### RAJARAJESHWARI COLLEGE OF ENGINEERING

# 14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru - 560 074. Karnataka



# NEWS LETTER SAMPARKA VANI



## **Electronics & Communication Engineering**





Dr. A. C. Shanmugam

RajaRajeswari College of Engineering established in the year 2006 under the shelter of Moogambigai Charitable and Educational Trust. RRCE is recognized by AICTE, New Delhi and is affiliated to Visvesvaraya Technological University Belagavi, Karnataka

The Department of Electronics and Communication Engineering of RRCE was established in 2006 with an initial intake of 60 students to the Under Graduate program and enhanced to an intake of 120 students in the year 2013 -14. The department is also has a recognized Research Centre by VTU from 2016.



Sri. A.C.S.Arunkumar Vice-Chairman RRGI



Dr. R Balakrishna

With these activities on-hand, the overall objective of the department is to contribute significantly, to the realization of the Vision of RRCE. We are also collaborating with industries such as Karnataka Hybrid Micro Devices, Win global Tech, Bangalore, Apsis Solutions and many more.

All the activities are held through professional societies like IEEE, ISTE, IETE or Departmental club. Department is accredited by NBA for 9 years under TIER-II from 2016-2025 and NAAC with A+ Grade.



Dr. Rangaiah L Professor and Head, ECE, R.R.C.E.

#### **Editors note**

We are happy to launch the department of Electronics and Communication Engineering newsletter "SAMANVAYA". We're keeping in touch digitally with our students, Professors, Alumni's, and business partners through our newsletter. This newsletter will showcase the department's initiatives and successes. Additionally, it updates readers on the most recent departmental news and recent departmental events. We would like to thank all of our Teaching & non teaching staff, students, Management for their unwavering support and encouragement.

Dr. Rangaiah L , Professor and Head, Dept of ECE Prof. Chaithanya S, Assistant Professor, Dept of ECE

#### Congratulations!!

"Success is the fruit of hard work pursued with energy, intelligence, and determination." No wonder you have made it!



"RRCE Management, Faculty and staff congratulated the Electronics and Communication Engineering Department team for getting NBA Accredited!!

Management have expressed their happiness on the well-deserved success of the department. The under the department guidance of Dr L Rangaiah, HoD, the team have been unwaveringly committed to excel and provide the best to the students. All the hardships involved have been fruitful with NBA Accreditation sanctioned to the department for three years. The achievement has boosted the commitment to excel. The appreciation received from the expert team at the Institutional and Department level has added delight to the happy moment.



#### PROGRAM EDUCATIONAL OBJECTIVES

#### PEO 1-Skill and Knowledge

To impart students with a strong background in the basic science, mathematics and electronics and communication engineering fundamentals required for solving engineering problems.

#### PEO 2 -Lifelong learning

To train students with good scientific and engineering breadth so as to comprehend, analyze, design, and provide technical solutions for the real-life problems.

#### **PEO 3- Attitudes**

Exercise excellent leadership qualities to address issues in a responsible, ethical, and innovative manner with continuous learning and broader societal context.

#### **PROGRAM SPECIFIC OUTCOMES**

#### PSO<sub>1</sub>

Understand the principles of Electronics and Communication Engineering and enrich knowledge in recent advancements and developments in Electronics and Communication Technology.

#### PSO<sub>2</sub>

Competent in programming and computing skills, ability to apply software development methodologies and modelling to solve real world problems in the field of Electronics and Communication Technology.

#### **VISION**

Our aim is to provide a program of high quality to produce creative technocrats and also establish an excellent R & D Centre to pursue research in the frontier areas of Electronics and Communication Engineering.



#### **MISSION**

To emerge as a centre of excellence in the field of Electronics & Communication Engineering, the graduates able to produce innovative solutions to the needs of the society, cognizant to the universal moral values, and adherent to the professional ethics.







## INDUSTRIAL VISIT

### Visvesvaraya Rain Harvesting Theme Park

Date: 20-01-2023 and 21-01-2023 Venue: Visvesvaraya Rain Harvesting Theme Park Addressed by: Mr. Naveenth Objectives: The main objective is to create the awareness about to save rain water under the title of "Rain water Harvesting" for the students.





The following mentioned titles are discussed by the guest speaker which are: Usage of water supply in our state Water scarcity Types of harvesting Protective measures Awareness The session was extended with some discussion from the students Along with that he showed Various designs of harvesting model and he has explained each and every models with demo

Total Number of participants: 3 faculties + 108 students







## TECHNICAL TALK

Role of Communication and Information for Industry 4.0

**Resource Person** 

Mr. K.S. Srikanth
Validation Architect Safety Intel
Technologies Bengaluru



#### **Major Session Contents:**

Mr. K.S. Srikanth gives a strong reason for the ECE students about why they should be proud about their Branch. He gave a clear visualization and analysis of the future that was waiting for the students. In this growing and era of "Communication and Information Industry 4.0", we should be ready with new innovation and ideas to change the world and make it a better place. The session thought about the knowledge we should have to do something great in the industry and not just learn for the sake of marks. It will be helpful for the faculties and researchers working in the areas of ECE for Electronics vision and analysis applications. He explains the few topics they are From Wheel to Industry 4.0, Smart Sensors leading to a Revolution, Trends and Opportunities, Industry 4.0 Formation, Embedded, Cyber physical and IoT, Evolution of wireless communications. Importance of reducing power consumption, Research Challenges and Job options



#### **Objective:**

- The main aim of the session was to explain the role of Communication and Information for Industry 4.0 to our Electronics and Communication Engineering students. How the students should get ready in this situation to grab the opportunities to build their career. The objective of this program is to learn
- what is Industry 4.0 communication
- What is the major role of Industry 4.0 in industry sector
- Industry 4.0 Formation
- Embedded, Cyber physical and IoT
- The Evolution of wireless communications



Date: 17th December 2022

Venue: APJ Abdul Kalam Hall, RRCE Total numbers of participants: 250

# Awarness Program on IPR under NIPAM 2.0

NIPAM 2.0

#### **Resource person**

Mr O Prasad Rao

Dy. Controller of Patents &

Design, Govr. Of India,

Chennai.

Date: 10-01-2023

Venue: APJ abdulkalam hall

(RRCE auditorium)

### Objectives:

The main objective is to create the awareness about the IPR (Intellectual Property rights) under the title of "Awarness program on IPR under NiPAM 2.0" for the faculties and students.

The following mentioned titles are discussed by the guest speaker which are:

- Patents
- Designs
- Trade Marks
- Geographical Indications (GI)
- Copyrights
- Semiconductor Integrated
- Circuits Layout-Designs (SICLD)







- The session was extended with some discussion from the audience.
- Along with he gave some tips about the validity, Career opportunities and some quize and Q&A sessions was conducted by the guest speaker.

# Technical Talk on "Introduction to IOT"

#### **Resource person**

Mr Nitin Awasti
Chief Executive Officer
ARCAPSIS Solutions,
Bengaluru

Date:7th Jan 2023

Time: 10:30 AM to 12:30 PM

Venue : Sathyendra Bose Hall, ECE

Department, RRCE, Bengaluru.

Organizer: Dr. L. RANGAIAH,

Professor & HOD (ECE)

Faculty Co-ordinator: Dr.

Sunitha.R, Associate Professor,

Dept. of ECE

### Objectives:

- 1) Insights into the bright and exciting future of the Internet of Things (IoT)
- 2) The course will familiarize with IoT concepts, its origin, impact, methodologies and tools

#### Outcome:

- 1. Define the term "Internet of Things"
- 2. State the technological trends which have led to IoT
- 3. Describe the impact of IoT on society
- 4. Define what an embedded system is in terms of its interface















## TECHNICAL TALK

Recents Trends in AI & ML an Industry Perspective

Mr. Venkata Reddy P.S Senior Developer, SAP Labs, Bangalore

**Resource Person** 



#### **Major Session Contents:**

The speaker explained about the artificial intelligence and machine learning which represents an important evolution in computer science and data processing that is quickly transforming a vast array of industries.

He also spoke about the major role of electronic engineers who entered these fields work on designiing, constructing, maintaining, and improving robotics and ai systems, such as using machine learning to deliver more accurate results.

He further explained the growth and evolution of Al in past few years.

Al evolved into a powerful tool that enables machines to think and act like humans.

Moreover, it has garnered focus from tech companies around the world and considered next significant technological shift after the evolution in mobile and cloud platforms.



#### **Objective:**

The main aim of the session was to explain the role of Recent Trends in Al & ML to our Electronics and Communication Engineering students was that how the students should get ready in order be flexible to the upgrading world. The objective of this program is to learn

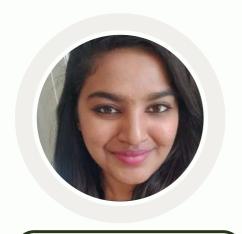
- what is AI & ML
- What is the major role of Electronics Engineers in it
- AI & ML Growth
- The Evolution Al



Date: 10th March 2023

Venue: APJ Abdul Kalam Hall, RRCE Total numbers of participants: 270

## **ALUMNI VOICE**



Pavithra kumar

#### Pavithra kumar

BE-ECE(Electronics & Communication) (2017 - 2021)

Company: HCL Technologies
Project: Google Pixel
Designation: QA test Engineer

I am so grateful to be a part of RRCE, My department encouraged me to explore my talent & potential by providing a great learning environment. I am really grateful to my teachers who have changed my whole aspect towards learning. I express my heartfelt thanks to the institution for giving me the perfect opportunity to explore myself and to find true leader in me.

I will remember my Engineering life for the rest of my life because I gained many memories and friends for life.

# H R Sowndarya BE-ECE(Electronics & Communication) (2018 - 2022) Company: 6D Technologies Designation: Implementation Engineer

Four years of my college life filled with lots and lots of memories that I will cherish forever. All the faculties in our department always provided us with continuous support and guidance .Our college provided many soft skills programs, encouragement that helped me to groom myself .I'm glad that I was part of such an Institute that always focused on student welfare development. Thank you so much RREC you're the main reason for what I'm today and learnt the meaning of Life." I am thankful to faculty members for the effort and support. They always motivated and encouraged me" .



**H R Sowndarya** 

# Gagana M BE-ECE( Electronics And Communication) (2018-2022) Company: DNATA Domain: Aviation



Gagana M

"You can't go back and change the beginning, but you can start where you are and change the ending"

I feel proud that I am an alumni of RRCE. My department is still in tough will all their alumni's and will take a step forward and welcome our reviews. My journey in my dept was so enjoyable with all the faculties and our beloved HOD. Without their cooperation in making us feel better in all the subjects probably we would not have felt our subjects are easy to understand. Learning in ECE dept was like playing with subjects and all the credits of making our subjects feel like games goes to our respected faculties. But the only guilt we have is about corona where we couldn't experience the best times of our life for 2 years. But we have the best supporters in all aspects where they motivate you for all the criteria's including your cocurricular activities as well. Overall my dept gave us the best life of engineering which we will cherish for the rest of our lives.