

RajaRajeswari College of Engineering

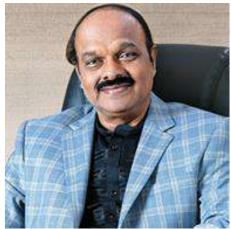
#14, Ramohalli Cross, Kumbalagodu, Mysuru road, Bengaluru - 560 074 (Approved by AICTE, New Delhi. Affiliated to the Visvesvaraya Technological University, Belagavi)

Department of Robotics and Automation NEWSLETTER

Volume:1 Issue: 1

CYBORGS 2021-2022

Chief Patron



Dr.A.C.Shanmugam, B.A.LLB, FIMSA, FRCPS (Glasgow,UK) Former MLA., MP., Chairman, RajaRajeswari Group of Institutions.



Mr.A.C.S.Arunkumar B.Tech (Hons), LMISTE,MIET., (UK).,LMCSI., MIEEE, MCSI, MISTE, CEngg(India), Vice-Chairman, RajaRajeswari Group of Institutions.

Patrons

Dr.S.Vijayanand, M.Tech, Ph.D., Executive Director RajaRajeswari Group of Institutions.

Dr. S.Jeyabalan, M.E., MBA., Ph.D., Special Officer RajaRajeswari Group of Institutions.

Principal

Dr.T.Chandrasekhar, Ph.D., RajaRajeswari College of Engineering

Head of the Department Dr.M.Karthikeyan, Ph.D., HOD-R&A

We express our utmost gratitude to the Management, Principal, Dean R&D, and Vice Principal for their unwavering encouragement, inspiration, and support throughout the compiling and release of our latest newsletter - "CYBORGS 2021-2022". Their constant support has been an essential driving force in bringing this publication to fruition.

Department at a Glance

The Department of Robotics and Automation was started in the academic year 2021-2022 with an intake of 60 students.

The department boasts a team of highly qualified faculty members, possessing extensive experience in diverse fields of engineering.

Robotics and Automation program is aimed at the Plan, Design, Construct, Operate and effective & independent usage of robotic devices. It is learned further the utilization of the computer systems required for its control, a sensor element, feedback, and information processing of Robotics and Automation devices.

The department is equipped with state-of-theart laboratories featuring advanced software, facilitating accurate and efficient results. Additionally, the department conducts numerous seminars, workshops, and Industry-Institute Interactions to enhance the students' knowledge.



Dr.M.Karthikeyan M.E., Ph.D., HOD-R&A



Robo Simulation



5 Axis Robot

Course Offered:

UG Programme:

Bachelor of Technology in Robotics and Automation -4 Years.

Department of Robotics and Automation

VISION

To develop technically skilled Robotics and Automation engineers with the systems & multidisciplinary approach in-line with the dynamic technologies for the competitive solution to the society.

MISSION

- To provide a technical education through an effective teaching-learning process to meet the industry requirement.
- To teach the process of designing, creating, and using robots to perform a certain task in problemsolving skills and up-gradation of knowledge through a project-based approach in collaboration with industries.



Faculty Publications 2021-22

1. M. Karthikeyan, K.Arul Raj, D.Narmatha," Investigation of Mechanical and wear properties of Cu-Coconut Shell ash alloy prepared by Powder Metallurgical Technique", Journal of Algebraic Statistics, Volume 13, No 3, 2022, p.5394-5408, ISSN 1309-3452. https://publishoa.com/index.php/journal/issue/view/17. Indexed in Emerging Souces Citation (Web of Science) Clarivate Analytics.

Universal Human Value programmes

Visvesvaraya Technological University has introduced the course Universal Human Values (UHV) for the 4th Semester students of all UG programmes under the scheme of 2021 for the academic year 2021 -22.

The following list of faculty members of the Department of Robotics and Automation has participated and obtained the certificate from AICTE and to be eligible to teach the subject UHV

Sl No	Name of the Faculty	Designation	Department	Dates of the UHV programme attended
1	Dr. M.Karthikeyan	HOD D () A	Robotics and Automation	25 th to 29 th April 2022
2	Dr. M.Karthikeyan	HOD-R&A	Robotics and Automation	30 th Jan to 1 st Feb 2020

Department of Robotics and Automation Association inauguration

Department of Robotics and Automation Association members for the AY 2020-21

Chief Guest	Mr.Rajashekara H V	
	Advisor and Head	
	IMTMA Design Institute (BIEC)	
	10 th Mile, Tumkur Road, Madavara, Bengaluru - 562 123	
Day & Date of Programme	Wednesday, 3 rd August 2022	
Venue	Aryabhata Seminar Hall	



Department of Robotics and Automation association members for the AY 20 21 with the dignitaries

The following students were nominated as office bearers of the Department of Robotics and Automation Association for the Academic Year 21-22.

Sl No	USN	Name of the Students	Designation	
1	1RR21RA014	Mohan M K	President	
2	1RR21RA017	Nithyashree L	Secretary	
3	1RR21RA004	Charankumar K R	Treasurer	
4	1RR21RA003	Bhumika H S	Executive members	
5	1RR21RA018	Nithya B	Executive members	
6	1RR21RA015	Naveen Kumar S N	Executive members	
7	1RR21RA020	Suhas S Vasishta	Executive members	
Staff Incharge: Dr.M.Karthikeyan, HOD-R&A				

Department of Robotics and Automation Association inauguration

<u>Inauguration of the Department of Robotics and Automation Association</u>

Chief Guest	Mr.Rajashekara H V	
	Advisor and Head	
	IMTMA Design Institute (BIEC)	
	10 th Mile, Tumkur Road,	
	Madavara, Bengaluru - 562 123	
Day & Date of Programme	Wednesday, 3 rd August 2022	
Venue	Aryabhatta Seminar Hall	



Invitation











RAJARAJESWARI COLLEGE OF ENGINEERING

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

Department of Robotics & Automation Engineering

The Management. Staff Cordially Invites all for

Inauguration of
Robotics and Automation Engineering Association
&

Technical Talk on Industrial Automation for Digital Manufacturing

Chief Patron

Dr. A.C.Shanmugam

B.A. LLB, FIMSA, FRCPS (Glasgow, UK)

Chairman

RajaRajeswari Group of Institutions

Co-Patron

Sri. A.C.S Arun Kumar

B.Tech (Hons)., LMISTE., MIET., (UK)., LMCSI., MIEEE, MCSI, MISTE, Ceng (India)

Vice - Chairman

RajaRajeswari Group of Institutions

Chief Guest

Mr. Rajashekara H V

Advisor and Head IMTMA Design Institute, Benglauru

Date: 3rd August 2022 (Wed), Time: 11 a.m. to 1 .00 p.m Venue: Aryabhatta Seminar Hall

37 JOS 18

Dr. S. Vijayanand, M.Tech, Ph.D

Executive Director

RajaRajeswari Group of Institutions

Dr. Balakrishna R Dean, RRCE Sri. C.N Seetharam, IAS (Retd.)

Chief Executive Officer
RajaRajeswari Group of Institutions

Dr. Amutharaj J Dr.S.Usha
Vice- Principal, RRCE Dean - R & D, RRCE

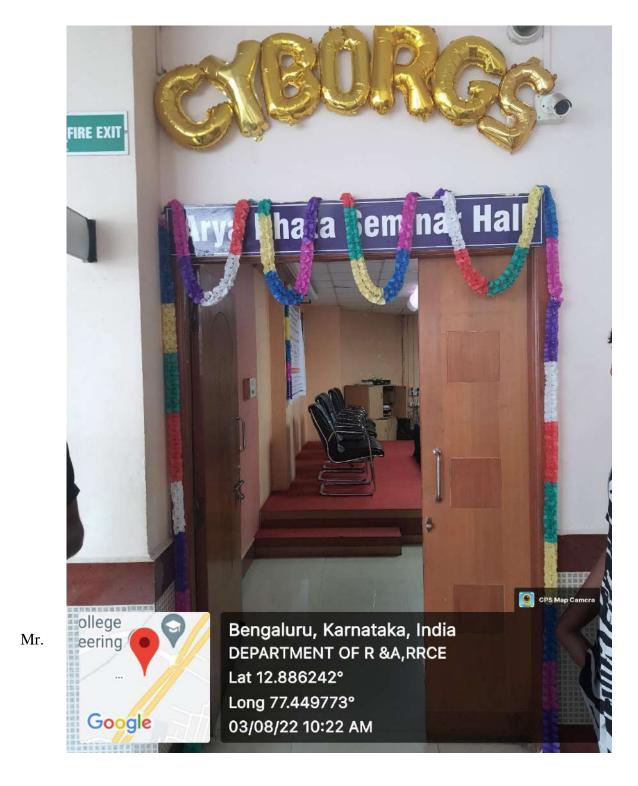
Dr. S. Jeyabalan, M.Tech, Ph.D Special Officer, RRCE

RajaRajeswari Group of Institutions

Dr.C.Ramesh Dr.M.Karthikeyan
HOD - Mech, RRCE HOD, R&A, RRCE

Dr.T.Chandrashekar Principal, RRCE

Geotagged Photos of the Programme



Entrance to the Hall for the inauguration of the Programme



Faculty and students during the Inauguration of the Department of Robotics and Automation association



Mr.Samvrudh N 1RR21RA019 welcomes the gathering



Chief Guest Mr. Rajashekara Inaugurated the Department of Robotics and Automation association by lighting the lamp.



Prayer song by the students



Ms. Nisanka Mansi Chandran 1RR21RA017and Ms Viha Trupthi S Pandit 1RR21RA022 l compering during the inauguration of the association.



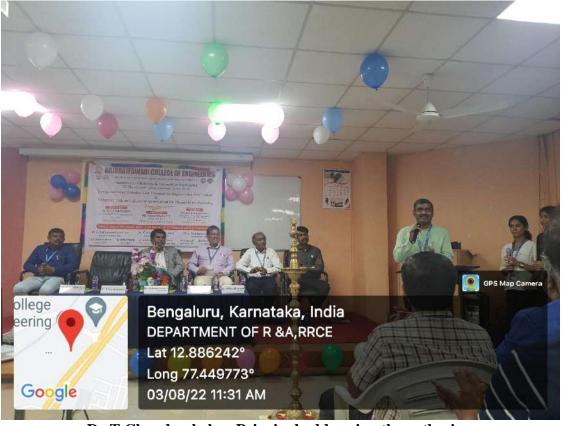
Ms. Nithashree 1RR21RA017 and Mr. Mohan MK 1RR21RA014 lit the lamp during the association's inauguration.



Principal Dr. T. Chandrashekar and Dr. C. Ramesh HOD-ME honoured the Chief Guest.



Chief Guest Mr. Rajashekara Inaugurated the Department of Robotics and Automation association digitally



Dr.T.Chandrashekar Principal addressing the gathering



Dr.J.Amutharaj, Vice-Principal addressing the gathering



Dr.C.Ramesh, HOD ME addressing the gathering

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Dr.M.Karthikeyan, HOD- R&A addressing the gathering



Ms. Nithashree 1RR21RA017 introduced the Chief Guest to the gathering



Mr. Rajashekara HV, Chief Guest addressing the gathering



Faculty members with Chief Guest and Principal



Department of Robotics and Automation association members for the AY 20 21 with the dignitaries



Students during the Robotics and Automation association inauguration

Academic Toppers in the Odd semester of the Academic Year 2021 -2022



Ms.Nithya B, 1RR21RA018 secured 90.3 % (1st Rank) in the first semester VTU exams is awarded a certificate and plaque



Ms.Viha Trupthi.S.Pandit, 1RR21RA022 secured 89.80 % (2nd Rank) in the first semester VTU exams is awarded a certificate and plaque



Ms.Bhumika, 1RR21RA003 secured 87 % (3rd Rank) in the first semester VTU exams is awarded a certificate and plaque



Ms.Nisanka Mansi Chandran, 1RR21RA016 secured 86.7 % (4th Rank) in the first semester VTU exams is awarded a certificate and plaque

CYBORGS-2021-2022



Ms.Jeevika D.K, 1RR21RA009 secured 85.7 % (5th Rank) in the first semester VTU exams is awarded a certificate and plaque

Department of Robotics and Automation Association logo



Academic Toppers in the Odd semester of the Academic Year 2021 -2022

Visvesvaraya Technological University examinations February / March 2022

1st Semester Class Toppers

CLASS TOPPER IN VTU 1ST SEMESTER EXAMS HELD DURING FEB / MARCH 2022



Ms.Nithya B 1RR21RA018 90.3% 1st Rank



Ms.Viha Trupthi.S.Pandit 1RR21RA022 89.8% 2nd Rank



Ms.Bhumika H S 1RR21RA003 87.0% 3rd Rank



Ms. Nisanka Mansi Chandran 1RR21RA016 86.7% 4th Rank



Ms.Jeevika D K 1RR21RA009 85.7% 5th Rank

Ms.Nithya B 1RR21RA018 has secured 1ST rank with 90.3%, Ms.Viha Trupthi.S.Pandit 1RR21RA022 has secured 2nd Rank with 89.8%, Ms.Bhumika H S 1RR21RA003 has secured 3rd Rank with 87.0%, Ms. Nisanka Mansi Chandran 1RR21RA016 has secured 4th Rank with 86.7%, Ms.Jeevika D K 1RR21RA009 has secured 5th Rank with 85.7% in the 1st Sem Visvesvaraya Technological University examinations held during February / March 2022. All students secured first class with distinction.

OBTAINED 100 PERCENTAGE OF MARKS IN THE SUBJECT

21MAT11 - CALCULUS AND DIFFERENTIAL EQUATIONS IN

VTU 1ST SEMESTER EXAMS HELD DURING FEB / MARCH 2022



Ms.Nithya B 1RR21RA018

Ms.Nithya B 1RR21RA018 has secured 100 percent of marks in the subject 21MAT11 Calculus and Differential equations in the 1^{st} Sem Visvesvaraya Technological University examinations held during February / March 2022



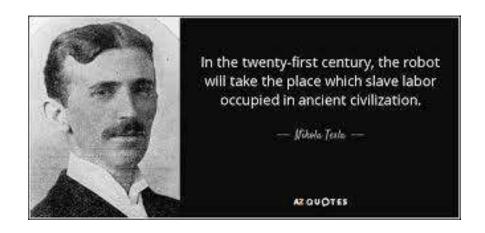
OBTAINED 100 PERCENTAGE OF MARKS IN THE SUBJECT

21MAT11 - CALCULUS AND DIFFERENTIAL EQUATIONS IN

VTU 1ST SEMESTER EXAMS HELD DURING FEB / MARCH 2022



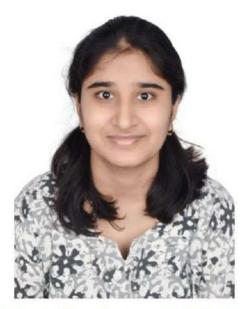
Ms.Viha Trupthi.S.Pandit (1RR21RA022) has secured 100 percent of marks in the subject 21MAT11 Calculus and Differential equations in the 1st Sem Visvesvaraya Technological University examinations held during February / March 2022



Student's participation in Extra-Curricular Activities during the Academic Year 2021 -2022

Second Place in the Drawing & Painting competition held during Intra-Collegiate Cultural and Sport meet

"Mathrubhasha Divas" on 21st February 2022

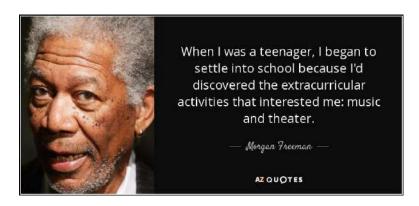


Ms.Viha Trupthi.S.Pandit 1st Year (2021-22) Robotics and Automation



Topic
Mythology

Ms.Viha Trupthi.S.Pandit (1RR21RA022), 1st Semester, Robotics and Automation has secured second place in the drawing and painting competition held during the intra-collegiate cultural and sport meet, Mathrubhasha Divas" on 21st February 2022.



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Student's participation in Extra-Curricular Activities during the Academic Year 2021 -2022



Basketball team players of the Department of Robotics and Automation are with the co-team players of the Department of Mechanical Engineering



Dr.M.Karthikeyan, Professor & HOD, Department of Robotics and Automation is with the prize winners of the Annual College Sports Competition 2022 of the students of R&A

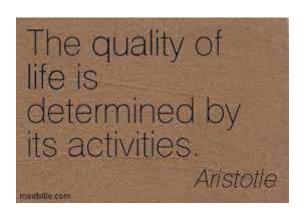
Mr.Samvrudh.N (1RR21RA019) runner of Table Tennis and Ms. Jeevika D K (1RR21RA009), Ms.NITHASHREE L (1RR21RA017) and Ms. VIHA TRUPTHI S PANDIT (1RR21RA022) of 1st year, Department of Robotics and Automation have represented the basketball team along with the Department of Mechanical Engineering and won the second prize during the Annual College Sports Competition held on 10th and 11th June 2022 at RajaRajeswari College of Engineering for the Academic Year 2021-2022.

Department of Robotics and Automation

Student's participation in Extra-Curricular Activities during the Academic Year 2021 -2022



Mr.Samvrudh.N (1RR21RA019) of 1st year, Department of Robotics and Automation has won the second prize in Table Tennis during the Annual College Sports Competition held on 10th and 11th June 2022 at RajaRajeswari College of Engineering for the Academic Year 2021-2022.



Student's participation in Extra-Curricular Activities during the Academic Year 2021 -2022



Mr. Harsha A V (1RR21RA007) of 1^{st} year, Department of Robotics and Automation Engineering student participated in the Editing Battle competition during the Cultural feast Kalasourabha 2022 held from 23^{rd} to 25^{th} June 2022 and won the first prize.



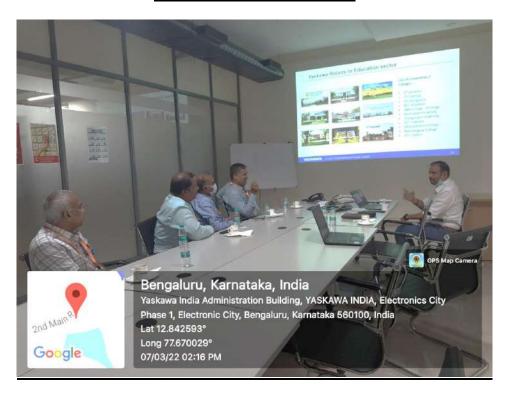
Student's participation in other Activities during the Academic Year 2021 -2022





Ms.Viha Trupthi.S.Pandit 1RR21RA022, Ms. Nisanka Mansi Chandran 1RR21RA016 have participated as volunteers in the 10th SAEINDIA International Mobility Conference 2022, Sustainable Multi-Modal Mobility Ecosystem, during 12th -14th October 2022.

Institute-Industry interaction





Dr.M.Karthikeyan, Professor and HOD, Robotics and Automation, Dr.C.Ramesh, HOD-ME, Mr.Thanuj Kumar, ASP-ME, Mr.Anand.A, AP-ME have visited M/s YASKAWA, Electronic City, Bengaluru, Karnataka 560100 on Monday, 7th March 2022.

Industrial visit by the faculty of the Department of Robotics and Automation

Industrial Visit by the Faculty			
Day & Date of Programme	Monday, 7 th March 2022		
Place of Visit	M/s YASKAWA,17/A, 2nd Main Rd, Electronics City Phase 1,		
	Electronic City, Bengaluru, Karnataka 560100.		
	https://yaskawaindia.in/		
Resource Person	Mr.T.S.Raja, Sr. Manager-Sales, YASKAWA		
Faculty Visited	Dr.M.Karthikeyan, Prof-Robotics and Automation		
	Dr.C.Ramesh, HOD-ME		
	Mr.Thanuj Kumar, ASP-ME		
	Mr.Anand.A, AP-ME		



Faculty with Mr..T.S.Raja, Sr. Manager and Mr.K.Bhavani Shankar, Head Manufacturing, Drives & Motor & Control Division, YASKAWA



Faculty with Mr..T.S.Raja, Sr. Manager and Mr.K.Bhavani Shankar, Head Manufacturing, Drives & Motor & Control Division in manufacturing section of YASKAWA



Faculty with Mr..T.S.Raja, Sr. Manager and Mr.K.Bhavani Shankar, Head Manufacturing, Drives & Motor & Control Division in manufacturing section of YASKAWA

The outcome of the visit:

Gained the information about the following:

- 1. Gain knowledge about real-time robotics operations.
- 2. Robotics Simulation.
- 3. Various Robots manufactured by the YASKAWA and its control system assembly, and troubleshooting.
- 4. Discussion regarding the signing of MoU with YASKAWA.
- 5. Consultancy opportunities.
- 6. Setting up the Centre of Excellence in the Department of Robotics and Automation.
- 7. Student's internship and projects.

Blood Donation Camp 21-22

Name of the Programme	Blood Donation Camp
Name of the Students, year,	Mr. Devaraju (1RR21RA005) Mr.Mohan L (1RR21RA013)
and department	Ms.Nithashree L (1RR21RA017)
	1st Year
	Department of Robotics and Automation Engineering
Day & Date of Programme	Wednesday, 29 th June 2022

Photos



Voluntary Blood Donation Camp poster

9th



Dr.M.Karthikeyan, Professor & HOD, Department of Robotics and Automation Engineering is with the students who participated in the 9th Voluntary Blood Donation Camp

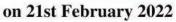


Department of Robotics and Automation Engineering during the 9th Voluntary Blood Donation Camp Mr. Devaraju (1RR21RA005), Mr.Mohan L (1RR21RA013) and Ms.Nithashree L (1RR21RA017) of 1st year, Department of Robotics and Automation Engineering donated their blood during the 9th Blood donation camp organized on Wednesday, 29th June 2022 at RajaRajeswari College of Engineering. We appreciate their contribution to humankind by donating their precious blood.

"Donate blood and be the reason for someone's existence".

Second Place in the Drawing & Painting competition held during Intra-Collegiate Cultural and Sport meet

"Mathrubhasha Divas"







Runner-up in the Table Tennis competition held during Intra-Collegiate Cultural and Sport meet

"Mathrubhasha Divas"

on 21st February 2022





Mr. Samvrudh.N.
1st Year (2021-22)
Robotics and Automation



Basketball team players of the Department of Robotics and Automation are with the co team players of the Department of Mechanical Engineering



Mr.Samvrudh.N (1RR21RA019) runner of Table Tennis and Ms. Jeevika D K (1RR21RA009), Ms.NITHASHREE L (1RR21RA017) and Ms. VIHA TRUPTHI S PANDIT (1RR21RA022) of 1st year, Department of Robotics and Automation Engineering have represented the basketball team along with the Department of Mechanical Engineering and won the second prize during the Annual College Sports Competition held on 10th and 11th June 2022 at RajaRajeswari College of Engineering for the Academic Year 2021-2022.

Dr. M. Karthikeyan, Professor & HOD, Department of Robotics and Automation Engineering is congratulated the prize winners.



Mr.Samvrudh.N (1RR21RA019) of 1st year, Department of Robotics and Automation Engineering has won the second prize in Table Tennis during the Annual College Sports Competition held on 10th and 11th June 2022 at RajaRajeswari College of Engineering for the Academic Year 2021-2022.



Mr. Charankumar K R (1RR21RA004), Mr. Lohith M R (1RR21RA011), Mr. Mohan L (1RR21RA013), Mr. Mohan M K (1RR21RA014), 1st Year, Department of Robotics and Automation Engineering students participated in the BGMI competition during the Cultural feast Kalasourabha 2022 held from 23rd to 25th June 2022 and won the first prize.



Mr. Harsha A V (1RR21RA007) of 1^{st} year, Department of Robotics and Automation Engineering student participated in the Editing Battle competition during the Cultural feast Kalasourabha 2022 held from 23rd to 25th June 2022 and won the first prize.



Department of Robotics and Automation

CYBORGS-2021-2022

The editorial committee of the Department of Robotics and Automation Newsletter

Staff Co-Ordinator:

Dr.M.Karthikeyan, Professor and Head

Students Coordinators:

Mr.Mohan M K 1RR21RA014

Ms.Nithyashree L 1RR21RA017

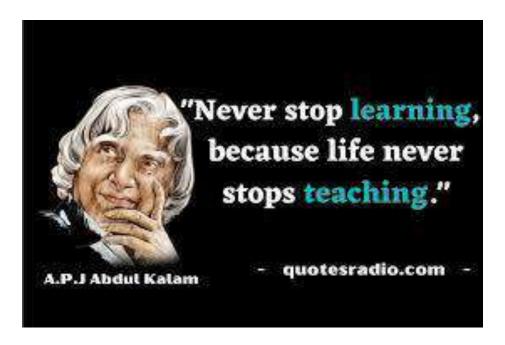
Mr.Charankumar K R 1RR21RA004

Ms.Bhumika H S 1RR21RA003

Ms.Nithya B 1RR21RA018

Mr.Naveen Kumar S N 1RR21RA015

Mr. Suhas S Vasishta 1RR21RA020



Department of Robotics and Automation

RajaRajeswari College of Engineering #14, Ramohalli Cross, Kumbalagodu, Bengaluru-560074.

Karnataka.

Mail id: hodra@rrce.org
