

**School of Computer Information and  
Mathematical Sciences**

**Department of Computer Science and Engineering**

**Robo Building  
Workshop**

**14<sup>th</sup> October 2024**

**Venue: AI & ML Lab**

**Time: 2.30 PM – 4.00 PM**



**School of Computer Information and Mathematical  
Sciences**

## Event Report

Name of the Event : Introduction to Robo Building

Date : 14<sup>th</sup> OCT 2024

Venue: AI & ML Lab

Total number of participants who attended the workshop:

Multimedia and Robotics Club of the Department of Computer Science and Engineering, B.S. Abdur Rahman Crescent Institute of Science and Technology organized a An Introduction to Robo Building workshop on 14<sup>th</sup> OCT 2024. In the Introduction to Robo Building workshop, participants will embark on an exciting journey to construct their own Robots. 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. Jushwanthh Nikkesh B J from B. Tech (Ai & Ds) and Mugilan B from B. Tech (Ai & Ds) 3<sup>rd</sup> year who shared their knowledge and experience in the fields of Robo Building.

### Objectives:

- **Understanding Core Robotic Components:** Familiarize participants with fundamental components like sensors, actuators, control boards, and basic robotics framework.
- **Basic Automation and Control Systems:** Introduce participants to the concepts of automation, including selecting appropriate technologies and integrating control systems into robotic structures.
- **Hands-On Assembly and Wiring Skills:** Develop practical skills in assembling the robot's frame, attaching actuators, and connecting wiring with attention to polarity and control.

- **Practical Testing and Debugging:** Teach testing protocols to ensure robot functionality and introduce techniques for identifying and addressing common issues.
- **Introduction to Robot Navigation:** Cover essential navigation techniques, emphasizing control system programming for sensor-driven responses and effective steering.
- **Automation Maintenance Awareness:** Highlight the importance of maintenance and continuous improvement to optimize robot performance and reliability.

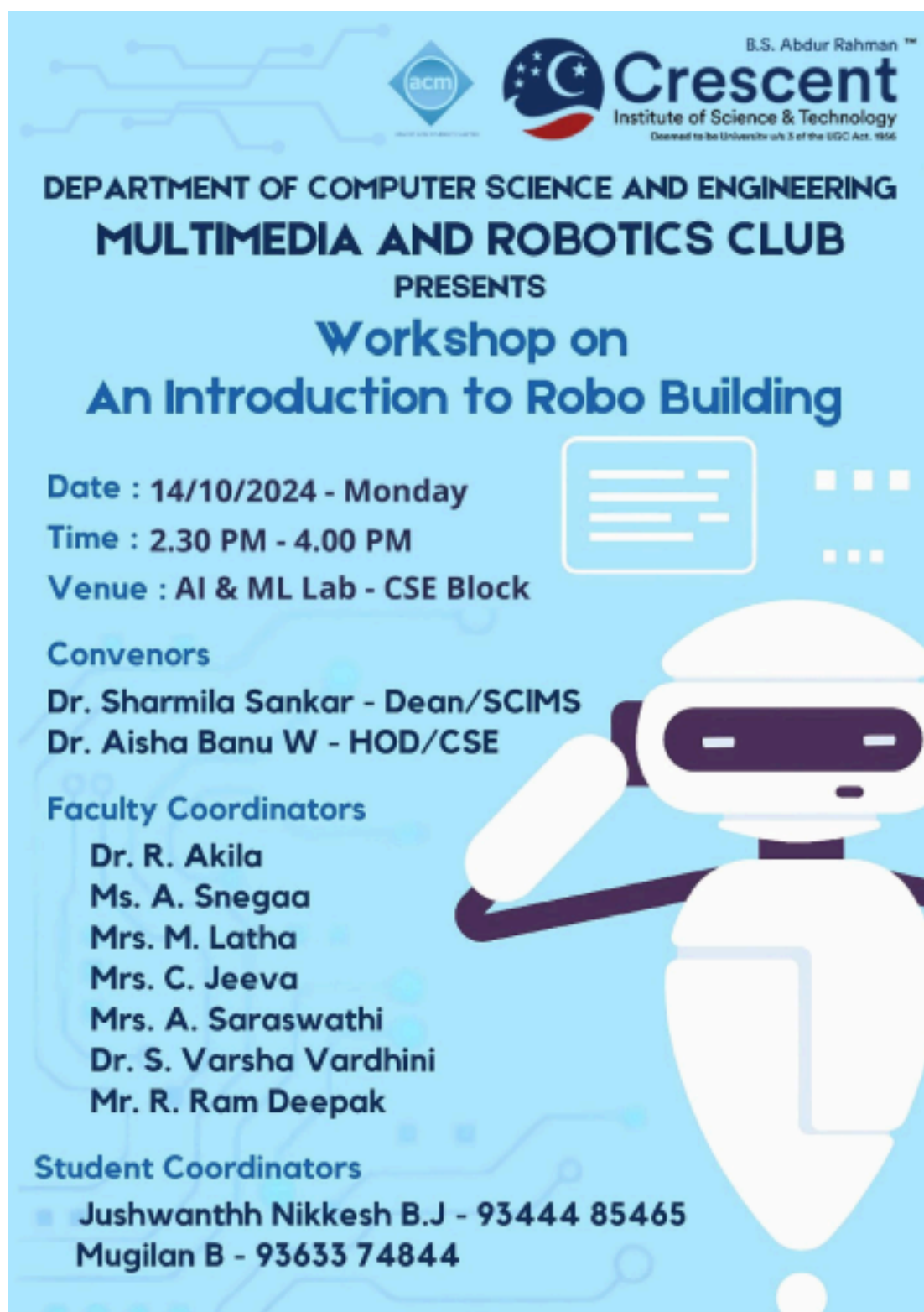
### **Topics Covered:**



The workshop, facilitated by experienced faculty and student mentors, included sessions on theory and practice. Participants started with an introduction to robotic components and automation, focusing on real-world applications in robotics and automation fields. The practical session involved hands-on assembly and wiring, followed by calibration, testing, and debugging. Advanced sessions covered control systems, discussing fixed, programmable, and flexible automation options suited for various tasks. The workshop concluded with a discussion on troubleshooting and maintenance, reinforcing the importance of ongoing system improvements.

### **Outcomes:**

- **Robotic and Automation Knowledge Base:** Attendees gained a comprehensive understanding of robotic and automation principles, preparing them for further exploration in robotics.
- **Enhanced Practical Assembly Skills:** Participants acquired experience in assembling robotic systems, connecting actuators, and understanding control systems.
- **Competency in Debugging and Maintenance:** The workshop enabled participants to troubleshoot issues, perform regular maintenance, and ensure optimal robot performance.
- **Real-World Application Insight:** By exploring practical automation applications, attendees saw how robotics can impact industries like manufacturing and logistics.
- **Career-Ready Skills:** Participants developed valuable skills in robotics and automation technology, providing a foundation for future roles in AI and robotics.

### **Brochure of the Workshop:**



  **B.S. Abdur Rahman™**  
**Crescent**  
Institute of Science & Technology  
Deemed to be University u/s 3 of the UGC Act, 1956

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**MULTIMEDIA AND ROBOTICS CLUB**  
**PRESENTS**

**Workshop on**  
**An Introduction to Robo Building**

**Date :** 14/10/2024 - Monday  
**Time :** 2.30 PM - 4.00 PM  
**Venue :** AI & ML Lab - CSE Block

**Convenors**  
Dr. Sharmila Sankar - Dean/SCIMS  
Dr. Aisha Banu W - HOD/CSE

**Faculty Coordinators**  
Dr. R. Akila  
Ms. A. Snegaa  
Mrs. M. Latha  
Mrs. C. Jeeva  
Mrs. A. Saraswathi  
Dr. S. Varsha Vardhini  
Mr. R. Ram Deepak

**Student Coordinators**  
Jushwanthh Nikkesh B.J - 93444 85465  
Mugilan B - 93633 74844

**Participants Name list:**

14/10/2024

Robo  
Building  
Workshop

S.No	Name	RRN	Dept / Sec	Year	Signature
1.	Abdul Rouzeen	220191601001	CSE IoT	3	<i>[Signature]</i>
2.	Adni Marjanan	220191601002	CSE IoT	3	<i>[Signature]</i>
3.	Adnan Akmal	220191601002	CSE (IoT)	3	<i>[Signature]</i>
4.	Haroun Pillo	220191601016	CSE (IoT)	3	<i>[Signature]</i>
5.	Syad Chudlofa	220171601123	AI & DS 'B'	3	<i>[Signature]</i>
6.	Pavithran S	220171601024	AI & DS 'B'	3	<i>[Signature]</i>
7.	Tijah Schuler K	220171601125	AI & DS 'B'	3	<i>[Signature]</i>
8.	Safika M	220171601109	AI & DS - B'	3	<i>[Signature]</i>
9.	Nithiyaraj D	220171601082	AI & DS - B'	3	<i>[Signature]</i>
10.	Meharaj Yograj S	220171601060	AI & DS - A'	3	<i>[Signature]</i>
11.	Vishwanath M	220171601121	AI & DS - B	3	<i>[Signature]</i>
12.	JANJANA R-B	220171601097	AI & DS - B'	3	<i>[Signature]</i>
13.	BASHEER JIMOL M	220191601009	CSE - IoT - A'	3	<i>[Signature]</i>
14.	ANNA JEES .JP	220191601006	CSE - IoT - A	3	<i>[Signature]</i>

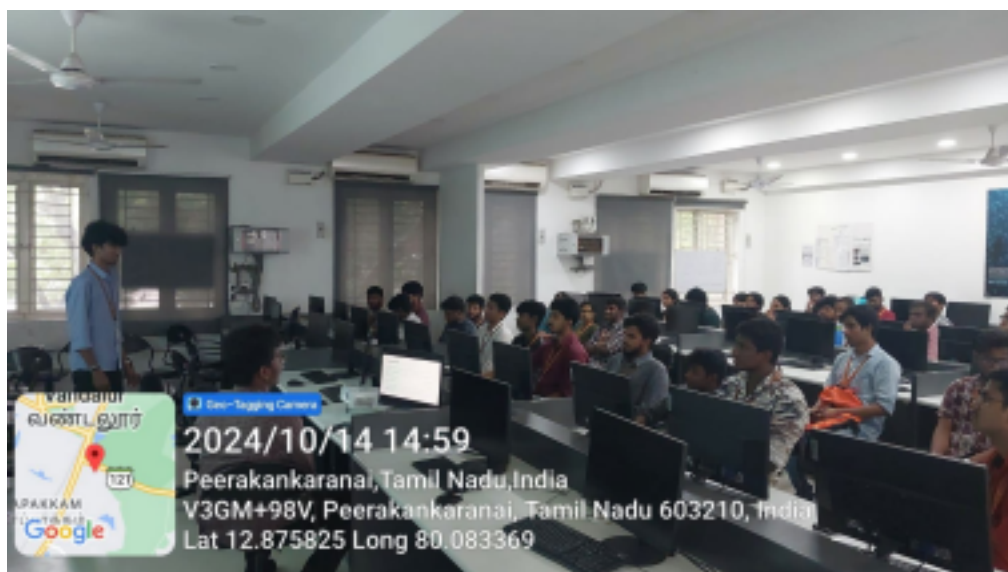
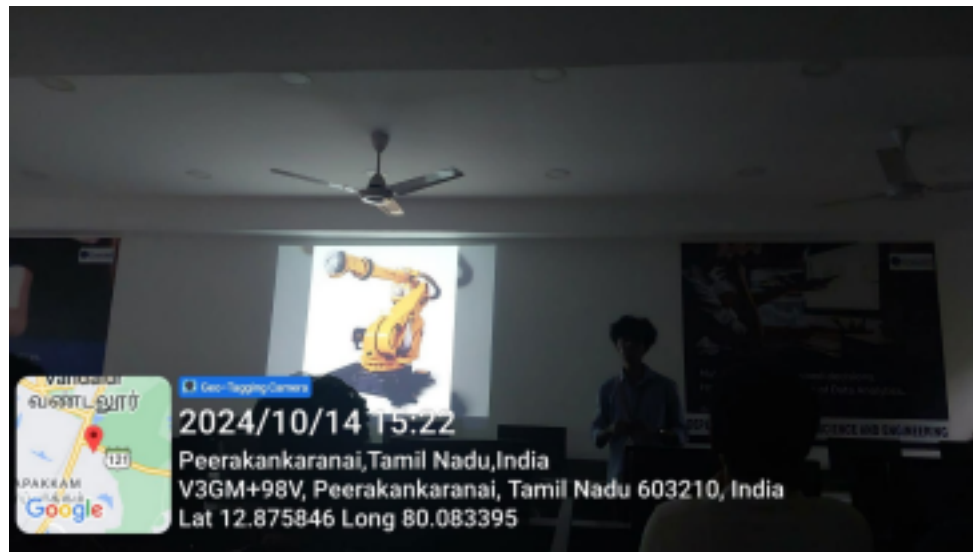
S.No	Name	RRN	Dept / Sec	Year	Signature
15.	DINESH .Y	220191601081	CSE - IoT - A	3	<i>[Signature]</i>
16.	Alan Joshua P	220191601007	CSE - IoT - A	3	<i>[Signature]</i>
17.	Akash M-b	220191601005	CSE - IoT A	III	<i>[Signature]</i>
18.	A Lubna Fathima	220191601030	CSE - IoT A	III	<i>[Signature]</i>
19.	S.Indiyaa	220191601021	CSE - IoT A	III	<i>[Signature]</i>
20.	Immanet Nona	220191601021	CSE - IoT A	III	<i>[Signature]</i>
21.	KUSHIKA M	220191601029	CSE - IoT - A	III	<i>[Signature]</i>
22.	Gowhan Ahalid Kona	220191601015	CSE - IoT - A	III	<i>[Signature]</i>
23.	Mohamedumar .B	220191601041	CSE - IoT - A	3	<i>[Signature]</i>
24.	Rathna . C-K	220191601049	CSE - IoT - A	3	<i>[Signature]</i>
25.	Magdalena Pardin S	220191601031	CSE - IoT - A	3	<i>[Signature]</i>
26.	Shadhifa Sherwood Sana	220191601022	CSE - IoT	3	<i>[Signature]</i>
27.	Mohamed Yousuf M H	220191601036	CSE - IoT	3	<i>[Signature]</i>
28.	Mohamed Sofan M I	220191601035	CSE - IoT	3	<i>[Signature]</i>

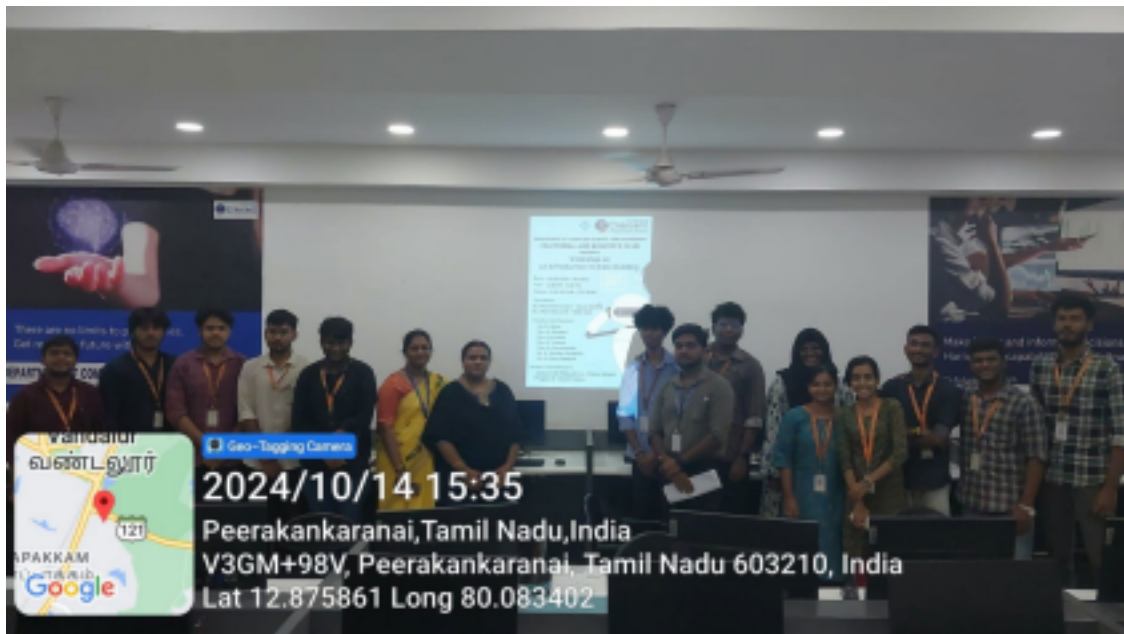
S.No	Name	RRN	Dept / Sec	Year	Signature
29.	Mohammed Shait	220191601040	CSE-10T	3	Shait
30.	Saleem Sulaiman Khan	220191601053	CSE-10T	3	Saleem Sulaiman
31.	Mohamed Ralyan	220191601039	CSE-10T	3	Ralyan
32.	THANIG RASIA	220191601059	CSE-10T	3	RASIA
33.	VED TUFIL NIMED	220191601056	CSE-IOT	3	TUFIL
34.	Karishma Bannu .J	220191601027	CSE-IOT	3	Karishma
35.	Mohamed Ibrahim	2201916010238	CSE-10T	3	Ibrahim
36.	Ranjith . D	220171601088	AI & DS 'B'	3	Ranjith
37.	Drishya Anand	220171601126	AI & DS-B	3	Drishya
38.	M.Rishat Daluwa	220111602005	AI and DS 'B'	3	Rishat
39.	R. Hemnath	220191601019	CSE-IOT-A	3	Hemnath
40.	Vibanjika	220191601060	CSE-10T	3	Vibanjika
41.	Roshini	220191601052	CSE-10T	3	Roshini
42.	M. Arthika	220191601051	CSE-10T	3	M. Arthika
43.	Karishma	220191601027	IOT	3	Karishma

S.No	Name	RRN	Dept / Sec	Year	Signature
44.	Mohamed Riza	220191601035	B.Tech CSE-IOT	3rd	Riza
45.	S. Rakesh Bharathi	220191601047	B.Tech CSE-IOT	3	Rakesh Bharathi
46.	Shakthi Ramesh	220191601057	B.Tech CSE-IOT	3	Shakthi
47.	Methan Kumar . S	220191601082	B.Tech CSE-IOT	3	Methan
48.	Mohammed	220191601054	B.Tech CSE-IOT	3	Mohammed
49.	Mohammed Salwan	220191601070	B.Tech AI&DS	3	Salwan
50.					
51.					
52.					
53.					
54.					
55.					
56.					

Pictures taken during the Workshop:







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

**Faculty coordinators Convenor** Dr. R. Akila, Asso.Prof/CSE Dr.W.Aisha Banu, HOD/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