



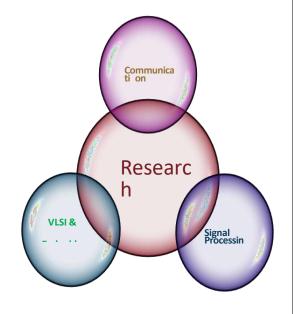
#### The Way Forward:

#### **VISION:**

To evolve into a premier technological and research institution, moulding eminent professionals with creative minds, innovative ideas, and sound practical skill, and to shape a future where technology works for the enrichment of mankind.

#### MISSION:

To impart state-of-the-art knowledge to individuals in various technological disciplines and to inculcate in them a high degree of social consciousness and human values, thereby enabling them to face the challenges of life with courage and conviction.





#### About the Department

**HOD: Dr. Jisa David** 

VLSI Research Group:

Dr Jobin K Antony

Communication Research Group:

Dr. Jaison Jacob

Signal Processing Research Group:

Ms. Harsha A

Editor:

Ms. Shivya MK

Staff Activities:

Mr. Abhishek Viswakumar

Staff Activities Publications:

Ms. Shivya mk

Student Activities

Mr. Rony Antony

Placement Activities:

Mr. Kiran K A

**Short Term Courses:** 

Dr.Simi Zerine Sleeba

Lab new S/W & H/W:

Mr. Abhishek Viswakumar

Mentoring Activities: Ms. Preethi Bhaskaran

Alumni Activities:

Mr. Bonifus P L

**Industry Interactions:** 

Mr. Karunakara P Menon

### From the HOD's Desk

Welcome to the Dept. of ECE, at RSET, Kochi. This newsletter will be covering departmental activities of staff and students and the major milestones achieved.

In the month of December 2023, the major activities of our department

## **Student Achievement in Sports**

Anamika PS(S1-ECE) has earned the honor of representing Kerala Technological University in the prestigious South Zone Inter University Kho-Kho Championships.



## **Success at SAE Convention**

Pranav K, a student of S5 ECE Gamma, has emerged as one of the three winners at the SAE (Society of Automotive Engineers) Convention organized by SAE-RSET. We extend our warmest congratulations to Pranav K for his remarkable achievement at the SAE Convention. As he prepares for the tier 3 competitions, we offer our heartfelt best wishes for continued success and triumphs in his future endeavors.





Hands-on Workshop on

# ADVANCES IN ROBOTICS: MOBILE ROBOTICS & ROS

Organized by

Department of Instrumentation & Department of Electronics Cochin University of Science and Technology





### Workshop Content

- ❖ Mobile manipulators in the modern world.
- ❖ Need of mathematical modelling in Robotics
- ❖ Introduction to ROS tools and ready to use frameworks in ROS like Navstack, Movelt etc.
- ❖ ROS Concept which includes Subscriber Publisher, Service, ActionLib & Parameter server.
- Driving the Turtlesim With ROS commands.
- ❖ Introduction to ROS CLI usage.
- ❖ Demo of ROS based Mecanum wheel robot.
- ❖ Introduction to making autonomous navigation robots using ROS.
- ❖ Explanation on how to convert the 3D model into URDF for simulation in Gazebo.
- ♦ How to add Gazebo plugins in order to drive the 3D model as well as add sensors to it.



- ❖ Perform autonomous navigation with the designed robot model.
- ❖ Showcasing of a Fully finished Delivery robot, the manufacturing and design process, how a GUI was built on top of ROS.

We were privileged to have Jerin, a former student of the Electronics department at Rajagiri School of Engineering and Technology, leading a section of the workshop.



# Celebrating the Festive Spirit in the ECE Department

Greetings! The Electronics & Communications (EC) Department celebrated the festive season with great enthusiasm and joy!



Department was adorned with vibrant decorations, including twinkling lights and festive wreaths, creating a cheerful atmosphere for all.

A delicious Christmas feast was enjoyed by everyone, featuring a variety of traditional and modern treats.









# ECE Newsletter December 2023 RSET RAJAGIRI SCHOOL OF RINGINEERING & TECHNOLOGY (AUTONOMOUS)

# Faculty Celebrate Christmas with Heartwarming Gift Exchange!





As we reflect on the joyous celebrations, let's cherish the memories of togetherness and goodwill shared during this festive season. From the ECE Department, warm wishes for a Merry Christmas and a Happy New Year to all!