Detection (AAFD) System Using ECG Signals" in the International Journal of Intelligent Systems and Applications in Engineering, published by the same journal. Indexed in Scopus, the paper was featured internationally in Volume 12, Issue 1 (Quartile 4) in June 2024. This work demonstrates significant progress in automated medical diagnostics leveraging advanced computational algorithms.

Professor T. Madhavi has published a research paper titled "Optimized Digital Simulation Methodology for System Validation Using Real-Time Hardware-In-Loop Simulation Platform" in the IEEE Aerospace and Electronic Systems Magazine, published by IEEE. Indexed in Scopus, the paper was featured internationally in Volume 39, Issue 8 (Quartile 2) in June 2024. This work highlights advancements in system validation using cutting-edge simulation technologies.

Professor T. Madhavi has published a research paper titled "SaferHer - A Wearable Women's Safety Device" in the proceedings of the International Conference on Advances in Computing, Control, and Telecommunication Technologies (ACT 2024). Published by IEEE and indexed in Scopus, the paper appeared in June 2024. This innovative work introduces a wearable device to enhance women's safety through advanced technology solutions.

Professor P. Trinatharao has published a research paper titled "Dynamic Thresholding Logarithmic Companding for PAPR Reduction in MIMO-OFDM Systems for 5G Wireless Communication" in the journal Measurement: Sensors, published by Elsevier. Indexed in Scopus, the paper was featured internationally in Volume 33 (Quartile 3) in June 2024. This publication highlights innovative advancements in signal processing techniques for next-generation 5G wireless communication systems.

Dr. Shantanu Saha has published a research paper titled "Optical Properties of Low-Defect Large-Area h–BN for Quantum Applications" in the journal IPSS Rapid Research Letters, published by Wiley. Indexed in Scopus, the paper was featured internationally in Volume 18 in March 2024. This work explores the advanced optical characteristics of h-BN, which contribute to the field of quantum applications.

Dr. Md. Masood Ahmad has published a research paper titled "Performance Analysis of Approximate Parallel Prefix Adders Realized with Field-Programmable Gate Array Technology" in the journal Recent Advances in Electrical and Electronics Engineering, published by the same journal. Indexed in Scopus, the paper was featured internationally in May 2024. This study provides valuable insights into optimizing FPGA-based systems for improved computational performance.

Mr. B. Santosh Kumar has published a research paper titled "Diabetic Prediction Framework Using Optimization Strategy via Optimal Weighted Score-Based Deep Ensemble Network to Support Diabetic Patients" in the journal International Journal of Bioinformatics Research and Applications, published by Inderscience. Indexed in Scopus, the paper appeared internationally in Volume 9, Issue 5 (Quartile 4) in June 2024. This work presents an innovative approach to diabetic prediction, offering significant contributions to healthcare and patient support systems.

Professor K Manjunathachari has published a research paper titled "**Implementing Spectral-Domain Feature Mapping for Sketch-Based Image Retrieval**" in the journal **International Journal of Intelligent Systems and Applications in Engineering**, published by the same journal. Indexed in Scopus, the paper was featured internationally in **Volume 12**, **Issue 15 (Quartile 4)** in **February 2024**. This study highlights advancements in image retrieval techniques using spectral-domain features, contributing to the field of intelligent systems.

Mr. Shaik Jhani Bhasha has published a research paper titled "Data Privacy Preservation and Authentication Scheme for Secured IoMT Communication Using Enhanced Heuristic Approach with Deep Learning" in the journal Cybernetics and Systems: An International Journal, published by Taylor and Francis. The paper was indexed in SCI and featured internationally in Volume 12, Issue 15 (Quartile 4) in May 2024. This work presents innovative solutions for secure communication in the Internet of Medical Things (IoMT) using advanced deep learning techniques.

### **Book Publications**

Dr. G. Srinivas published a book titled "Automatic Toll Collection System," released internationally in **March 2024** by **Lap Lambert Academic Publishers**. This book offers an in-depth exploration of innovative solutions for automated toll collection systems, contributing to advancements in transportation technology.

Dr. S. V. Padmavathi published a chapter titled "**Power Quality Enhancement in Grid Integrated System**" in the international book **Futuristic Trends in Renewable & Sustainable Energy**, released in **May 2024**. This chapter contributes to the field of renewable energy by addressing key challenges and solutions related to power quality in grid-integrated systems.

### **Delegates Visited**

On March 22, 2024, the G-Electra Students Technical Club of the Department of Electrical, Electronics and Communication Engineering (EECE) organized a highly engaging interaction session with Mr. Gangadhar Gude, CEO of AtAI Ltd. The event was a platform for students to showcase their technical projects and gain insights from industry experts.

During the session, members of the G-Electra club presented diverse, innovative projects, reflecting their creativity and technical acumen. These projects spanned various domains, including automation, embedded systems, and AI-driven solutions. The students demonstrated their prototypes, explained the problem-solving approaches they adopted, and outlined the real-world applications of their work.

Mr. Gangadhar Gude took a keen interest in the projects and interacted with the students individually, asking thought-provoking questions and exploring the underlying concepts behind their innovations. He provided constructive feedback, highlighting areas of improvement and offering practical suggestions to enhance the projects' effectiveness and scalability.

In addition to project reviews, Mr. Gude shared his experiences as an industry leader, emphasizing the importance of innovation, teamwork, and staying updated with technological advancements. His insights inspired the students to think beyond academics and envision their contributions to real-world challenges.

The session concluded with a vote of thanks, acknowledging Mr. Gude's invaluable time and guidance. This interaction enriched the students' learning experience and strengthened the bridge between academia and industry, fostering an environment of growth, innovation, and collaboration.



### **Cultural/Sports**

### **Farewell party**

On March 22, 2024, the students hosted a memorable farewell party for their beloved seniors, celebrating their journey and achievements. The event was vibrant with emotions, cultural performances, and camaraderie.

The evening began with a warm welcome for the seniors, followed by heartfelt speeches reflecting the unforgettable moments shared during their academic journey. Cultural performances, including dance, music, and skits, showcased the juniors' creative talents while adding joy and energy to the atmosphere. Engaging games brought fun and laughter, creating cherished moments for everyone present.

The highlight of the evening was a nostalgic rewind of memories, where seniors shared their experiences, lessons, and heartfelt gratitude towards their peers and faculty. A slideshow of photographs captured milestones, friendships, and the essence of their time on campus, evoking smiles and tears.

The event concluded with tokens of appreciation presented to the seniors and a vote of thanks from the juniors, marking a beautiful end to their journey. This farewell party was a celebration and a heartfelt goodbye, leaving behind a legacy of memories and inspiration for the juniors.



### **Thanks Giving Party**

On **April 2**, **2024**, the final-year students organized a heartfelt **Thanksgiving Party** for the faculty as a gesture of respect and gratitude. The event served as a platform to express their appreciation for the invaluable guidance and support provided by the faculty throughout their academic journey.

The students thoughtfully planned the occasion, ensuring it was meaningful and memorable. Faculty members were warmly welcomed and presented with tokens of appreciation as a mark of respect. The event's highlight was sharing experiences, where students reflected on their transformative journey, recalling moments of learning, mentorship, and encouragement that had shaped their growth.

Faculty members also shared their thoughts, offering wisdom and best wishes for the students' future endeavors. The atmosphere was filled with warmth, nostalgia, and mutual admiration, making the occasion a cherished memory for students and faculty. This Thanksgiving Party stood as a testament to the strong bond between the students and their mentors, celebrating the essence of education and gratitude.



### **Sports**

#### **David's Remarkable Achievement in Sports: A Source of Pride for the Department of EECE**

David, a talented and dedicated student in our Department's 3rd year (PIN: HU21EECE0100315), has made a significant mark in the sports field, bringing pride and recognition to the Department of Electronics and Communication Engineering (EECE). His exceptional performance and leadership were showcased at the prestigious **Annual Sports** Flagship Event by Vardhaman College of Engineering in January 2024, which witnessed participation from 32 universities across the region.

David played a pivotal role in leading his team to secure an impressive **2nd position** in this highly competitive tournament. His unwavering commitment, strategic thinking, and ability to inspire teamwork were key factors in achieving this outstanding result. Davids performance against some of the best talents from various universities, David's performance stood out as a testament to his athletic skill and determination.

This remarkable accomplishment highlights David's talent and reflects the Department's commitment to fostering a holistic development environment where academic excellence and extracurricular achievements go hand in hand. His success inspires his peers and underscores the importance of dedication, discipline, and teamwork in achieving goals on and off the field.

The Department of EECE congratulates David for his incredible achievement and looks forward to supporting his future endeavors in sports and academics.



### David Shines Again at GITAM Hyderabad Gusto Annual Sports Fest

In March 2024, David, a 3rd-year student from the Department of Electronics and Communication Engineering (PIN: HU21EECE0100315), once again demonstrated his outstanding athletic prowess and leadership skills by representing the university at the prestigious GITAM Hyderabad Gusto Annual Sports Fest. Renowned as one of the region's most anticipated and competitive sports events, the fest brought together talented athletes from multiple universities, creating a platform for showcasing excellence in sportsmanship.

David's exceptional skills and strategic acumen were crucial in leading his team to secure an impressive **2nd position** amidst fierce competition. His ability to perform under pressure, dedication, and teamwork proved instrumental in achieving this remarkable feat. The event showcased David's consistency as a top-performing athlete and highlighted his ability to inspire and motivate his teammates to perform at their best in challenging situations.

This achievement at the GITAM Hyderabad Gusto Annual Sports Fest further reinforces David's reputation as a committed and talented athlete who excels in individual and team settings. It also serves as a proud moment for the university and the Department of EECE, underscoring the importance of nurturing students' talents beyond academics.

David's consistent performance in sports is a testament to his hard work, determination, and passion, inspiring his peers and setting a benchmark for excellence in extracurricular activities. The Department congratulates David on his continued success and wishes him greater achievements in the future.



#### David Continues to Excel: A Stellar Performance at IIIT-H Annual Sports Fest

Continuing his impressive streak of achievements, **David**, a 3rd-year student from the **Department of Electronics and Communication Engineering (PIN: HU21EECE0100315)**, once again showcased his exceptional talent and dedication at the **International Institute of Information Technology, Hyderabad (IIIT-H) Annual Sports Fest** held in **April 2024**. The event, known for attracting some of the finest teams and athletes from across the region, was another opportunity for David to display his athletic prowess.

Competing against highly skilled teams in a fiercely competitive environment, David played a pivotal role in leading the university to secure a commendable **3rd position**. His unwavering commitment, strategic mindset, and exceptional sportsmanship contributed to the team's success and highlighted his ability to perform consistently at the highest level.

David's efforts were instrumental in rallying his team through challenging matches, proving his mettle as a player and a leader. His ability to remain focused under pressure and inspire those around him has been a source of motivation for his teammates and peers.

This achievement at the IIIT-H Annual Sports Fest marks yet another proud moment for the Department of EECE, reflecting the Department's ethos of fostering all-round development among its students. David's accomplishments continue to set a benchmark for excellence, reinforcing the importance of discipline, teamwork, and resilience.

The Department commends David for his outstanding contributions and congratulates him on this well-deserved success. His journey inspires others, and the Department eagerly anticipates more milestones in his sports and academic endeavors.



### **Industrial Visits**

Industrial Visit to SSPL Labs, Nacharam Date of Visit: March 4, 2024. Organized by: GITAM University, Hyderabad Department: EECE (Electronics and Communication Engineering) Year: 3rd Year Students.



#### Introduction:

The industrial visit to SSPL Labs in Nacharam was organized to provide third-year EECE students from GITAM University, Hyderabad, with practical exposure to vibration testing techniques and equipment. The visit aimed to bridge the gap between theoretical knowledge and practical electronics and communication engineering applications.

#### **Overview of SSPL Labs:**

SSPL Labs is renowned for its advanced facilities and expertise in vibration testing. The lab has state-of-the-art machinery and tools for various vibration tests, including natural, forced, and damped vibrations. The facility is designed to test devices under different atmospheric conditions to ensure their durability and performance in real-world scenarios.



#### **Types of Vibration Testing:**

#### **1. Natural Vibration:**

This type of vibration occurs without external forces, driven by the device's resonant frequencies. Understanding natural vibrations helps in designing devices that can withstand their inherent oscillations.

#### 2. Forced Vibration:

External forces cause forced vibrations. Testing for forced vibrations involves applying specific frequencies and amplitudes to the device to evaluate its response and resilience.

#### **3. Damped Vibration:**

Damped vibrations are characterized by damping mechanisms that reduce the amplitude of oscillations over time. This type of testing assesses the effectiveness of damping systems in mitigating vibrations.



#### **Testing Procedures:**

The visit included demonstrations of various testing procedures:

#### **1. Sign Vibration Testing:**

Sign vibration testing involves wave motion analysis, including acceleration, displacement, and velocity. It assesses how devices respond to sinusoidal vibrations within a specified range.

#### 2. Shock Testing:

Shock testing evaluates a device's response to sudden changes or impacts. This test is crucial for determining the robustness of devices under unexpected mechanical shocks.

#### 3. Random Vibration Testing:

Random vibration testing simulates real-world conditions by applying random vibrations. The average value is taken over time to analyze the device's performance under unpredictable vibrations.



#### **Equipment and Setup:**

#### • Compressor:

An external compressor is used to balance the extra weight during testing. It functions similarly to a bumper connected to all sides of the armature, ensuring stability and accuracy.

#### • Slip Table:

The steel slip table serves as the external connected table. The armature is vertically bent and connected to the slip table, providing a stable platform for vibration testing.

• Sensors:

Sensors are placed according to the testing requirements. They can be positioned on top of the armature or at specific points to capture accurate data during testing.

#### • Control and Monitoring System:

The control and monitor units are placed beside the testing apparatus. The control unit manages the testing parameters, while the monitor unit displays real-time reactions and results in a graphical format, represented by a blue line control system.

#### **Observations and Learning:**

Students observed the entire vibration testing process, from setting up the equipment to analyzing the results. The graphical representation of data provided insights into how devices react to different types of vibrations and the effectiveness of damping mechanisms.

### **Placements**

S.No	Registration Number	Name	Company Placed	CTC
1	222010401004	KAILA KAVYA	VODAFONE IDEA	5.5 LPA
2	222010401006	VUDITHYALA SRI HARSHA	VODAFONE IDEA	5.5 LPA
3	222010401014	INGUVA SATYA VENKATA SAI KUMAR	CHEGG	4 LPA
4	222010401019	HARIKA BANOTH	EDUHOLIC	5.5 LPA
5	222010401035	KOPPAKA GANA SAI THANMAYEE	MYCAPTAIN	5 LPA
6	222010401042	PUTTA SREENIJA	AMAZON	4 LPA
7	222010401046	EDARA BHARATH	CHEGG	4 LPA
8	222010401049	K N SURYA KIRAN	PUBLICIS SAPIENT	4.48 LPA
9	222010404002	BOLLOJU SAKETH ANAND	CBRE	9.1 LPA
10	222010404008	K KEERTHI	FEDERAL BANK	6.1 LPA
11	222010404009	МАНАТНІ	PEOPLE TECH	4 LPA
12	222010404010	VADDADI SAI ABHINAV	VODAFONE IDEA	5.5 LPA
13	222010404011	KHANDERAO HRISHIKESH	DATABEAT DMR	5 LPA
14	222010404013	DHRITI SREE ROMPICHARLA	ACCENTURE-ASE	4.5 LPA
15	222010404018	ANJURI PAVAN KUMAR	CHEGG	4 LPA
16	222010404020	V VAMSHI RAJ	TALENTSERVE	6 LPA
17	222010404026	K SATHWIKA CHOWDARY	TECH MAHINDRA	4.5 LPA
18	222010404027	AVADHANULA L K SRUJANA	AXIS ENERGY GROUP	5 LPA
19	222010404041	SATHVIKA MUCHUMARI	EDUHOLIC	5.5 LPA
20	222010404048	UBA DURGA VARA PRASAD	EDU-VERSITY	6 LPA
21	222010404054	TATA RAVI CHANDRA	CHEGG	4 LPA
22	222010404057	BHARATH R NAIR	ARKLIGHT MARKETING	4 LPA
23	222010404060	DUGGIREDDY SAI CHARAN REDDY	INFINITY LEARN	4 LPA
24	222010405008	JAYANTH NAIK DHARAVATH	TALENTSERVE	6 LPA
25	222010405011	JAMPANI KIRAN SARMA	ALSTOM	6.8 LPA
26	222010405018	KETHIREDDY MUKKARA SATHYANANDA REDDY	TALENTSERVE	6 LPA
27	222010405019	Ramaraju Akhil Karthik	COFORGE	4.25 LPA
28	222010405020	M V N P S PRANAV	CORIZO	6.5 LPA

## **DEPARTMENT OF ELECTRICAL, ELECTRONICS & COMMUNICATION ENGINEERING**

29	222010405021	PUJARI VINAY	CHEGG	4 LPA
30	222010405022	K TEJAVARDHAN REDDY	CHEGG	4 LPA
31		VELAGATURI NAGA		
51	222010406003	YESWANTH	EDU-VERSITY	6 LPA
32		ANEGONDI ASHRAY DATTA		
02	222010407001	PRANESH	MUSIGMA	5 LPA
33	222010407003	SHAIKVASEEM	AMAZON	4 LPA
34			FRIENDLY IT	
<u> </u>	222010407011	S VYSHNAVI REDDY	CONSULTANTS	4 LPA
35	222010407012	SHAGI SRIKHAR	ACCENTURE-ASE	4.5 LPA

