# VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN **TECHNOLOGY FOR WOMEN** NEWSLETTER

## JAN - MAR, 2022

**DEPT. OF ECE** 

### **VOLUME NO.: 23**

### **ECE Department**

Department of Electronics and Communication Engineering was started since the inception of Vignan's Institute of Management and Technology for Women during 2008 with an initial intake of 90. The strength was enhanced to 120 during 2010. The Department had added Post graduate programme in VLSI during the year 2011 and Embedded Systems during 2014 with an intake of 18 each.

The Department has state-of-art laboratories equipped with advanced and well maintained equipment, continuously updated application software packages, more than adequate computing systems with 24x7, 30 MBPS internet facility.

### **Department Vision**

To transform the students into technologically competent professionals, with abilities to address the societal challenges of the time through innovative technical practices in electronics & communication engineering.

### **Department Mission**

- M1: To foster inquisitive-driven advanced knowledge building among students for reinforcing the domain knowledge, develop capabilities, skills and solve complex engineering problems.
- M2: To prepare industry-ready graduates for global Electronics as well as communication-based engineering companies by conducting training programs, workshops and industry visits.
- M3: To build entrepreneurship and leadership qualities, research aptitude among students for the contribution of economic and technological development in cutting edge technologies in the national and as well as in the global arena.

### **Program Educational Objectives**

- PEO1: To develop the student's ability on technical concepts to design, simulate, and synthesize various electronic and communication circuits & systems for their research advancements.
- PEO2: To impart analytical skills and to prepare the students to excel in applying state-of-the-art hardware and software tools to solve complex engineering problems for R&D, Industry, and societal requirements.
- PEO3: To prepare the students to work in teams, take independent decisions, and integrate engineering issues for a successful career in a multi-disciplinary environment.
- PEO4: To promote entrepreneurship among the students to become successful entrepreneurs with professional ethics.

### **Program Educational Objectives**

A graduate of the Electronics and Communication Engineering Program will be able to

**Professional Skills Ability:** Identify, design electronics & communication circuits and conduct experiments with electronics & communication systems, analyze and interpret data, formulate and solve electronics & communication engineering problems.

**Industrial Skills Ability:** Design digital and analog systems, algorithms, fire ware, modern engineering tools, software, etc. as per needs and specifications and work in laboratory and multidisciplinary tasks.

**Ethical and Social Responsibility:** Communicate effectively in both verbal and written form, will have knowledge of professional and ethical responsibilities and will show an understanding of the impact of engineering solutions on the society, and also will be aware of contemporary issues.

### **Program Outcomes** (Adapted from NBA)

Engineering Graduates will be able to:

**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**Conduct Investigations of Complex Problems:** Use researchbased knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



# **HOD'S MESSAGE**

MR. P. HARIKRISHNA, ASSOCIATE PROFESSOR & HEAD OF THE DEPARTEMENT, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING. It gives me great pleasure to congratulate students, teachers and Staff of electronics department. During study at The department, the students are encouraged to Get hands-on experience in the corporate world Through internship projects with reputed organizations. Newsletter is believed to be a Focus of the inside activities i.e. academics, students and Faculty achievement as well as Innovation occurring in the department.

# **REPUBLIC DAY CELEBRATIONS**



The republic day celebrations held 26 January 2022 at Vignan's institute of management and technology for women in the campus. Chief Guest DR. VIJAYENDER addressing the gathering on the occasion of Republic Day. Completing the country's growth toward becoming an independent republic. the Importance of Indian constitution and four principles of justice, liberty, equality and fraternity that are enshrined in the preamble of Indian constitution. The event followed by prize distribution ceremony for winners of various competitions namely essay writing, painting, quiz conducted by management as a part of this 73rd Republic day celebrations.

# **WOMEN'S DAY CELEBRATIONS**







వరిశా పరిలారతికే వేరు పురుడు కర్తుదరి స్థారాంతో బుదిం శార్పినం ద్రాఫి ఎందుతో బుదు పొర్పారు జరిగిన ముద్దిందో కాలుర్గళించి ప్రధికి మరా బు మరిది కళాలలో అందర్గిమ చదిశా దిశ్చిం విదురు చుదూ నిర్గిసిలారు. వదిగి అర్ధికులో మర్దు అరీగు జరిగిచినులో దర్గింతో ఇద్దికి కాలు, మె వదిగి అర్ధికి రాఫ్ కర్మిడి సిమి పోర్టించి రాధి పర్పి సిమి విద లి ప్రదిశార్వి రాఫ్ కర్మిడి సిమి పోర్టించి రాధి పర్పి సిమి జిరిగిందు, పెరి పొరిత్రు ప్రతి సిమి పోర్టించి పారి పర్పి సిమి విదిగిందు, పెరు పొరిత్రు ప్రతి సిమి పోర్టించి పరి పదిశార్వి రాధి కర్మిత పరిశ్రిపత్తి పరిశ్రి పరిశ్రి పరిశారం పదిశారంగా, కర్మారణ విది పరిశారంగు, మెర్దటింగు పరిజంతో, మిర్గుల్లో రాష్ట్రదిశాలు జిర్మిదికారులో పరిజంతో, మెరిళించి సరిత్రింతి పిర్కుల్లో రాష్ట్రదిశాలు జిర్మిదికారులో పరిజంతో, మెరిళించి సరిత్రింతి మర్పిరితి పరిశారంగు చెలులులో, మిర్కుల్లో రాష్ట్రదిశులు జిర్మటిర్రాజుల్లో పరిజంతం, మార్లటించి పరిశారంగు చెలులులో, గార్రంగు, 10 Harch 3222

#### మహికా విజ్ఞాస్ ఇంజనీలింగ్ కణాశాలలో మహికా దినోత్సవం

ఆదోరిక్, మార్చి క ( భజువ్రావి : బుదేరిన ముర్చింద్ గా లుంద్రంగింది. ప్రార్ మహిం మురింగి కళాలాండి మంగకారు అంతరించి వరిగా దిశోల్పన జిడుగా బుదులు బుది ప్రదిశాలండి : కళాలాండి చెళాయి జిడుగులు మురులు బుదులు ప్రధిశాలండి : కళాలాండి చెళాయి జిడుగులు మురులు బుదులు ప్రధిశాలం ప్రధిశాలం దర్శకు మండి అవరార్త, గాహింద పర్శర కాళ్ల కర్ణుడికి, గుండ మొద్దికుం అంతరి, బుదుల పదులంగా పిళుమార్థులు అంతరించి కళాలం ప్రదిశ్రీంచి గార్రకు ఆ ఎర్రాడా రాజుడు దరిగద వర్శకి కాళ్ల కర్ణుడికి, గుండ మొద్దికుం ఇద్దకు అంతా, పదిశా అంతరులు దరిగద వర్శకి కాళ్ల కర్ణుడికి, గుండ మొద్దకు అంతరి, బుదులు విశారాలు కరిగులు విశ్రీ కళాళ ప్రదిశిశం మారించింది.



64-54-65 64-54-65 65-54-65 14-55-55-55 14-55-55-55 14-55-55-55 14-55-55-55-55-55 14-55-55 Women's Day Celebrations Held On March 8th 2022 .At Vignan's Institute of Management and Technology.. Bringing together all the female staffs (teaching and non-teaching), the college decided to hold an interactive session where everyone could put forward their views and perspectives freely.

"We decided to highlight that fact in the campus and the important suggestions, welfare scheme and objectives towards the development of women. Therefore, we thought to organize a platform for all our female staff, and students to allow them to express themselves."

TECHINNOVATION

2



## **FACULTY ARTICLE**

The article **"IOT BASED ENERGY METERING AND THEFT DETECTION"** is written by Mr. M. KARTHIK PAL, as a Assistant Professor.

**ABSTRACT:** In this connected world, the expansion of the intelligent devices has created a new start to the machine to machine communication at any time and at any place. As intelligence spreads beyond devices to anything, this connectivity has created a more noteworthy vision on Internet of things. The Internet of things has made a virtual network between the human and this physical world and has drastically changed the way business works. Numerous associations are finding the inventive approaches to make information trade with more protection and decreased expenses.

**CONCLUSION:** In the proposed work, IOT and arduino based meter reading system is designed to monitor the meter reading and service provider can disconnect the power source whenever the customer does not pay the monthly bill and also it eliminates the human involvement in Energy meter management. The Project has achieved following goals, Theft detection at buyer end in real time, LCD displays energy consumption units and amount and Disconnection of service from remote server.



# **FACULTY ARTICLE**

The article **"ANALYSIS OF LEAKAGE POWER OPTIMIZATION TECHNIQUES FOR VLSI APPLICATIONS"** is written by DR. SK. MASTHAN BASHA, as a Associate Professor.

**ABSTRACT:** Power dissipation has become one of the VLSI circuit structure's significant Worries with the fast launching of battery-worked applications. In high-performance Structures, the leakage segments of power consumption are equivalent to the Switching segment. This will keep incrementing with innovation scaling, Except if effective procedures are introduced for controlling the leakage. This Paper gives a thorough report, examination, and correlation Of leakage power reduction systems and techniques. Additionally, the advantages and disadvantages of

3



different Strategies for decreasing leakage power are introduced.

These methods can be stretched out to any complex advanced Digital implementation.

**CONCLUSION:** Power leakage reduction is an important job in low power submicron circuits. Additionally, considering the above review, obviously, for bigger savings of leakage power, the Most favored strategy is Power gating, for example, the Multi-threshold CMOS system. Additionally, the rate decrease of leakage power is more with the MTCMOS Method when contrasted with some other strategy. MTCMOS can be actualized on various circuits, and the power, delay, and different parameters can be estimated just as contrasted with different methods.

S.NO.	AUTHOR(S)	JOURNAL NAME	TITLE OF THE PAPER	ISSN NUMBER
1.	MR. P. HARIKRISHNA	NEUROQUANTOLOGY	IMPROVED PRIORITY-BASED CONGESTION CONTROL PROTOCOL FOR MULTI-ACCESS EDGE COMPUTING (MAEC) USING IOT-BASED WEARABLE DEVICES FOR NEUROLOGICAL DISEASES DIAGNOSIS	EISSN 1303-5150
2.	DR. SK. MASTHANBASHA	THE INTERNATIONAL JOURNAL OF ANALYTICAL AND EXPERIMENTAL MODAL ANALYSIS	ANALYSIS OF LEAKAGE POWER OPTIMIZATION TECHNIQUES FOR VLSI APPLICATIONS	ISSN NO: 0886-9367

### **FACULTY PUBLICATIONS (2021-22)**

VOLUME NO.: 23 JAN - MAR, 2022 DEPT. OF ECE



## **STUDENT ARTICLE**

The Article **"X-RAY BASED COVID -19 DETECTION"** is Written By M. MEGHANA, Roll Num: 18UP1A0437.

**ABSTRACT:** General X-Ray-based Covid-19 detection systems are fast and give quick results along with the status of how much the COVID-19 virus has infected the lungs. This is X-Ray-based Covid-19 detection system needs to be installed only once with an X-Ray machine. The detection system gives a timely status of infection inside the lungs.

**CONCLUSION:** There are two ways to achieve this: by using the Python library or by creating and training an ML model smallest Raspberry-based laptop that helps in many task Tasks including network penetration and testing the potency of malware and virus is often performed in spying and ethical hacking. The user is required to work on a computer that's small in size and can't be easily noticed. And despite the size, the laptop should have excellent specifications, on par with other high spec laptops.

## **STUDENTS AWARDED CERTIFICATES**

THE WATE						
CERTIFICATE OF PUBLICATION		Actword Allies CERTIFICATE OF APPRECIATION Is here by presented to				
THIS IS TO CERTIFY THAT G PRANITHA REDDY	Pranitha					
has been publicities in the Web Cider's writering Furly Factoric' in the month of July 2021 Mither P.J. Device A	For participating in daily Challange held on 12th.Aug.2021 (English Category), Theme : Write about Yourself					
Niket Raj Omivedi CEO FORMELS THE WITE ORDES		Prerna Dwivedi Founder Sonal Prajapati Go-Founder				

## **CAMPUS RECRUITMENT**

S.NO.	COMPANY'S NAME	ON/OFF CAMPUS	BRANCH	OFFERS	PACKAGE	ROLE
1.	EUNIMART	ON	CSE	1	5.0 LPA	SOFTWARE DEVELOPER
2.	DXC	ON	ALL	28	4.0 LPA	ASSOCIATE ENGINEER
3.	TCS	NATIONAL HIRING	ALL	15	3.6 LPA	SOFTWARE ENGINEER
4.	PUBLICIS SAPIENT	ON	ALL	1	10.0 LPA	SOFTWARE DEVELOPER
5.	FLIPKART	ON	ECE & EEE	2	13.52 LPA	SUPPLY CHAIN
6.	WIPRO	NATIONAL HIRING	ALL	23	3.5 LPA	SOFTWARE DEVELOPER
7.	PLANETSPARK	ON	ALL	1	7.10 LPA	BDE
8.	AMAZON - OPEATIONS	ON	ALL	4	4.5 LPA	OPERATIONS TEAM LEAD
9.	ADP	ON	ALL	2	5.0 LPA	TECHNICAL DEVELOPER
10.	VEON	ON	ALL	3	3.36 LPA	PROGRAMMER ANALYST
11.	BIRLASOFT	NATIONAL HIRING	ALL	1	2.5 LPA	SOFTWARE DEVELOPER
12.	ZENSAR	ON	ALL	4	5.0 LPA	SOFTWARE ENGINEER
13.	AMDOCS	ON	ALL	13	5LPA + 20K	SOFTWARE ENGINEER
14.	CSS CORP	ON	ALL	7	4.0 LPA	SOFTWARE DEVELOPER
15.	UST GLOBAL	ON	ALL	13	3.5 LPA	SOFTWARE DEVELOPER
16.	COGNIZANT	ON	ALL	46	6.75 LPA	GENCNXT
					4.0 LPA	GENC
17.	WORKSBOT	ON	ALL	57	4.0 LPA	FULL STACK DEVELOPER
					3.0 LPA	DATA SCIENTIST ENGINEER
18.	ACCENTURE	NATIONAL HIRING	ALL	26	4.5 LPA	SOFTWARE DEVELOPER
19.	BYJUS	ON	ALL	1	10.0 LPA	BDE
20.	PWC	ON	ALL	2	6.0 LPA	DATA SCIENTIST ENGINEER

Editorial: Dr. G. Apparao Naidu, Principal, Mr. P. Harikrishna, HOD, ECE., Mrs. V. Suzan Shalini, Asst. Professor, BS&H, Ms. M. Hemalatha, Asst. Professor, ECE. Contact Details: Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002, 96529 10003, Email: info@vmtw.in, www.vmtw.in