

## 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: 2 Issue: 2

CYBORGS 2022 -2023







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Vice-Principal, RRCE

C1D0R05 2022 -2025

We express our utmost gratitude to the Management, Rector, Principal, Dean R&D, and Vice Principal for their unwavering encouragement, inspiration, and support throughout the compiling and release of our latest newsletter - "CYBORGS 2022-2023". Their constant support has been essential 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.

The Robotics and Automation program aims to plan, Design, Construct, and 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



FANUC Robo Guide Simulation

FANUC 6 Axis Industrial Robot



#### **Course Offered:**

#### **UG Programme:**

• Bachelor of Engineering in Robotics and Automation -4 Years.

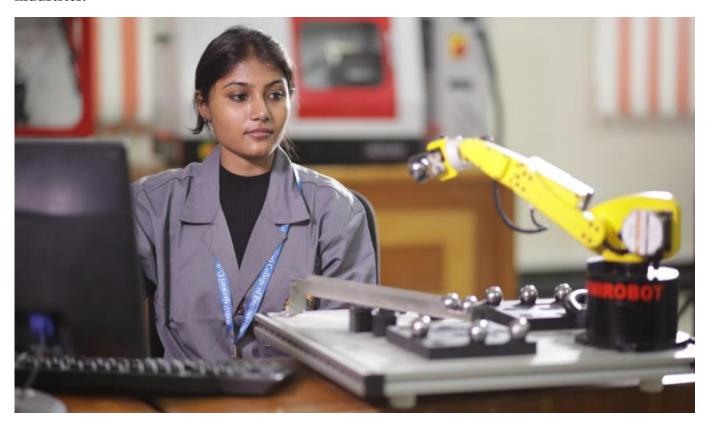
#### **Department of Robotics and Automation**

#### **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.





Automation as "the creation and application of technology to monitor and control the production and delivery of products and services."

#### **Department of Robotics and Automation Association**

#### Department of Robotics and Automation Association members for the AY 2022-23

The following students were nominated as office bearers of the Department of Robotics and Automation Association for the Academic Year 2022-23.

Sl No	USN	Name of the Students	Designation
1	1RR21RA016	NISANKA MANSI CHANDRAN	President
2	1RR21RA011	LOHITH M R	Secretary
3	1RR21RA017	NITHASHREE L	Treasurer
4	1RR21RA003	BHUMIKA H S	Executive member
5	1RR21RA018	NITHYA B	Executive member
6	1RR22RA028	TANZEEM	Executive member
7	1RR22RA010	JAFFER A	Executive member
Staff Incharge: Prof.Radhakrishna R K			

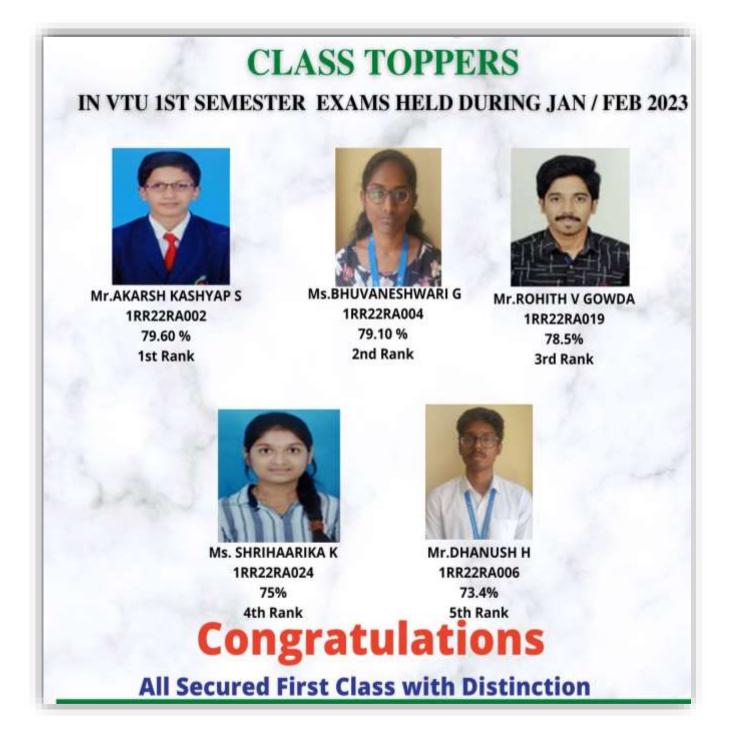
# Academic Toppers in the Odd Semester of the Academic Year 2022-23 Visvesvaraya Technological University examinations January / February 2023 3rd Semester Class Toppers



The 2<sup>nd</sup> year of students of the Department of Robotics and Automation of RajaRajeswari College of Engineering Ms.Jeevika D K 1RR21RA009 has secured 94.1% & 1<sup>st</sup> Rank in class, Ms.Nithya B 1RR21RA018 has secured 91.5% & 2<sup>nd</sup> Rank in class, Ms.Viha Trupthi.S.Pandit 1RR21RA022 has secured 89% & 3<sup>rd</sup> Rank in class, Ms.Bhumika H S 1RR21RA003 has secured 88.4% & 4<sup>th</sup> Rank Ms. Nisanka Mansi Chandran 1RR21RA016 has secured 86.5% & 5<sup>th</sup> Rank, , in the 3<sup>rd</sup> Semester Visvesvaraya Technological University examinations January / February 2023. All secured first class with distinction. The student's academic excellence is honored with the Merit certificate by the Principal Dr.R.Balakrishna and Dr. M. Karthikeyan, HOD R&A.

**Department of Robotics and Automation** 

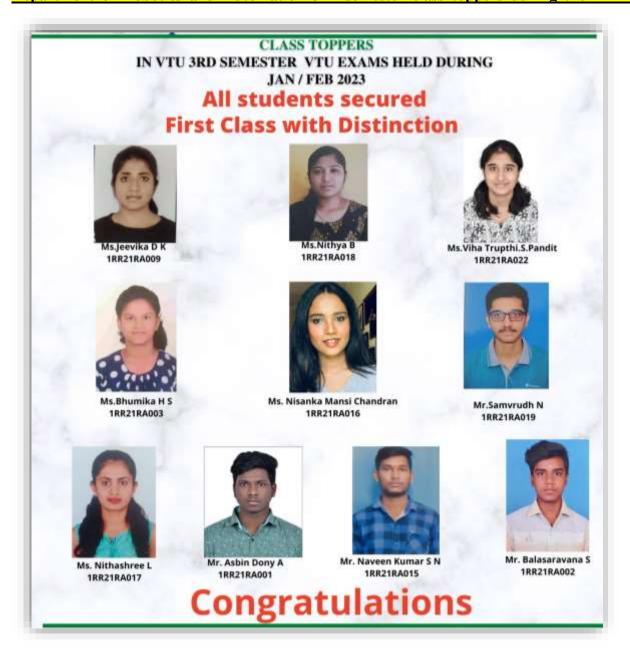
Department of Robotics and Automation 1st semester class toppers during the AY 2022-2023



The 1<sup>st</sup> Year students of the Department of Robotics and Automation of RajaRajeswari College of Engineering Mr.Akarsh Kashyap.S 1RR22RA002 has secured 79.60% & 1<sup>st</sup> Rank in class, Ms.Bhuvaneshwari G 1RR22RA004 has secured 79.1% & 2<sup>nd</sup> Rank in class, Mr.Rohith V Gowda 1RR22RA019 has secured 78.5% & 3<sup>rd</sup> Rank in class, Ms.Shrihaarika K 1RR22RA024 has secured 75% & 4<sup>th</sup> Rank, Mr. Dhanush H 1RR22RA006 has secured 73.4% & 5<sup>th</sup> Rank, , in the 1<sup>st</sup> Semester Visvesvaraya Technological University examinations January / February 2023. All secured first class with distinction. The student's academic excellence is honored with the Merit certificate by the Principal Dr.R.Balakrishna and Dr. M. Karthikeyan, HOD R&A.

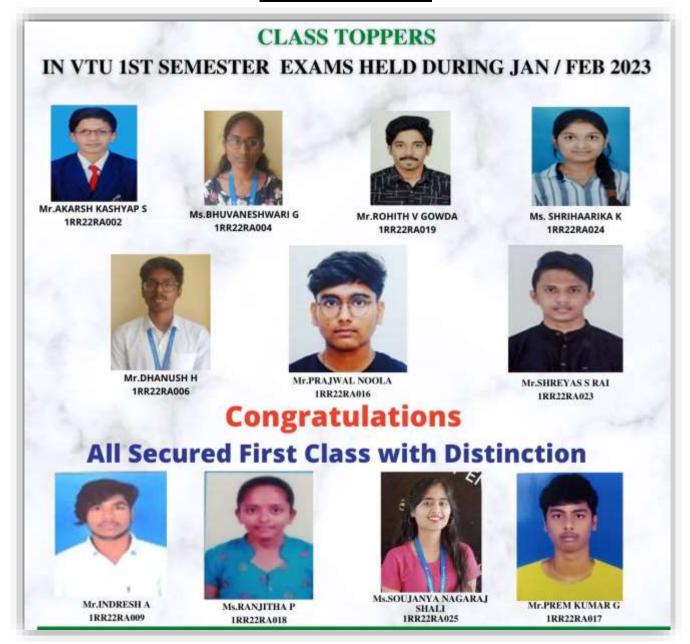
**Department of Robotics and Automation** 

Department of Robotics and Automation 3rd semester class toppers during the AY 2022-2023



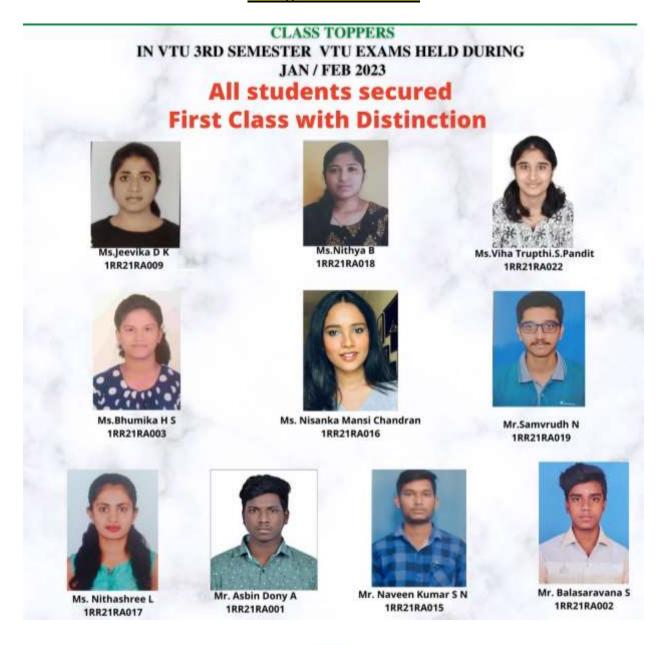


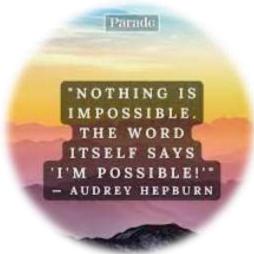
Department of Robotics and Automation 1st semester students secured first class with distinction during the AY 2022-2023





## Department of Robotics and Automation 3<sup>rd</sup> semester students secured first class with distinction during the AY 2022-2023





#### **Publications**

• K. S. Madhu, Dr. Shankara Reddy R, Dr. S. G. Sanga Shetty, Dr. Satheesha V. "Heat Transfer and Pressure Drop variation in Helical Coil Heat Exchange with varying pitch using Water-based TiO2 Nanofluid" In International Journal of European Chemical Bulletin, Vol. 12, Issue 7, (2023): 2300-2308.

#### **Faculty Contribution to Academic Excellence**



Dr.N.Sreenivasalu Reddy, Associate Professor, Department of Robotics and Automation Engineering has translated course material for the National Programme on Technology Enhanced Learning (NPTEL)

#### Certificate received from NPTEL



Translate the course Engineering Mechanics in the Kannada language



Translate the course Computer Numerical Control of Machine Tools and Processes in the Telugu language

**Department of Robotics and Automation** 

#### Faculty Contribution to Academic Excellence



Dr K C Vishwanath, Associate Professor, Department of Robotics and Automation has participated ih the AICTE Training And Learning (ATAL) Academy Offline FDP on "AICTE-ATAL Idea Lab Basic Faculty Development Program (Hands-on Training)", organised by Visvesvaraya Technological University-CPGS, Muddenhalli, Chickballapur (Dt) during 7<sup>th</sup> - 11<sup>th</sup> August 2023



AICTE-ATAL Idea Lab Basic Faculty Development Program (Hands-on Training) Certificate

#### Faculty Contribution to Academic Excellence



Dr K C Vishwanath, Associate Professor and Dr.N.Sreenivasalu Reddy, Associate Professor, Department of Robotics and Automation Engineering has attended the 46<sup>th</sup> Seried KSCST Students Project Programme, Seminar and Project Exhibition held at ALVA's Institute of Engineering & Technology, Moodubidire during 11<sup>th</sup> and 12<sup>th</sup> August 2023 along with the students of the Department of Mechanical Engineering.

#### **Technical Seminar**



Mr. Kiran Babu, Senior Manufacturing Consultant. M/s SOLIZE India Technologies Private Limited, Bengaluru delivered the technical talk on "DELMIA 3D EXPERIENCE for Academia" to the students of the Robotics and Automation on Saturday, 15<sup>th</sup> June 2023.

#### **Technical Seminar**



Dr.M.Karthikeyan, HOD R&A welcomed the speaker Mr. Muthukrishnan G. MD, M/s Universal Tech Automation, Coimbatore delivered the technical talk on "Robotics in Factory Automation"



Mr. Muthukrishnan G. MD, M/s Universal Tech Automation, Coimbatore delivered the technical talk on "Robotics in Factory Automation" to the students of the Robotics and Automation on Tuesday, 20<sup>th</sup> June 2023.

#### **Knowledge Enhancement of the faculty members**



Faculty members from the Department of Robotics and Automation and the Department of Mechanical Engineering visited NTTF, Bengaluru on 04<sup>th</sup> May 2023 and had a discussion with the members of the institute.



Mr.Lohith MR, (1RR21RA011) is in the rank of "cadet" in "1kar naval unit" Bengaluru.



Mr.Lohith MR, (1RR21RA011) with other "cadets" of "1kar naval unit" Bengaluru.



\ Mr.Lohith M R, (1RR21RA011) with other "cadets" during the ATC(Annual Training Camp) in Christ University, Kengeri from 25th May 2023 to 4th June 2023 of "1kar naval unit" Bengaluru.

#### Students' Achievement in Co-curricular Activities







Ms.Bhumika H.S, (1RR21RA003) has participated in the event Winged Ink Pencil Sketching Competition and won second place during the VAIMAANIK organized by Global Academy of Technology from 30<sup>th</sup> June / 1<sup>st</sup> July 2023.

#### **Industrial Visit**



Mr.Vijayendra, HR, M/s Sansera Engineering Ltd, Bengaluru addressed the students about the industry



Students of Robotics and Automation visited to M/s Sansera Engineering Ltd, #143/A, Bommasandra Jigani Link Road, Bengaluru. Karnataka 560105 on Saturday, 25<sup>th</sup> March 2023.

**Department of Robotics and Automation** 



Dr.M.Karthikeyan, HOD RA reviewed the model done by the students during the internship



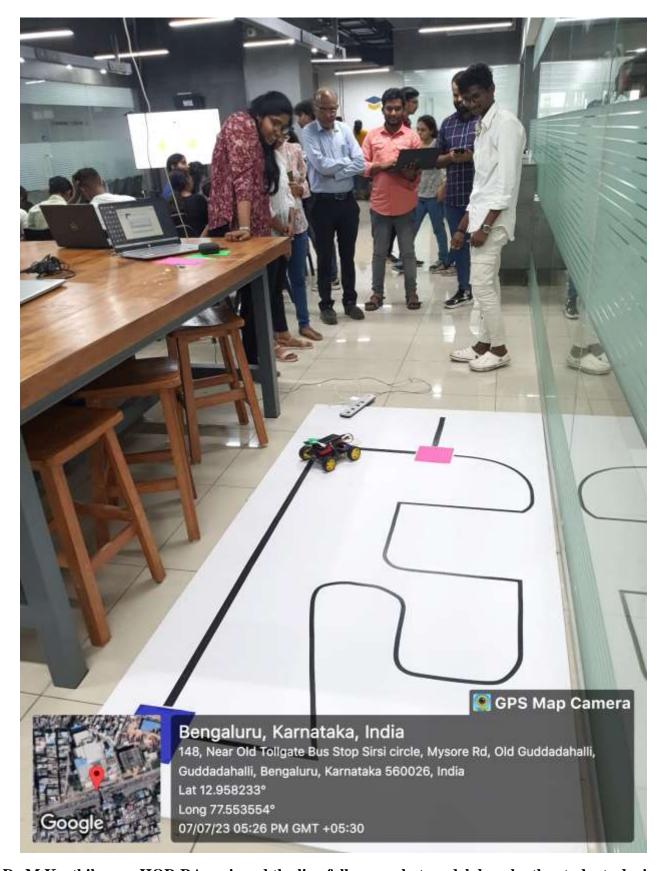
Dr.M.Karthikeyan, HOD RA reviewed the model done by the students during the internship



Dr.M.Karthikeyan, HOD RA reviewed the model done by the students during the internship



Dr.M.Karthikeyan, HOD RA reviewed the model done by the students during the internship



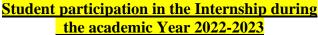
Dr.M.Karthikeyan, HOD RA reviewed the line follower robot model done by the students during the internship



Mr. SUHAS S VASISHTA (1RR21RA020), 4<sup>th</sup> semester student of the Department of Robotics and Automation has received the best students of the internship and received the certificate and memento from Dr.M.Karthikeyan, HOD RA



Students with internship certificates









### CERTIFICATE OF COMPLETION

This is to certify that

#### Suhas S Vasishta

From Robotics and Automation with USN 1992BBAD20 From the Rajanajeshwari College Of Engineering Has successfully completed the Internship programme on Robotics held at Comeditares innovation Hub, JP Nagar, Bengaluru from 18/06/2023 To 09/06/2023.



14 JUNE 2023



16 students of the Department of Robotics and Automation have successfully completed the internship at M/s COMED KARES, Bengaluru between the intervening period of  $3^{\rm rd}$  and  $4^{\rm th}$  Semester vacation of the academic year 2022-23

#### **Technoxian 2023- World Robotics Championship**

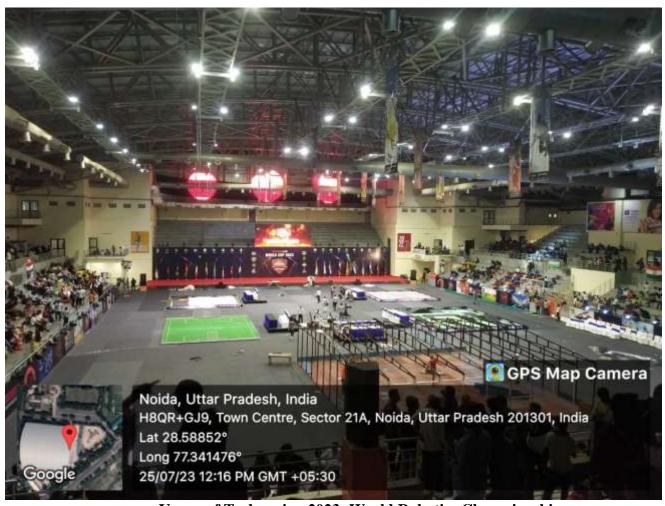
Students of Robotics and Automation has participated in Technoxian 2023- World Robotics Championship at New Delhi from 25<sup>th</sup> to 27<sup>th</sup> July 2023



Faculty coordinator Prof.Radhakrishna R K, Dept of ME, RajaRajeswari College of Engineering and Mr.Nizar, COMED KARES, Bengaluru in the venue of Technoxian 2023- World Robotics Championship



45 countries participated in the Technoxian 2023- World Robotics Championship



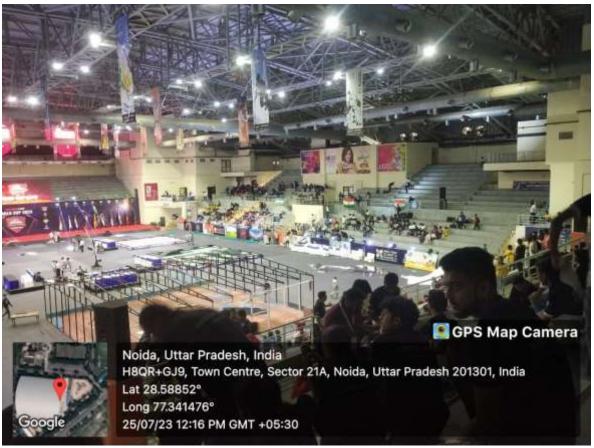
Venue of Technoxian 2023- World Robotics Championship



The Staff coordinator and students (Team A and B) registered for the Technoxian 2023- World Robotics Championship



The staff coordinator and students (Team C) registered for the Technoxian 2023- World Robotics Championship



Noida Indoor Stadium, New Delhi Technoxian 2023- World Robotics Championship



Team A students participated in ROBO Soccer during Technoxian 2023- World Robotics Championship



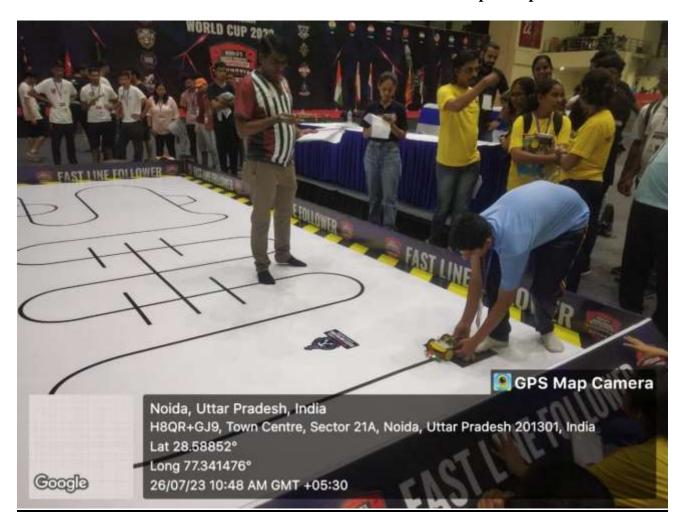
Students participated in ROBO Race during Technoxian 2023- World Robotics Championship



Students participated in ROBO Race during Technoxian 2023- World Robotics Championship



Students participated in ROBO SOCCER during Technoxian 2023- World Robotics Championship



Students participated in Line follower ROBO during Technoxian 2023- World Robotics Championship



Team A students with participation certificates of Technoxian 2023- World Robotics Championship



Team B students with participation certificates of Technoxian 2023- World Robotics Championship

**Department of Robotics and Automation** 



Team A and B students with participation certificates of Technoxian 2023- World Robotics Championship



Team C students with ROBOT Technoxian 2023- World Robotics Championship



4<sup>th</sup> Semester students of the Department of Robotics and Automation are participated in RC Car Racing in the RV College of Engineering, Bengaluru and got 2<sup>nd</sup> Prize, 3<sup>rd</sup> Prize, 4<sup>th</sup> Prizes.



Ms. Jeevika.D.K (1RR21RA009) and Ms.Nisanka Mansi Chandran (1RR21RA016) acted as volunteers at SAEINIDA, Software Depend Vehicle (SDV) conference 2023 held in Bengaluru on 11th August 2023



 $2^{nd}$  semester students of the Department of Robotics and Automation has participated in the IDT workshop held on  $8^{th}$  June 2023



2<sup>nd</sup> semester students of the Department of Robotics and Automation has participated in the IDT workshop held on 8<sup>th</sup> June 2023



2<sup>nd</sup> semester students of the Department of Robotics and Automation has participated in the IDT workshop held on 8<sup>th</sup> June 2023



1<sup>st</sup> prize winners Mr.Tanzeem (1RR22RA028), Mr.Kanishk J (1RR22RA011) during the IDT workshop of 2nd-semester students of the Department of Robotics and Automation are honored with the gift by Dr Ebby Darney ,HOD EEE and Dr.M.Karthikeyan, HOD RA



2<sup>nd</sup> prize winners Mr.Likith K, (1RR22RA013) and Mr. Yuvaraj S (1RR22RA03) during the IDT workshop of 2nd-semester students of the Department of Robotics and Automation honored with the gift by Dr Ebby Darney ,HOD EEE and Dr.M.Karthikeyan, HOD RA



3<sup>rd</sup> prize winners Hemanth P (1RR22RA008) and Uday L D ( 1RR22RA029) during the IDT workshop of 2nd-semester students of the Department of Robotics and Automation honored with the gift by Dr Ebby Darney,HOD EEE and Dr.M.Karthikeyan, HOD RA

#### **Sports And Cultural**



Department of Robotics and Automation students won the second prize in the Football during the GALA DAY-(Sports Competition) held on 26<sup>th</sup> January 2023. Mrs.Ragini Prajwal, Cine Actress, Dancer and Model & Dr. R. Balakrishna, Principal gave the prize to the students on 24<sup>th</sup> June 2023 during the Annual Sports and Cultural Meet 2023.







Ms.Spoorthi J, 1RR22RA026 for winning 2<sup>nd</sup> Prize in chess competition during the GALA DAY-(Sports Competition) held on 26<sup>th</sup> January 2023. Mrs.Ragini Prajwal, Cine Actress, Dancer and Model & Dr.R.Balakrishna, Principal gave the prize to the student students on 24<sup>th</sup> June 2023 during the Annual Sports and Cultural Meet 2023.



1<sup>st</sup> year students of the Department of Robotics and Automation won the second prize in Volleyball during the GALA DAY-(Sports Competition) held on 26<sup>th</sup> January 2023. Dr. M. Karthikeyan, HOD-RA and Prof.K.S.Madhu, Mentor congratulated the students.

The editorial committee of the Department of Robotics and Automation Newsletter

#### **Newsletter Head and Compiler**

DR.M.KARTHIKEYAN, PROFESSOR AND HEAD

#### **Staff Co-Ordinators**

DR.VISHWANATH K C, ASSOCIATE PROFESSOR
DR.N.SREENIVASALU REDDY, ASSOCIATE PROFESSOR
DR.SATHEESHA V, ASSOCIATE PROFESSOR

#### **Student Co ordinators:**

MS. NISANKA MANSI C, 1RR21RA016

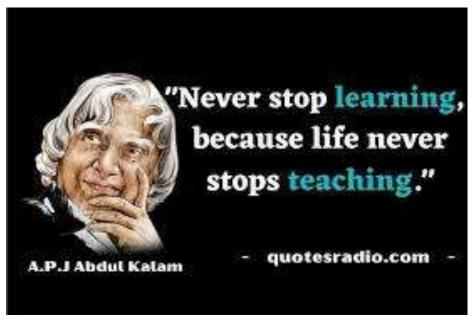
MR. LOHITH M R, 1RR21RA011

MS.NITHASHREE, 1RR21RA017

MS.BHUMIKA HS, 1RR21RA003

MR. TANZEEM 1RR22RA028

MR. JAFFER A, 1RR22RA010



### **Department of Robotics and Automation**

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Newsletter compiled by DR.M.KARTHIKEYAN PROFESSOR AND HEAD Department of Robotics and Automation

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**Department of Robotics and Automation**