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# **"AUTOMATION EXPLORER"** NEWSLETTER

Vol 10, Issue-2, 2023

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Established in 1963, RV College of Engineering is one of the country's first self-financing engineering institutes. The Rashtreeya Sikshana Samithi Trust (RSST), a non-profit organization, oversees the operation of the facility. RVCE is a self-governed institution. A total of 12 bachelor's and 15 master's programmes are currently available at the college, which is associated with Visvesvaraya Technological University (VTU) Belagavi. "Leadership in Quality Technical Education, Interdisciplinary Research & Innovation, with a Focus on Sustainable and Inclusive Technology" is the institution's mission statement. RVCE "Engineering College of the Year-2021," by the Higher Education Review Magazine. Ranked 10th in the Country by IIRF ranking in 2023. RVCE is also ranked 96th nationally by the National Institutional Ranking Framework (NIRF-2023). More than a dozen research institutes have been approved by the university. DST, AICTE, CSIR and manymore agencies have financed the institution's projects. NBA has accredited all undergraduate and postgraduate programmes multiple times. PhDs are being pursued by around 250 Research Scholars. The institution has established 19 Centre's of excellence/competencein the campus. The institution has to its credit over 50 filed patents,47 published patents and 9 granted patents. Six Centres of Excellence have been established in the Institute. An incubator is a part of the college.

#### Message from Editor's Desk:

Dear readers,

Welcome to the Automation Explorer,

We are thrilled to announce the launch of our department's newsletter, the 'Automation Explorer'. This digital publication aims to foster a strong and continuous connection with our esteemed students, professors, alumni, and business partners. Through this newsletter, we aspire to share the vibrant activities and remarkable accomplishments of our Electronics and Instrumentation Engineering department.

The 'Automation Explorer' will serve as a platform to showcase the achievements and breakthroughs of our students, faculty, and staff. We believe in celebrating every milestone, big or small, as they contribute to the collective growth of our department. This newsletter will not only highlight our success stories but also provide insights into the latest trends and advancements in our field.

In each edition, we will highlight the significant accomplishments of our community. Whether it's a student winning a prestigious competition, a faculty member publishing groundbreaking research, or a collaborative project achieving success, we will cover it all. These stories reflect our commitment to excellence and our dedication to fostering an environment where innovation thrives.

Staying informed about the latest events is crucial for our community. We will provide comprehensive coverage of recent departmental activities, including seminars, workshops, and conferences. Special focus will be given to our placement drives, celebrating the success stories of our talented graduates as they embark on their professional journeys. These events not only recognize the efforts of both students and staff but also offer valuable insights into the evolving industry landscape.

In addition to our regular features, the 'Automation Explorer' will include crisp and concise technical briefings. These sections will delve into the latest technological advancements and research findings in the field of electronics and instrumentation engineering. Topics will range from emerging trends in automation and robotics to cutting-edge developments in sensor technology and data analytics. Our aim is to keep our readers at the forefront of technological innovation.

The future of our department is incredibly bright. Rapid advancements in technology, particularly in automation, are reshaping industries and opening up new horizons. With an interdisciplinary approach, we are preparing our students to adapt and lead in this changing landscape. The \*\*Automation Explorer\*\* will serve as a testament to the exceptional work being done in our department and highlight the opportunities that lie ahead.

We recognize the importance of bridging the gap between academia and industry. Future editions will feature interviews with industry leaders, insights into collaborative projects, and updates on partnerships that enhance the learning experience for our students. By fostering strong connections with the industry, we ensure that our curriculum remains relevant and our students are well-prepared for their careers.

To further personalize our newsletter, we will include spotlights on faculty and students. These profiles will showcase their research interests, projects, and personal journeys. Understanding the diverse experiences and aspirations within our community helps us build a stronger, more connected department.

We would like to take this opportunity to express our heartfelt gratitude to every faculty member, staff, and student who has contributed to the success of our department. Your constant encouragement and support are invaluable, and we are proud to have such a passionate community driving our endeavors. Together, we have created an environment where learning and innovation flourish.

As we embark on this exciting journey with the 'Automation Explorer', we invite you to join us in celebrating our collective achievements, staying connected, and embracing the promising future that lies ahead for Electronics and Instrumentation Engineering. Your participation and feedback will be instrumental in making this newsletter a dynamic and engaging platform for all.

Thank you for being a part of our community. Let's explore the future of automation together!

Sincerely,

Warm regards,

Editorial Committee: Dr. Veena Divya K, Assistant Professor.

Dr. CH. Renu Madhavi, HoD.

Data Collection & Entry: Mrs. Chandrakala M R, Programmer G-II

#### Message from HoD's Desk



Warm greetings!

I am delighted to release this year's second issue of our department's newsletter, packed with updates on our activities and the achievements of both our staff and students over the past six months.

We successfully conducted the odd semester SEE exams recently, and the results for the 4th, 6th, and 8th semesters were impressive. Our department hosted several technical talks by industry experts, expert lectures from renowned academic speakers, and various workshops for students and faculty. Our faculty members have participated in numerous workshops, Faculty Development Programs (FDPs), and webinars. We have also initiated efforts to build networking connections with foreign universities.

Several faculty members mentored students who opted for NPTEL elective courses, served as resource persons for national-level conferences and workshops, and acted as reviewers for various international journals and conferences. We are pleased to announce the success of our Center of Excellence in Sensor Technology Applications, which provided internship training and certifications to both in-house and other college students. Under the banner of the IEEE Sensor Council Student Chapter, our department organized technical talks, seminars, and an Industrial Conclave, along with industrial visits to various companies.

Additionally, we successfully conducted skill labs for 1st-year students. Our department consistently organizes events aimed at the academic and holistic development of students and other stakeholders. Regular events include Parent-Teacher meetings, Board of Studies (BoS) and Board of Examiners (BoE) meetings, orientations on electives offered, student counseling, and our Annual Alumni Meet.

We are proud of our community's continuous efforts and look forward to many more achievements in the future.

Dr. CH. Renu Madhavi

Associate Professor & HoD, Department of EIE

#### Department Vision, Mission, PEOs and PSOs. Vision

Achieving academic excellence in Instrumentation Technology by adopting interdisciplinary

research with a focus on sustainable and inclusive technologies.

#### Mission

- 1. To create an environment for students to excel in domain areas and get motivated to involve in interdisciplinary research by utilizing state of the art infrastructure.
- 2. To impart technical knowledge, encourage experiential learning and develop future professionalleaders.
- 3. To establish industry-academia networking and develop industry-ready students and futureentrepreneurs, to meet societal & industrial challenges.
- 4. To motivate lifelong learning and research in sustainable technologies to find improved solutions for the betterment of society.

#### **Program Educational Objectives (PEOs) of the Department**

- 1. Apply Instrumentation, Electronics, Controls and Automation concepts to develop technical solutions for industrial problems.
- 2. Exhibit competency in adapting to various industrial challenges and work in inter-disciplinaryprojects with team spirit and professional ethics for achieving organizational goals.
- 3. Pursue higher education in technology or management and achieve professional excellence by imbibing leadership qualities and communication skills.
- 4. Become entrepreneurs with a focus on sustainable technologies and develop innovative solutions to meet industrial and societal needs.

#### **Program Specific Outcome (PSOs) of the Department**

- **PSO1:** Design, analyse, and practice the instrumentation, controls and automation concepts and techniques required for industrial and/or research pursuits resulting in product development, publications, or patents.
- **PSO2:** Demonstrate the knowledge of basic science, mathematics, electronic system design, and programming for real-time applications, towards developing industrial solutions and become technology leaders of future.

#### 1. Departmental Activities from JULY 2023 to DECEMBER 2023

The department has always been contributing significantly to the growth of technical education. The IEEE Sensors Council-Bengaluru Student section has organized a technical talks and student membership drive. Skill labs conducted for both 1<sup>st</sup> Semester and 4<sup>th</sup> semester students . Conducted Parents Teachers Meeting for 6<sup>th</sup> Semester.

### 2. Major Project Details of UG.

The students of 8<sup>th</sup> semester UG have taken up the innovative, societal-related problems and developed prototypes to showcase the working of the module. Some of the students executed the problem statements given by the industries of the current era and bridged the gap between the academics and industry standards. The list of projects is given below.

			Major Project - 8th Sem, 2022-23		
Sl No.	Project Batch	USN	Project Title	Internal Guide	External Guide
			Internship Cum Projects	·	
01	Spoorthi N.B	1RV19EI055	SIEM Integration for SOC		Mr. Shabarinath Reddy
	Aftab T	1RV20EI400	Development of Pot Hole and hump	Dr. CH	
	Rajkiran J	1RV19EI038	detection Sensor Robot Notifying its	Renumadhavi	NA
	Nihal BK	1RV19EI031	Location via Android App		1 1 1 2
	Vikas K	1RV19EI062			
02	Narendhiran K S	1RV19EI029	Custom Communication Protocol	Dr. Padmaja	Gurubaran Elango
02	Farhan Akhter	1RV19EI017	Development of AEON: NUTANIX Platform for Training.	ΚV	Mr. Shashi Sekhar
	Mallikarjun K	1RV19EI027			
	Rajath Reddy S	1RV19EI037	IoT Based Smart Medicine Dispenser		
	Syed Maaz	1RV19EI057			NA
03	Tanish S	1RV19EI059		Dr. Prasanna	
03	Jagan Srinivas P	1RV19EI024	Helius Cut - CNC Laser cutting & Engraving machine	Kumar S C	NA
	R Dhyaan	1RV19EI036	Thermal,Mechanical and vibration test of PCB using simulation		Mrs. Jayalakshmi C
	Vaishnavi Solapur	1RV19EI061	Front End Design flow of Arm Cortex- M55 Processor with AHB Interface Analysis.	Dr. K B Ramesh	Mr. Tarun Goel Mr. Amrut Jigajinni
	Soujanya Bhat	1RV19EI054	Design verification of UART modules in CHM2T CPLD		Mr. Devendra Singh Rana
04	Jaipala	1RV19EI401			
04	Kamil Firaz Khan	1RV18EI025	Diabetic diagnosis using machine		NT A
	Sagar Srivastava	1RV19Ei044	learning		NA
	Doddagouda Patil	1RV19EI402			
	Shilpa S	1RV19EI052	Model Based Design for Position Sensor-less BLDC Control		Mohan Ranga K
05	Ganesh C L	1RV19EI019	Design and Implementation of Car Seat Control Module	Prof. S Venkatesh	Mohan Ranga K
	Mudit Rathi	1RV19EI028	Next Gen E-commerce		Mr Sourav Ghosh
	Aryan Amarnani	1RV19EI012	Database Efficiency Comparison for Two JSON Formats		Naresh Krishnamoorthy
06	Anisha Saha	1RV19EI008	Data Driven Decision Making Market Research for Effective Analysis and Strategy.	Dr. Anand Jatti	Nischitha N
	Keerthi Gowda D	1RV18EI027	DM NVX Automation		Renu Yadav
07	Shashwat Mishra	1RV19EI050	Development of a Dashboard and Data Analysis for Sales.	Dr. B G	Rohit Sharma
07	Harsh Kumar Hritik Raj	1RV19EI021 1RV19EI023	Renal cell Carcinoma Detection by Using ML Techniques	Sudarshan	NA

	Prajwal B				
	Gadad	1RV20EI404			
	Raj Gaurav	1RV19EI065			
	Pankaj Kankani	1RV19EI033	SDR Alternative using Niagara Scripts and Preconditioning of HDDs using CVF SCSI		Mr. Manoj Kumar Rajan
08	Jennifer E	1RV19EI025	Control of Humanoid Robot using Pose Estimation	Dr. Rachana Akki	Mr. Ashish K Achar
	Samiya Goyal	1RV19EI047	VID Tracker Application		Pratyusha Josyula
	Anjali Mishra	1RV19EI009	Design HR Portal		Mr Anish
09	Akanksha Raj	1RV19EI003	Data Management of Asset Management Team	Dr.	Sudeep Vettle
09	Vaishnavi Athrey	1RV19EI060	Digital Banking Platform Development	Deepashree Devarj	Mr. Pawan Rawal & Mr. Amit Ranjan
	Ankit Srivastava	1RV19EI010	Visual Intelligence for general		Mr Srikanth Rajaram
	Ananya D	1RV19EI007	commerce using Deep Learning		
	Bindu V	1RV19EI014			
10	Yash Raj	1RV19EI063		Dr. Harsha	
	Kavyashree N	1RV20EI403	Bin loading and unloading using		Mr Vishwanath
	Harshitha V	1RV19EI022	overhead conveyor	-	
	Neha Jagannath	1RV19EI030	Design of POE-IEEE 802.3bt load box		Mukundan Gangadurai
	Sheikh Raazi	1RV19EI051	Development of Troubleshooting Tool for CISCO High Availability.	Dr. Tabitha Janumala	Mr. Chandrashekar Sodankoor
11	Saurav Agrawal	1RV19EI049	Fast-Accurate-Robust Circle Detection Using Conventional Image Processing.		Mr Jegathesan Shanmugam
	Sangamesh S W	1RV19EI048	LINUX Administration - Configuring of LAMP Stack		Mr. Sunil Kumar Panda & Harshita R
	Prashant Verma	1RV19EI034	Deployment of Cloud 3.0 using AWS for KBSI		Mr Chandrashekar Bellamkonda
	Farid	1RV19EI018		Dr. Rajashree	
12	Aakash	1RV18EI001	Raspberry Pi based Android	P M	N A
	Nalin	1RV18EI034	Controlled Surveillance Robot	1 141	
	Bhavani	1RV20EI401		_	
	Anand Raj	1RV19EI006	Reation of Dependency graph using Neo4j		Mr. Rajaram M
	Rohit K M	1RV19EI040	Head Gesture based motorized wheel		
	Jhanhavi R	1RV19EI026	chair with Speech alert for paralyzed		NA
	S Varun	1RV19EI043	people	Dr. Kendaganna Swamy S	
13	Srishti R	1RV19EI056			
	Nikhil K B	1RV19EI032	Error Detection In Memory, Based On		Dr Ravikumar CP
	Anand M Sharma	1RV19EI005	Signature Testing In LFSR		

	Aditya Venkateshwaran	1RV19EI002	Design and Development of a Low Cost Automatic Hydroponic System		NA
14	Chandhrikka R	1RV19EI015	Digital Processing Operation in Digital receivers		Mr. Girish
	A Vishnu Charan Suhas S B TS Dheeraj Kumar	1RV19EI001 1RV19EI064 1RV19EI058	Automatic Toilet Seat Sanitization Development of Employee	Dr. Veena Divya K	NA
	Sakshi Bharti	1RV19EI046		Divya K	Mr. Manjo Barnwal
	Aman Kumar Singh	1RV19EI004	Development of a Cloud based RISK Prediction Platform		Mr. Padmakumar Nambiar

## 3. Workshops/seminars/FDP/conference/attended by faculty.

*4*.

Sl No	Faculty Name	Conference /Workshop /Seminar	Organized By	Date Attended
1	Dr. Tabitha Janumala	RGNIIPM Nagpur Ministry of Commerce & Industry Government of India One Day Online Workshop on Intellectual Property Rights (IPR) – Patent & Designs Process	Internal Quality Assurance Cell Janardan Rai Nagar Rajasthan Vidyapeeth, Udaipur	18-01-2023
2	Dr. Tabita Janumala	5 day workshop on Augment and virtual reality	Dept of MCS, RVCE, Bengaluru	17-04-2023 To 21-04-2023
3.	Dr. K B Ramesh Dr. Veena Divya K Dr. Tabitha Janumala Mr. Chandrakala M R Mr. Krishna Murthy A V	Microcontroller Programming and using ARM Cortex Kiel Version 5	Dept of EIE, RVCE Bengaluru	16-05-2023 to 18-05-2023
4	Dr. Padmaja K V	Attended a talk on mobile evolution upto 6G by Sri Srinivasan Selvaganapathy, Head of standardization India Nokia	Telecommunica tion day at TCE Seminar hal	17-05-2023
5	Dr. Padmaja K V	CSITSS 2023 7th IEEE International Conference on "Computational Systems and Information Technology for Sustainable Solutions	0	2 <sup>nd</sup> to 4 <sup>th</sup> Nov, 2023

## 5. Training / consultancy activities carried out / amount received.

Sl no	Training / consultancy work	Faculty involved	Funding agency	Amount received
1.	Fabrication of breast tissue mimicking phantoms characterization of elastic and acoustic numerical model validation	Dr. Rachana S Akki (PI) Dr.CH.Renu Madhavi (Co-PI)	VGST	15 lakhs
2.	IoT based Sheep/goat Tracker and livestock management platform	Dr. Padmaja K V	Consultancy	4 Lakhs

### 6. Product Development:

#### A few innovative projects with working models are provided in table.

Sl. No.	Name of the faculty	Project Title	Funding Agency	Amount (in Lakhs)	Sanctioned Date
1	Dr. Kendaganna	Sensors and its applications using IoT development kit	ISE Department, RVCE, Bengaluru	3.08	13.10.2023
2	Swamy S	Sensor Application development kit	Mechanical department, RVCE, Bengaluru	2.58	17.11.2023

### 6. Patent field details

Sl no	Title	Faculty involved	Patent Application No.	Date of Grant/filed
1.	Smart belt for school children	Dr.Kendaganna Swamy	367711-001	19/08/2023
2	Methods and apparatus for Continuous Measurement of Blood Pressure	Dr. Sudarshan B G	201741002255	11/12/2023

### 7. List of Workshops organized by the faculty:

Sl	Details of workshop / Date of the Participants		Organized by			
No	seminar / conference	Events	No. of	No. of	Industry	
	/events		Students	Faculty	Person	
1	Skill Lab of 1 <sup>st</sup> year EIE		63	8	-	Dr. K B Ramesh

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2	students on Extra Components Skill Lab of 1 <sup>st</sup> year EIE ,	24-07-2023 To 28-07-2023 17-07-2023	280	10	-	Dr. CH Renu Madhavi Dr. Anand jatti Dr. Veena Divya K Dr. Rajasree P M Dr. K B Ramesh
	ETE,ECE, EEE students	to 21-07-2023 and 24-07-2023 To 28-07-2023				Dr. CH Renu Madhavi Dr. Anand jatti Dr. Kendaganna Swamy Mr. Anil Kumar N A Mr. Somanna Mrs. Chandrakala M R Mr. Ashoka B M Mr.Pratap N Mr. Murali Krishna N Mr. Krishna Murthy A V
3	Organized skill lab for II year students Topic: "Debugging Digital Trainer Kit and tracing its Circuit" Fifth day of Skill Lab workshop	14-08-2023	68	8	_	Dr. K B Ramesh Dr. CH Renu Madhavi Mr. Anil Kumar N A Mr. Somanna Mrs. Chandrakala M R Mr. Ashoka B M Mr.Pratap N Mr. Murali Krishna N Mr. Krishna Murthy A V
4	Organized skill lab for II year students Topic: "Development of Junction box" Fourth day of Skill Lab workshop	12-08-2023	68	8	-	Dr. K B Ramesh Dr. CH Renu madhavi Mr. Anil Kumar N A Mr. Somanna Mrs. Chandrakala M R Mr. Ashoka B M Mr.Pratap N Mr. Murali Krishna N Mr. Krishna Murthy A V
5	One day workshop on "Cortex-M3/M4 Microcontroller" Hands on Sessions.	31-08-2023	68	3	-	Dr. K B Ramesh Dr. Veena Divya.K Mrs. Chandrakala M R Mr. Ashok B M
6	Catalog internship phase2 session	06.11.2023 07.11.2023 And 08.11.2023	80	2	-	Dept of EIE under Sensors and its Application Technology Excellent Centre (Dr. CH Renu Madhavi)
7	CSTA internship phase 5	24.11.2023 28.11.2023 And	80	2	-	Dept of EIE under Sensors and its Application Technology
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	29.11.2023	Excellent Centre
		(Dr. CH Renu Madhavi)

## 8. List of Conference/Seminars/Workshops attended by the faculty:

Sl	Faculty Name	Conference /Workshop	Venue	Date Attended
No		/Seminar		2 are i internaed
1	Dr. Padmaja K V	As reviewer for International conference on smart systems for applications (ICSSES 2023)	7-8th july organized by SIT, Tumkur.	07-07-2023 to 08-07-2023
2	Dr. CH Renu Madhavi	As reviewer for International conference on smart systems for applications (ICSSES 2023)	7-8th july organized by SIT, Tumkur.	07-07-2023 to 08-07-2023
3	Dr. K B Ramesh	Attended Two weeks international online FDP program on "Research Tools" organized by the Department of Artificial Intelligence, Easwari Engineering College.	Online FDP Program	03-07-2023 to 14-07-2023
4	Dr. Veena Divya Krishnappa	VLSI to System design: Silicon-to-end application approach	organized by the All-India Council for Technical Education (AICTE), STMicroelectronics and Arm Education	31-07-2023 To 04-08-2023
5	Dr. CH Renu Madhavi	VLSI to System design: Silicon-to-end application approach	organized by the All-India Council for Technical Education (AICTE), STMicroelectronics and Arm Education	31-07-2023 To 04-08-2023
6	Dr. Deepashree Devaraj	Participating in Anthology on AI's Role in Reshaping Indian Higher Education	Online	17-08-2023
7	Dr. Padmaja K V	Attended Seven days National level online FDP on outcome based education and essential AI tools for Teachers	Organized by Carmel College and Kerala State Higher Education Council	10-08-2023 To 18-08-2023
8	Dr. Padmaja K V	faculty mentor attended	Online	29-08-23
				Dama 12 of 24

		IUCEE Minicourse online sessions on Social and emotional learning		
9	Dr. Padmaja K V	Attended a talk by Dr Revan Kumar Joshi, Faculty, RV Dental college on bridging the gap between Dentistry and Engineering	During the inaugural event of RVU COE in IoT and Edge computing at Civil seminar hall	01-09-2023
10	Dr. CH Renu Madhavi	AICTE Training And Learning (ATAL) Academy Faculty Development Program on Cyber Security for Industry 4.0	RVCE, Bengaluru	09/10/2023 to 14/10/2023.
11	Dr.Anand Jatti	AICTE Training And Learning (ATAL) Academy Faculty Development Program on Cyber Security for Industry 4.0	RVCE, Bengaluru	09/10/2023 to 14/10/2023.
12	Dr. CH Renu Madhavi	Attended a online Talk on Quality in Higher Education	Dr Subramanya, Principal RVCE under the Aegis of ISQ, Bangalore chapter RVCE, Bengaluru	11.11.23
13	Dr.Padmaja K V	Attended a online Talk on Quality in Higher Education	Dr Subramanya, Principal RVCE under the Aegis of ISQ, Bangalore chapter RVCE, Bengaluru	11.11.23
14	Dr.Deepashree Devaraj	8 Day National level Online Faculty Development Program on Research Methodology using ChatGPT & AI tools and Funding Opportunities for Research,	organized by the PG Department of Computer Applications, The Internal Quality Assurance Cell (IQAC) and Lincoln University College Marian Research Centre (LUC MRC) of Marian College Kuttikanam (Autonomous),in association with The Kerala State Higher Education	23-11-2023 to 01-12-2023
				Decc 13 of 3

			Council (KSHEC)	
15	Dr.Padmaja K V	Served as Seesion Chair for CSITSS'2023	RVCE, Bengaluru	02.11.2023
16	Dr. CH Renu Madhavi	Served as Seesion Chair for CSITSS'2023	RVCE, Bengaluru	03.11.2023
17	Dr. S.C. Prasanna Kumar	CSITSS '2023 – Finance Chair & Session Chair	RVCE, Bengaluru	02.11.2023 to 03.11.2023
		Session Chair – ICSSES'2023	SIT, Tumakuru	06.07.2023
18	Mrs. Chandrakala M R	Campus IT Infrastructure Management	Dept of TCE	27-11-223 to
				29-11-2023
19	Mr. Pratap N	Campus IT Infrastructure	Dept of TCE	27-11-223
		Management		to 29-11-2023
20	Dr. Ramesh K B	Attended the	L-Universita,	04-12-2023
		International	Ta' Malta and	То
		conference	UPES	06 -12-2023
		and chaired a session		
		on applications of IoT		
		in different sectors.		

## 9. Awards / Certifications

Sl No	Faculty Name	Award / Achievement Details	Awarded by Organization Name
1	Dr. Rachana S Akki	Attending online course on Course Design and Delivery Lecture IIEECP Spring 2023	Under IUCEE Platform
2	Dr. Renu Madhavi CH	Awarded for 3 reviews between July 2019 and February 2023 presented in recognition of the review contributed to the journal	Journal of King Saud University: Computer and Information Sciences
		IEEE Women in Engineering and Technology Conference Session chair CSITSS COProgram chair of a session	IEEE,Karnataka RVCE,BLR





पेटेंट कार्यालय, भारत सरकार पेटेंट प्रमाण पत्र (पेटेंट नियमानली का नियम 74)

The Patent Office, Government Of India Patent Certificate (Rule 74 of The Patents Rules)

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पेटेंट सं. / Patent No.	480210
आवेदन सं. / Application No.	201741002255
फाइल करने की तारीख / Date of Filing	: 20/01/2017
पेटेंटी / Patentee	R.V. College of En

प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित METHOD AND APPARATUS FOR CONTINUOUS MEASUREMENT OF BLOOD PRESSURE नामक आविष्कार के लिए, पेटेंट अयिनियम, 1970 के उपबंधों के अनुसार आज तारीख जनवरी 2017 के बीसवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled METHOD AND APPARATUS FOR CONTINUOUS MEASUREMENT OF BLOOD PRESSURE as disclosed in the above mentioned application for the term of 20 years from the 20<sup>th</sup> day of January 2017 in accordance with the provisions of the Patents Act, 1970.

अनुदान की तारीख : Date of Grant : 11/12/2023 Controller of Patents ली - इस पेटेट के नबीकरण के लिए फीस, तरि हरी बनाए रखा जाना है, जनवरी 2019 के वीसबे दिन की और उसके प्रवल प्रलोक बर्ब ने उसी दिन देस लेगे। Note. - The fees for renewal of this patent, if it is to be maintained, will fail / has fallen due on 20th day of January 2019 and on the same day in every year thereafter.

Patent Granted for Dr. B.G. Sudarshan, for the title 'Method and apparatus for Continuous measurement of Blood Pressure'



Dr. K.V.Padmaja received certificate of appreciation as 'Global Expert Faculty' in IUCEE Foundation



Dr. Harsha, and Dr. Rachana S. Akki received certification as 'Yoga Trainers'.



Dr. Rachana S Akki received Distinction Certificate for successful completion of IUCEE International Engineering Educator Certification Program.

The following faculty are involved in Training and Consultancy for different Centre of Excellence and Centre of Competency established in RVCE:

S.No	Name of the Faculty	СоЕ
1	Dr. Padmaja K V	Centre of Excellence in Internet of Things
2	Dr.Rachana S Akki	Centre of Excellence in e- mobility
3	Dr.Harsha	RVCE Bosch Rexroth: Centre of Competence in Automation Technologies
4	Dr. Veena Divya K	Centre of Competence on Visual Computing

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5	Dr. Kendaganna Swamy S	Centre of Sensor Technology Applications
5	Dr. Rajasree P M	
	Dr. CH Renu Madhavi	
	Dr. Veena Divya K	

## 7. Publication details of faculty- International Journals.

Sl No	Faculty Name	Title	Journal Name	National/ International	Volume & No	Issue
1	Dr. K B Ramesh, Mayur	Published a review paper on the topic "Enhancement of Memory in ALU" in the journal of Analog and Digital Devices.	MAT	National	2	2
2	Dr. K B Ramesh, Nidhi C N	Published a review paper on the topic "Computer Architecture and System through Machine Learning- A Comprehensive Exploration of Applications" in the journal of Advancement of Computer Technology and its Applications.	the journal of Advancement of Computer Technology and its Applications	International	6	3
3	Dr. Deepashree Devaraj	Recognizing And Converting Sign Language Into Speech	International Journal of Novel Research and Development	International	8	7
4	Dr. Deepashree Devaraj	Web-Based Data Visualization Techniques for Effective Research Data Representation	International Journal of Novel Research and Development	International	8	7
5	Pradumna, K.B.Ramesh	"Optimizing Conventional Full adder Design for Enhanced ALU Performance"	JETIR	International	10	8

## 8. Conference Publications by Faculty:

Sl	Faculty Name	Title	Conference	National	Volume	Issue	Page
No				/International	& No		No
1	Dr. K b Ramesh	Classification of	7th	International	-	-	-
		DNA Sequence using	International				
		Machine Learning	Conference on				
		Techniques	"Computational				

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			Systems and Information Technology for Sustainable Solutions"			
2	Dr. K b Ramesh	Low- Cast Non – Invasive Data Acquisition System for diabetic Detection with IoT	7th International Conference on "Computational Systems and Information Technology for Sustainable Solutions"			
3	Padmaja K V, Vidya M J, Revan Kumar Joshi, Rajasree P M,CH Renumadhavi, Veena Divya K	Anxiogram: Unmasking Anxiety with IOT- Enhanced ECG	2023 7th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS)	International		

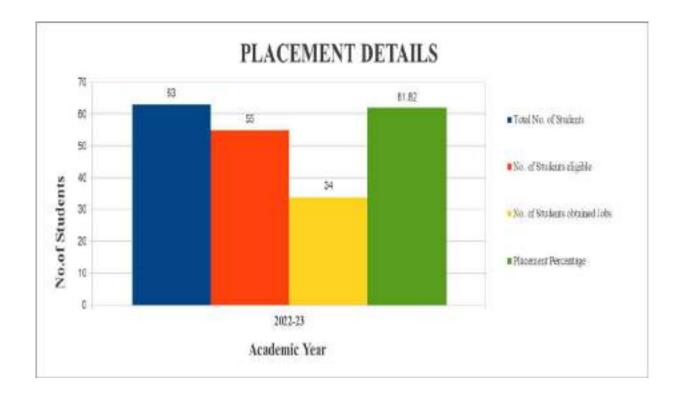
#### 9. Book Published /Authored by Faculty:

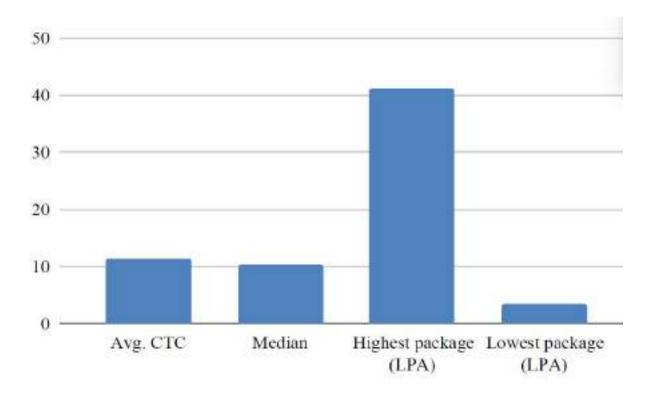
Sl No	Faculty Name	Name of the Book	Publisher	ISBN
1	Dr. CH Renu Madhavi	A Deep Learning	<b>RcHuB</b> Publications	978-81-957695-8-2,
		Approach to		Edition 1
		Improve Detection		
		And Classification		
		Of Brain Tumor In		
		Mri Images		

### **10. Placement Statistics:**

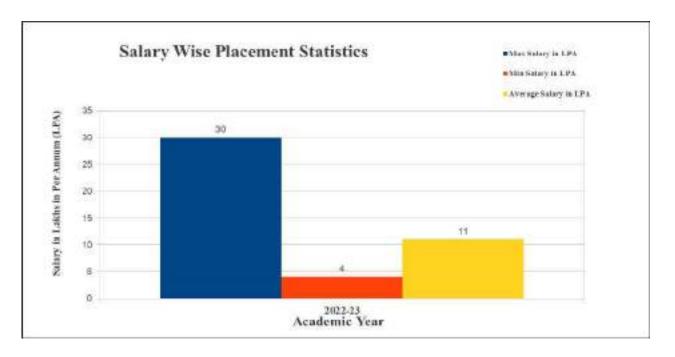
The placement statistics for the batch 2019-2023 of Electronics and Instrumentation Engineering Department is shown below, many major IT and Core companies like AIRBUS, BOSCH, HP, Oracle, Western Digital, CISCO, Deloitte to name a few have visited our campus, still the placements are ongoing for this batch. Maximum salary package of 30Lakhs per annum has been bagged by our E & IE students, Average salary of

our dept students is 11 Lakhs per annum as of now. The statistics is as depicted:





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**Our Major Recruiters:** 



### 11. Student Achievements:

### Extra-Curricular Activities:

Sl.	Event	USN	Name of the	Prize won	Place of event	DATE
No			student 2022-23			
1	Ablana mastam anom	101/21/051		1.8t ml a a a	DVITM	22 <sup>nd</sup> Jun 2023
1.	Ablaze-western group dance competition	1RV21EI051	Shruthi Petkar	1 <sup>st</sup> place	RVITM	22 <sup>22</sup> Jun 2023
2.	Humanza'223 -western	1RV21EI051	Shruthi	1 <sup>st</sup> place	St. Pauls college	25 <sup>th</sup> May 2023
	gp. dance competition	11( ) 2121031	Petkar	1 place	st. I duis conege	25 May 2023
3.	varchasva'2023-western	1RV21EI051	Shruthi	1 <sup>st</sup> place	SJBIT	21 <sup>st</sup> Jun 2023
	group dance		Petkar	_		
4.	cultura'2023-weatern	1RV21EI051	Shruthi	2 <sup>nd</sup> place	CMRIT	10 <sup>th</sup> Jun 2023
<u> </u>	group dance category		Petkar	and 1		a oth o
5.	Business Marathon 2023	1RV21EI051	Shruthi	2 <sup>nd</sup> place	Jain University	08 <sup>th</sup> Oct 2023
6.	Incident Street play	1RV21EI034	Petkar Prajwal KP	3 <sup>rd</sup> place	NIT Surathkal	19 <sup>th</sup> Mar 2023
0.	meldent Street play	1K V 21E1034	Flajwal Kr	5 place	NII Sulaukai	
7.	Street play	1RV21EI034	Prajwal KP	1 <sup>st</sup> place	Nitte, Bengaluru	20 <sup>th</sup> May 2023
8.	Utsav Street play	1RV21EI034	Prajwal KP	2 <sup>nd</sup> place	BMS College of	27 <sup>th</sup> May 2023
				and	Engineering	a —th a a
9.	Utsav Mad ads	1RV21EI034	Prajwal KP	2 <sup>nd</sup> place	BMS college of	27 <sup>th</sup> May 2023
10.	DSATM Street play	1RV21EI034	Prajwal KP	1 <sup>st</sup> place	Engineering R V college of	03 <sup>rd</sup> Jun 2023
10.	DSATM Succe play	11 V 21 21034	I lajwal Ki	i place	Engineering	03 Juli 2023
11.	SJBIT Mad ads	1RV21EI034	Prajwal KP	2 <sup>nd</sup> place	SJBIT, Bengaluru	22-Jun-23
10				-	-	
12.	Center Stage	1RV21EI034	Prajwal KP	Runners	RVCE, Bengaluru	15 <sup>th</sup> Jun 2023
13.	Jayciana Street Play	1RV21EI034	Prajwal KP	3 <sup>rd</sup> Place	SJCE, Mysore	29 <sup>th</sup> Jun 2023
14.	VTU South Zone	1RV22EI053	Shreya	Runners	RNSIT	18th - 19th
	Badminton Tournament		Kulkarni			July 2023
15.	SPENT Quiz	1RV21EI019	George	3 <sup>rd</sup> Place	MSRIT, Banglore	22 <sup>nd</sup> Dec 2023
16	V (1 0000	101/0051052	Johnson	1 St DI		20/1 M 1 /
16.	Youvothsava 2023 - Group Indian Song	1RV22EI053	Shreya Kulkarni	1 <sup>st</sup> Place	Nagarjuna College of Eng. & Tech.	29th Mar -1st Apr,2023)
17.	Incident Street play	1RV22EI403	Rohan R	3 <sup>rd</sup> place	NIT Surathkal	19 <sup>th</sup> Mar 2023
				-		
18.	Street play	1RV22EI403	Rohan R	1 <sup>st</sup> place	Nitte, Bengaluru	20 <sup>th</sup> May 2023
19.	DSATM Street play	1RV22EI403	Rohan R	1 <sup>st</sup> place	Dayanand Sagar	03 <sup>rd</sup> Jun 2023
			<b>D</b> 1 -		Academy of Tech.	A oth x a seco
20.	Center Stage	1RV22EI403	Rohan R	Runners	RVCE, Bengaluru	15 <sup>th</sup> Jun 2023
21.	Jayciana Street Play	1RV22EI403	Rohan R	3 <sup>rd</sup> Place	SJCE, Mysore	29 <sup>th</sup> Jun 2023

### **12.**Gallery Section



EIE -Faculty Flag Hoisting -August'2023., an initiative for 'Azadi ka Amrit Mahotasv



ISTA – RVCE -Curricular Activities – Teacher's Day Celebrations-Event Winners' September 2023



EIE -Faculty participation in ISTE-RVCE Teacher's Day Celebrations– Extracurricular events -2023



ISTE-RVCE Chapter-Teacher's Day Celebrations – 15<sup>th</sup> September 2023.



Dr. Kendaganna Swamy and Dr. Rajasree P M, CoE-CSTA conducted workshop for Faculty of BIT, Bengaluru



COE-CSTA Internship students of EIE, RVCE for one week in August, 2023



COE-CSTA Internship conducted for German Program for one week in November, 2023



IOT Kits Developed by CoE - CSTA - Team



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Alumni meet in EIE Department – 8<sup>th</sup> July, 2023



Dr. K.V.Padmaja, Professor addressing first year Inaugration on 1st October, 2023



Dr. K.V.Padmaja, Professor, organized 'Khadi Mahotsav' promoting Rural Welfare Development.

Technical talk by Prof. S.Venktatesh on 'How to become a good engineer' on 3rd August, 2023, in BIT, Bengaluru.



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'Skill Lab' organized for I-year UG students of EIE, RVCE in July 2023

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Parent-Teachers Meet- held on 22nd July, 2023



COE-CSTA Internship for ISE Department, in August, 2023.



Workshop on Microcontrollers and Programming Using ARM'' organized by department of Electronics and Instrumentation Engineering, in collaboration with the Sensors Council chapter of IEEE RVCE 31<sup>st</sup> August 2023.





#### **Other Information**

- a. Dr. Padmaja K V, Professor, Invited as Doctoral committee member for DC meeting to know the progress of PhD Scholar of Guide Dr Usharani Research scholar on 04.07.23 at ECE research centre.
- b. Dr. Padmaja K V, Professor, Generated fund of Rs 70,000/- as Warden RVCE girls hostel by providing Krishna Garden hostel facilities for 46 girls for UG & PG students of Sri Vidya Mandir Arts and Science College, Katteri, Tamil Nadu from 21June to 5july, 2023 for Internship program conducted by Department of Mathematics, RVCE.
- c. Dr. Padmaja K V, Professor, Invited as Doctoral committee member for open seminar 1meeting to know the progress of PhD Scholar of Guide Dr Usharani Research scholar on 18.07.23 at ECE research centre.
- d. Dr. Padmaja K V, Professor, received certificate of appreciation as Reviewer for International conference on smart systems for applications (ICSSES 2023) held on 7-8th july organized by SIT, Tumkur.
- e. Dr. K B Ramesh, Associate Professor, Conducted the Final Ph.D Viva-voce of Research Scholar Mr. Narendra Kumar(External Candidate -1RV16PEJ08 on 18-07-2023.
- f. Dr. Padmaja K V, Professor, As Warden RVCE, carrying out BE admissions for girls' hostel during july/ Aug/Sept 2023 for the Academic year 2023-24.
- g. Dr. Padmaja K V, Professor, As Co-Ordinator for Covid protocol, carried out the responsibility assigned for the Graduation Day on 19.08.23
- h. Dr. Padmaja K V, Professor, As Anti ragging committee member was a part of the activities for the Anti-ragging week from 16-18, Aug 2023
- i. Dr. Padmaja K V, Professor, As member of the of the funded project of Rs 4lakhs titled IoT based Sheep tracker and livestock management submitted Hardware prototype module work during Aug 2023.
- j. Dr. Padmaja K V, Professor, Invited as Judge for Talent show for faculty on 23.08.23 at ECE seminar hall by ISTE-RVCE chapter.
- k. Dr. Padmaja K V, Professor, Invited as the panel member for evaluating EL component of 2nd semester A,B,C section on 14/9/2023 at ECE Department, RVCE.
- 1. Dr. Anand Jatti, Associate Professor, invited as the panel member for evaluating EL component of 2nd semester on 14/9/2023 at CSE Department, RVCE.
- m. Dr. Anand Jatti, Associate Professor, Invited as DTL second phase external examiner for fourth semester DTL projects by TCE department on 15.09.23.

- n. Dr. Padmaja K V, Professor, Invited as DTL second phase external examiner for fourth semester DTL projects by ECE department on 15.09.23
- o. Dr. CH Renu Madhavi, Associate Professor and HoD, Received 1.9Lakh sponsorship for CSITSS-2023 from Synaptics Company on 30/09/2023.
- p. Mr.Anil Kumar N A, Foreman, Received 5k sponsorship for CSITSS-2023 from Advanced Control Systems Company on 30/09/2023.
- q. Dr. Padmaja K V, Professor, Invited as Doctoral committee member for open seminar I1meeting to know the progress of PhD Scholar of Guide Dr. Usharani Research scholar on 19.10.23 at ECE research center.
- r. Dr. Padmaja K V, Professor, Received Certificate of Appreciation as Faculty mentor for IUCEE Mini Course on Social and Emotional Learning during Aug-Oct 2023 from Global Expert Faculty, Dr. Prathiba Nagabhushan, Educational Psychologist, St Mary MacKillop College, Australia.
- s. Dr. Padmaja K V, Professor, As Co-coordinator for hospitality Committee and member of organizing committee, carried out planning and execution for three days 2nd Nov to 4th Nov 2023, International conference, CSITSS.
- t. Dr. Padmaja K V, Professor, As Co-Ordinator for Centre for Gandhian Principles organized Khadhi exhibition in association with Rural Welfare and development association under Khadi Mahotsav at Civil department Third floor, RVCE during 16nth, 20th,21st Nov 2023.
- u. Dr. Padmaja K V, Professor, invited to serve as a Co-Chair for a Session on computing at RVCE on 03.11.23 for CSITSS 2023 7th IEEE International Conference on "Computational Systems and Information Technology for Sustainable Solutions [CSITSS - 2023]" is being organized jointly by RV College of Engineering, Bengaluru in association with Florida International University (FIU), USA.
- v. Dr. Padmaja K V, Professor, invited to attend Anti ragging meeting at RVU as external committee member on 29.12.23
- w. Dr. Padmaja K V, Professor, Provided accommodation for 36 outside participants In DJ campus hostel for Civil department concrete fair event on 11.12.23 and 12.12.23. also provided accommodation for 9 girls from outside participating in ECE department FDP from 03.12.23 to 10.12.23
- x. Dr. Padmaja K V, Professor, As Warden RVCE girls hostel attended first year Parents Teachers Meeting on 09.12.23 in college auditorium.
- y. Dr. K B Ramesh, Associated Professor, as a REVIEWER of 7th IEEE International Conference CSITSS-2023 on 2nd Nov to 4th Nov 2023.
- z. Dr. Rachana S Akki, Dr. Kendaganna Swamy S, Dr. Deepashree Devaraj, Dr. Harsha and Dr. Veena Divya K, are involved in as event management team in CSITSS'2023, in RVCE, Bengaluru.