

School of Computer Information and Mathematical Sciences

Department of Computer Science and Engineering

Code Connect and Control Workshop

28th Aug 2024 - 29th Aug 2024

Venue: IoT laboratory

Time: 9:10 am to 4.00 pm



School of Computer Information and Mathematical Sciences

Event Report

Name of the Event : Code Connect and Control

Date : 28th Aug 2024 – 29th Aug

2024

Venue : IoT laboratory

Total number of participants who attended

the workshop: Day 1 -15, Day 2 - 16

Multimedia and Robotics Club of the Department of Computer Science and Engineering, B .S. Abdur Rahman Crescent Institute of Science and Technology organized a Code Connect and Control workshop from 28th Aug 2024 to 29th Aug 2024. In the "Build Your Own RC Car" robotics workshop, participants will embark on an exciting journey to construct their own remote-controlled cars. The session was conducted with the assistance of our esteemed faculty members Dr. R. Akila Associate professor, Ms. A. Snegaa Assistant Professor, Mrs. A. Saraswathi Assistant Professor, Mrs. M. Latha Assistant Professor, Mrs. C. Jeeva Assistant Professor, Ms. Varsha Vardhini Assistant Professor, Mr. R. Ram Deepak Assistant Professor and students including Mr. M. Sarathi Ganesh from B. Tech CSE (IoT) 4th year, Mr. Rohan A from B.Tech CSE(IoT) 4th year who shared their knowledge and experience in the fields of building up the RC Car.

Objective:

Understand RC Car Components: Gain knowledge about the various parts that make up an RC car, including the frame, motors, receiver board, and transmitter.

Mechanical Assembly Skills: Develop hands-on skills in assembling the car frame and attaching motors, ensuring a solid and functional build.

Basic Electrical Wiring: Learn the fundamentals of electrical connections, including wiring motors to the receiver board and maintaining proper polarity.

Wheel Alignment and Testing: Acquire the ability to align wheels correctly and test their performance, making necessary adjustments for optimal operation.

Radio Communication Basics: Understand the principles of radio communication by pairing the RC car with the transmitter and learning to control it remotely.

Control Mastery: Practice and master the skills needed to makeover the RC car, including steering, acceleration, and reversing.

Troubleshooting and Customization: Develop problem-solving skills to address any issues that arise and explore ways to further customize and improve the RC car.

Certification and Achievement: Complete the workshop with a fully functional RC car and receive a participation certificate, recognizing the skills and knowledge gained.

Topics discussed:

In the robotics workshop conducted by Mr. M. Sarathi Ganesh and Mr. Wasim Shaikh, the topic discussed the "Build Your Own RC Car", participants will embark on an exciting journey to construct their remote-controlled cars. The workshop begins with a warm welcome and an introduction to the components and safety guidelines. Participants will then dive into the mechanical assembly, putting together the car frame and attaching the DC motors. Following this, they will learn the basics of electrical wiring, connecting the motors to the receiver board with careful attention to polarity and neatness. Once the wheels are aligned and tested for optimal performance, the focus shifts to pairing the RC car with the transmitter, covering the essentials of radio communication. Participants will then practice controlling their cars, mastering steering, acceleration, and reversing. The session concludes with a Q&A segment for troubleshooting and tips on further customization, ending with a recap and the

distribution of participation certificates. By the end of the workshop, attendees will have a fully functional RC car and a solid foundation in mechanics, electronics, and wireless communication.

Outcome:

Enhanced Understanding of Robotics: Participants gained a solid foundation in the fundamental concepts of robotics, including the definition, types, and key components of robots.

Practical Knowledge of Robot Components: Attendees learned about sensors, actuators, and controllers, understanding their roles in detecting environmental changes, enabling movement, and managing functions.

Insight into Autonomous and Controlled Robots: The workshop provided clarity on how robots can be guided by external control devices or operate autonomously through internal control systems.

Awareness of Robotics Applications: Participants explored the versatility of robots in performing repetitive, dangerous, or difficult tasks across various environments, from industrial settings to outer space.

Introduction to Multimedia: The session on multimedia introduced participants to the integration of text, audio, images, animations, and video to create engaging and interactive experiences.

Improved Presentation Skills: Through Mr. Wasim Shaikh's guidance, attendees learned how to design compelling PowerPoint presentations, focusing on effective communication and visual appeal.

Real-World Applications: The workshop highlighted the practical applications of robotics and multimedia in communication, education, entertainment, and business, demonstrating their impact on various industries.

Career-Relevant Skills: Participants developed skills relevant to their future careers, including robotics assembly, multimedia design, and presentation techniques.

Brochure of the Workshop:



Participants Name

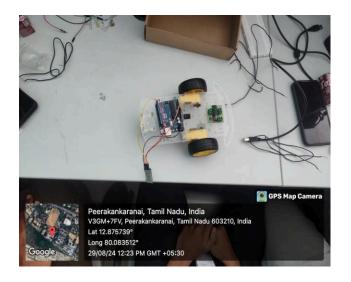
list: DAY 1

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DAY 2

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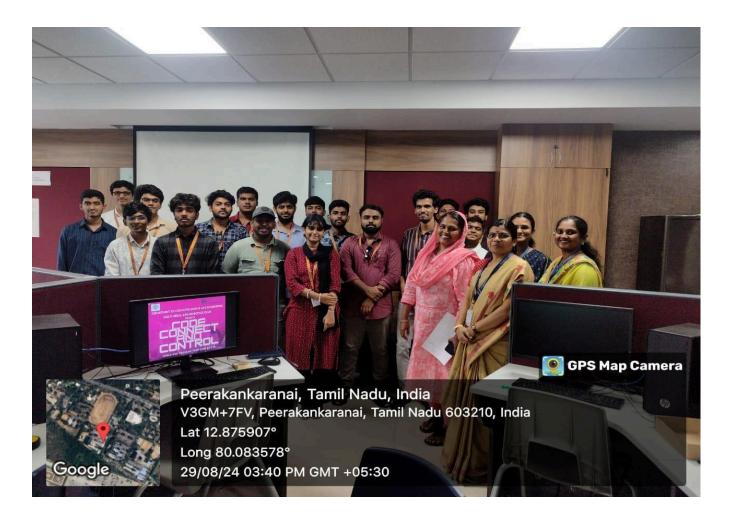
Pictures taken during the meeting:











"Crafting tomorrow's wonders, today: Dive into the world of Robotics and Multimedia with us"

Faculty coordinators

Dr. R. Akila, Asso.Prof/CSE

Ms. A. Snegaa, AP/CSE

Mrs. M. Latha, AP/CSE

Mrs. A. Saraswathi, AP/CSE

Mrs. C. Jeeva AP/CSE

Dr. Varsha Vardhini, AP/CSE

Mr. R. Ram Deepak, AP/CSE

Convenor

Dr.W.Aisha Banu, HOD/CSE