INTERFACE

Connecting EECE

HALF-YEARLY TECHNICAL E-MAGAZINE

DEPARTMENT OF ELECTRICAL, ELECTRONICS AND COMMUNICATION ENGINEERING

GITAM SCHOOL OF TECHNOLOGY
GITAM (DEEMED 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

"**INTERFACE**- *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, Faculty Development Programmes, Achievements, Cultural/Sports, 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**

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Workshop

Workshop on Raspberry Pi and IoT – A Hands-on Learning Experience

On **March 30, 2022**, an extensive **Workshop on Raspberry Pi and the Internet of Things (IoT)** was organized, providing students with valuable insights into these cutting-edge technologies. The workshop aimed to bridge the gap between theoretical knowledge and practical application by offering hands-on training in **IoT development and Raspberry Pi-based projects**.

The session was designed to cater to both beginners and those with prior technical knowledge, ensuring that every participant could **grasp fundamental concepts** and explore real-world applications. Industry experts and experienced mentors guided students through a **step-by-step learning approach**, making the session engaging and informative.

Key Highlights of the Workshop

⬥ Introduction to Raspberry Pi and IoT

The session began with an overview of **Raspberry Pi**, its architecture, features, and its role in **IoT-based solutions**. Students were introduced to the **capabilities of Raspberry Pi as a microcontroller** and how it differs from traditional computing systems.

⬥ Hands-on Experience with Hardware and Sensors

Participants had the opportunity to work directly with **Raspberry Pi boards, sensors, actuators, and peripheral devices**. They learned how to interface various components such as **temperature sensors, motion detectors, cameras, and LED modules**, gaining a deep understanding of **hardware integration**.

⬥ Programming and IoT Implementation

The workshop included **practical coding sessions**, where students were guided on writing Python scripts to control sensors and process data in real-time. They explored how **IoT applications communicate using protocols like MQTT and HTTP**, enabling devices to **send and receive data over the internet**.

⬖ **Building Real-World IoT Projects**

Students were divided into teams and encouraged to develop **mini-projects** using Raspberry Pi.

Some of the projects included:

✅ **Smart Home Automation:** Controlling home appliances remotely through IoT.
✅ **Weather Monitoring System:** Real-time data collection of temperature, humidity, and air quality.
✅ **Motion-Activated Security System:** Using PIR sensors to detect movement and trigger alerts.
✅ **Smart Agriculture Solutions:** IoT-enabled soil moisture monitoring for efficient irrigation.

Impact and Takeaways

The workshop was an **immensely enriching experience**, where students gained:
✓ A **practical understanding of IoT concepts** and Raspberry Pi applications.
✓ **Hands-on exposure** to real-time data collection and processing.
✓ The ability to **develop and prototype IoT-based projects**.
✓ Insights into **future career opportunities** in IoT and embedded systems.

The event concluded with an **interactive Q&A session**, where students engaged with experts to explore advanced topics and discuss innovative project ideas. Participants received **certificates of completion**, recognizing their efforts and learning achievements.

Overall, the **Workshop on Raspberry Pi and IoT** proved to be a **transformative learning experience**, empowering students with the skills and confidence to **develop innovative IoT solutions** and **contribute to the evolving tech landscape**.

Culturals

Farewell party

On April 9, 2022, the students hosted a memorable farewell event to honor and celebrate the achievements of their graduating seniors. The event was filled with emotions as the entire batch bid a heartfelt goodbye to the seniors who had spent years shaping the identity of the institution. The evening kicked off with a warm welcome extended to the seniors, followed by heartfelt speeches reflecting on their unforgettable academic journey, struggles, triumphs, and the valuable lessons learned over the years. These speeches not only celebrated the growth of the seniors but also acknowledged the strong bonds they had forged with their peers and faculty.

The event was marked by vibrant cultural performances, including dances, music, and skits, organized by the juniors. These performances showcased the creativity and talent of the students while infusing the evening with energy and enthusiasm. The cultural performances served as a tribute to the hard work and camaraderie between the students, leaving the audience in awe.

Fun-filled games and activities further contributed to the lively atmosphere, allowing the seniors and juniors to bond in a relaxed, cheerful setting. As the evening progressed, a nostalgic moment unfolded, where the seniors shared their experiences, memories, and expressions of gratitude for the opportunities and friendships they had gained during their time at the institution.

A touching slideshow of photographs played, capturing key milestones, friendships, and moments of joy throughout the seniors' journey, evoking both laughter and sentimental tears. The event concluded with a presentation of tokens of appreciation to the seniors, followed by a vote of thanks from the juniors, marking the end of a memorable chapter. This farewell was not only a goodbye but also a beautiful celebration of the legacy the seniors left behind, creating lasting memories that will continue to inspire and motivate the juniors for years to come.

Fresher's Party – A Grand Welcome to the New Batch

On **March 26, 2022**, a vibrant **Fresher's Party** was organized to extend a warm welcome to the new batch of students. The event aimed to create an atmosphere of joy, camaraderie, and excitement as the freshers embarked on their new academic journey.

The celebration was meticulously planned, featuring an array of cultural performances, engaging activities, and interactive sessions that allowed students to bond with their peers and seniors. The event commenced with a formal welcome address, followed by an energetic lineup of music, dance, and entertaining games that kept the audience enthralled.

A highlight of the evening was the **"Mr. and Ms. Fresher"** contest, where participants showcased their talents and confidence. The competition, judged by faculty members and senior students, added an element of fun and excitement to the celebration.

The faculty members also graced the occasion, sharing words of encouragement and wisdom with the freshers. Their inspiring messages emphasized the importance of academic excellence, personal growth, and making the most of their college journey.

Placements

S.No	Name of the Student	Registration Number	Company Name
1	A Saketh	221810401001	Prodapt
2	Addanki Amar Praveen	221810401002	Prodapt
3	Avula Abhiram	221810401004	PK Global
4	Boghra Subramaniam Anurag	221810401006	Mindtree
5	Bolla Sai Saketh	221810401007	Prodapt
6	Ch Sai Kalyan	221810401009	Tech Mahindra
7	Challa Revanth	221810401011	Celigo
8	Dharna Jeshwanth Kumar	221810401013	ValueMomentum
9	Dornadula Sai Dheeraj	221810401014	ValueMomentum
10	Ganji Anudeep	221810401015	Mindtree
11	Gudimella Mahathi Sritha	221810401016	Birlasoft
12	Sunil Sriharsha Gudimella	221810401017	TCS
13	Hazare Sai Dheeraj	221810401018	ValueMomentum
14	Inapakurthi Manikanta	221810401019	Prodapt
15	K Saras Chandra	221810401023	Accenture
16	Kammali Rohith	221810401024	ValueMomentum
17	Kopparthi Sai Vignesh	221810401027	Mindtree
18	Mallipeddi Rishika	221810401031	Prodapt
19	Manjakuppam Vamshikrishna	221810401032	Infosys
20	Markapuram Chamundeswari	221810401033	Accenture
21	Nadimpalli Harini	221810401036	Accenture
22	Nallabelly Vinay	221810401037	TCS
23	Pulla Siva Chaitanya Bharadwaja	221810401040	Prodapt

24	Pusuluru Nandhini	221810401041	Virtusa
25	Rajaboena Vamshi Charan	221810401043	ValueMomentum
26	S Vishvaas	221810401045	ValueMomentum
27	Sadanand Anuraag Kumar	221810401046	Mindtree
28	Sarvagoni Chandra Shaker	221810401047	ValueMomentum
29	Voddepally Ajay Kumar	221810401050	ValueMomentum
30	Yedallacheruvu Sam Aditya	221810401052	Axiscades
31	Yelchuri V V S Sai Charan	221810401053	Wipro
32	Chirakala Trishya	221810401056	Accenture
33	Ishitha Rawat	221810401059	Mindtree
34	D Suhas	221810401060	Prodapt
35	D Anush Kumar Goud	221810401061	Wipro
36	Vuppalapati Jaya Syama Sai	221810401062	Wipro
37	Ambati Aruna Jyothi	221810402001	BirlaSoft
38	Ambedpelli Sumanth	221810402002	Prodapt
39	Ankam Sushant	221810402003	Wipro
40	Bajjuri Harshavardhan Reddy	221810402004	Prodapt
41	Bujranpally Sai Vaishnavi	221810402006	Prodapt
42	Datla Snehith Varma	221810402009	TCS
43	M Dinesh Kumar	221810402010	Virtusa
44	Dopathi Varshith Reddy	221810402011	Mindtree
45	Gatla Nikhil	221810402013	Virtusa
46	Gundumalla Anusha	221810402015	Mindtree
47	Haritha Nimmagadda	221810402016	Virtusa

48	Jaina Meghana	221810402017	ValueMomentum
49	Jallepalli Sai Charan Likhith	221810402018	Virtusa
50	K Keerthana	221810402020	Accenture
51	Kakita Thandava Krishna	221810402022	Accenture
52	Kandepu Gopinadh	221810402023	ValueMomentum
53	Karamtoth Charitha Nayak	221810402024	Mindtree
54	Kaza Krishna Bharadwaj R	221810402026	Wipro
55	Kimidi Viswanadh Naidu	221810402027	ValueMomentum
56	Koothuru Rohith	221810402029	Prodapt
57	Kundurthy Pavithra	221810402030	Mindtree
58	M Sivasai Ganesh	221810402031	Prodapt
59	Mahamood	221810402032	NTT Data
60	Nakka Navyasree	221810402033	Virtusa
61	Nuthalapati Aruna Sri	221810402035	Prodapt
62	P Shanmukha Sai	221810402036	Wipro
63	Parigi Harsha Vardhan Reddy	221810402037	ValueMomentum
64	Paruchuri Sai Karthik	221810402038	NTT Data
65	Putta Madhav Charan	221810402039	Wipro
66	Saranyasri Jannela	221810402040	Accenture
67	Seelam Sai Charan Reddy	221810402041	Prodapt
68	Shweta Prasad	221810402043	Wipro
69	Srikanth Paruchuri	221810402044	ValueMomentum
70	Sukthae Krishna Prasad	221810402045	Prodapt
71	Sure Mukesh Harsha Vardhan	221810402046	Prodapt

72	Survi Tridev Goud	221810402047	Prodapt
73	Tadikonda Sri Sai Rajyasushma	221810402048	Accenture
74	Vishal Nelaturi	221810402051	Wipro
75	Yellambhatla Rakesh	221810402052	Musigma
76	Yerraguntla Trisuli Sri Lakshmi	221810402053	Prodapt
77	Yerroju Satyamani Teja	221810402054	TCS
78	Zubin George Philip	221810402056	Virtusa
79	Dachepally Saivineeth	221810402058	ValueMomentum
80	Gangireddi Sai Teja	221810402059	Virtusa
81	Syed Adil Raza	221810402060	ValueMomentum
82	Embadi Sravani	221810402062	Wipro
83	Modaboyina Nava Tej	221810402063	Musigma
84	Yerragudi Tony Kalinan	221810402064	Mindtree