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Departmental News Letter

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A VOICE OF ELECTRONICS AND COMMUNICATION ENGINEERING









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D.N.R. COLLEGE OF ENGINEERING & TECHNOLOGY

Balusumudi, Bhimavaram - 534 202 W. G. DIST.

Department of Electronics and Communication Engineering

VOLUME I ISSUE 1

DEPARTMENT VISION & MISSION

VISION

To be a recognized center for innovation in Electronics & Communication Engineering with ethics in research and serving society.

MISSION

DM1: Impart knowledge skills on state-of art technologies aligned to address industry and society needs.

DM2: Organize activities to inculcate self-learning lifelong learning, team spirit and professional ethics.

DM3: Provide quality environment, promoting research innovation and entrepreneur skills.

Program Outcomes (PO's)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Ability and skills to effectively use state-of-the-art techniques and computing tools for analysis, design and implementation of computing systems which resolve real life problems.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues, and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PO9: Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Make effective presentations and give and receive clear instructions. with society at large. Be able to comprehend and write effective reports documentation.

PO11: Project management and finance: Demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team. Manage projects in multidisciplinary environments.

PO12: 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.

Program Educational Objectives (PEOs)

PEO1: Demonstrate the educational foundation needed for professional career/higher studies in the field of Electronics and Communication Engineering

PEO2:Provide solutions for the real time problems with the ever-changing industry requirements.

PEO3: Develop attitude for life long learning and practice the profession with integrity and responsibility

Program Specific Outcome's (PSO's)

PSO1: Design and provide solutions in Power Electronics and Power Systems.

PSO2: Demonstrate renewable energy technologies for growing energy demand.

FACULTY PUBLICATIONS

Mr.Y.Srinivas published Real Time Number Plate Recognition System Using Hybrid Models Applications in journal IJSDR Vol.4,Issues 8, Aug-2019 ISSN No: 2455-2631.

"https://www.ijsdr.org/papers/IJSDR1908001.pdf".

Mrs.Dr.S. Koteswari published Energy Efficient Low- Density Adder For Enhanced DSP Applications in journal JETIR Vol.6,Issues6, June2019.

https://www.jetir.org/papers/JETIR1906O03.pdf



. In proposed paper, approximate reverse carry propagate adders are used which propagate

carry from most significant to LSBs. The reverse carry propagation provided higher stability in delay variation.

The proposed Paper presents a new approach for number plate recognition system to extract details from license plates. It was decomposed into three stages. The first stage was to extract number plate region from the captured image. Then top- hat transformation technique is used for this purpose. Second stage is to segment the extracted number plate characters by using Blob analysis. And final stage is to recognition the segmented characters using template matching. Further, extractions of number plate region in adverse conditions were considered. Top-hat transformation technique is used to eliminate some adverse conditions such as rain, dust, different fonts, extra characters on the number plate and skewed input cars

EVENTS ORGANIZED

> A **Block** Workshop Chain on **Technology** conducted was by Professor SIET, Dr.M.N.Rao, Seetharampuram, West Godavari on 27.07.2019.



A Workshop on Advanced Python Programming was conducted by Mr. B. Yakub Associate Technical Lead, CyberaegisT Solutions Pvt.Ltd., Hyderabad on 11.09.2019.



A one week value added course "Electronics Modules for Industrial applications using OP-AMP" was carried out from 20/09/2019 to 26/09/2019.





- A one week value added course on "MOSFET" was carried out from 02/09/2019 to 08/09/2019
- A one week Value added course or "Multisim" from 27/07/2019 to 02/08/2019



➤ A one day Training on **interpersonal skills** was conducted on 15/07/2019.



A one day Training on leadership qualities was conducted on 12/08/2019



➤ ENGINEER"S DAY has been celebrated and appreciation awards are presented in respective events on 15-0919.



INDUSTRIAL VISIT

➤ Industrial Training for batch 2016-2020 IV-I Cyclone Detection Radar Station, RTC Colony, Machilipatnam, Andhra Pradesh was carried out on 08-07-2019.



Outer visuals of Cyclone Detection Radar Station

Cyclone Detection Radar Station about Radar Station



The Machilipatnam Cyclone Detection Radar Station consisting of mainly three blocks.

- Remote Sensing & Radar Wind(RS/RW) Block
- TransreceiverBlock
- Measuring Weather Report Module Blocks

The Remote Sensing & Radar Wind (RS/RW) Block aims for regular diagnosis of weather moisture, wind speed, temperature, humidity and sun rise &sun shine.

The Trans Receiver Block contains radar operated with a Doppler effect consist of five blocks.

- Transmitter Chamber Box
- Cavity
- Klystron
- ReceiverChamberBox
- ControlUnit

The Measuring Weather Report Module Blocksconsisting of different Types of thermometers(mercury and alcohol)to measure temperature min and max and average of the day and also the status of rain fall by using the rain gauge and atmospheric pressure using Barometer etc., to evaluate different parameters of the atmosphere by using respective physical devices.



Photographs of Industrial Training/Tours organized During the Academic Year 2019-20 Cyclone Detection Radar Station, RTC Colony, Machilipatnam, Andhra Pradesh EVENTS ATTENDED-FACULTY

Mr. Kopalli Venkanna Naidu attended faculty development program on Next Generation wireless systems and networks-Theory to practice at Shri Vishnu



- Engineering College for Women (Autonomous), Bhimavaram from 01/08/2019 To 14/08/2019.
- ➤ Mr. V.Balaji attended faculty development program on Next Generation wireless systems and networks-Theory to practice at Shri Vishnu Engineering College for Women (Autonomous), Bhimavaram from 01/08/2019 To 14/08/2019.
- ➤ Mrs. S Koteswari attended faculty development program on **Research Methodology** S.R.K.R Engineering College, Bhimavaram from 08/07/2019 TO 12/07/2019
- ➤ Mrs. S V L Sowjanya Nukala attended faculty development program on **Research**Methodology S.R.K.R Engineering College, Bhimavaram from 08/07/2019 TO 12/07/2019

STUDENT PARTICIPATIONS

- ➤ Deedeepya has participated at the SHE BUILDS TECH "Mentorship Program",held on 10th and 11th august 2019 at KL University, Vijayawada, supported by Government of AP Youth Services and Girls in Tech Foundation.
- ➤ Sravani has participated at the SHE BUILDS TECH "Mentorship Program",held on 10th and 11th august 2019 at KL University, Vijayawada, supported by Government of AP Youth Services and Girls in Tech Foundation.

PLACEMENTS

- Mandadhi Swetha selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ S.Lakshmi Priyanka selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- > Seelaboina Sudheer selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ P.Venkata Sesha Sai selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ Karri Tulasi Sairam selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ Gudavalli Naga Sireesha selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ Varre Raja Rao selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ G Sriramanjaneyulu selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ Gandham Sai Srinivasu selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- Chakka Venkata Rama Manikanta selected in TCS as an assistant system engineer-trainee on 13/09/2019.
- ➤ Lakshmisetti Lakshmana raju selected in TCS as an assistant system engineer-trainee on 13/09/2019.

