ISSUE 22

CIRCUIT CHRONICLES

ECE NEWS LETTER
K.S.R. COLLEGE OF ENGINEERING (Autonomous)
TIRUCHENGODE – 637 215

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- Faculty Achievements
- Department Activities
- Students Activities
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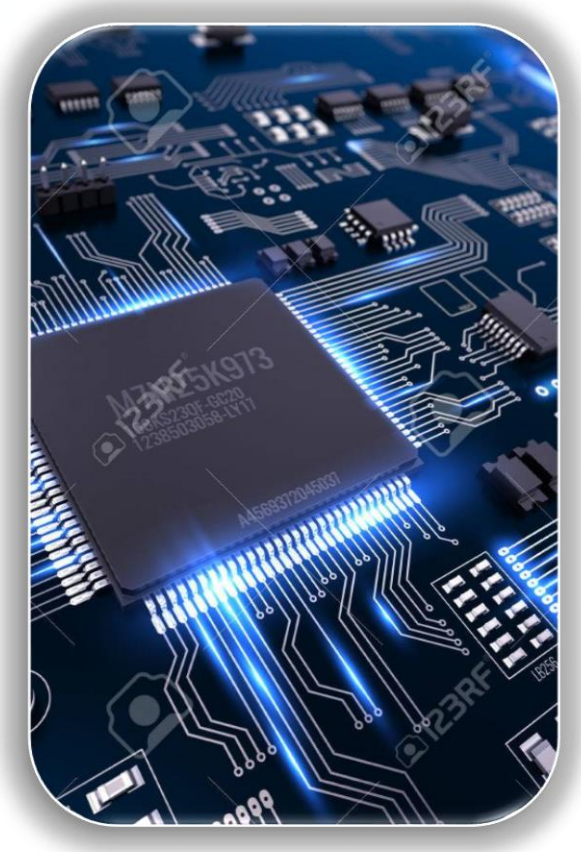

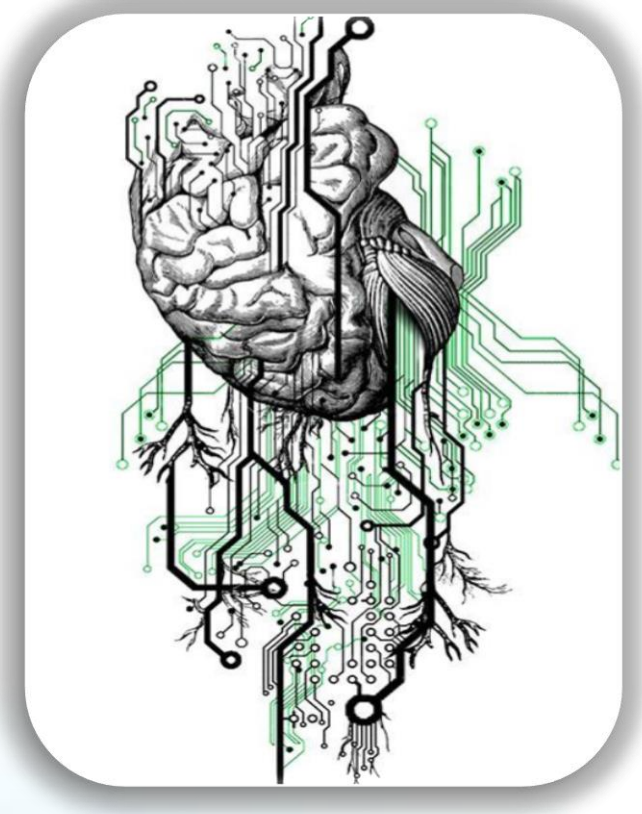

VISION OF THE INSTITUTION

IV We envision to achieve status as an excellent educational institution in the global knowledge hub, making self-learners, experts, ethical and responsible engineers, technologists, scientists, managers, administrators and entrepreneurs who will significantly contribute to research and environment friendly sustainable growth of the nation and the world

MISSION OF THE INSTITUTION

IM 1 To inculcate in the students self-learning abilities that enable them to become competitive and considerate engineers, technologists, scientists, managers, administrators and entrepreneurs by diligently imparting the best of education, nurturing environmental and social needs.

IM 2 To foster and maintain mutually beneficial partnership with global industries and Institutions through knowledge sharing, collaborative research and innovation.

VISION OF THE DEPARTMENT

DV We envision as a center of excellence in the field of Electronics and Communication Engineering to produce technically competent graduates with diverse teaching and research environments.

MISSION OF THE DEPARTMENT

DM 1 To educate the students with the state of art technologies to meet the growing challenges of the industries.

DM 2 To develop an innovate, competent and ethical Electronics and Communication Engineer with strong foundations to enable them for continuing education.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

The graduates of the programme will be able to:

PEO 1 **Employability and Higher Education:** Excel in Professional career and higher education by acquiring knowledge in mathematical, social, scientific & engineering principles.

PEO 2 **Core Competence:** Analyze, design and develop/implement core engineering problems in communication systems that are technically sound, economically feasible and socially acceptable.

PEO 3 **Interpersonal Skills and Team Work:** Exhibit professionalism, ethical communicating skills and team work by engaging in lifelong learning for sustainable development of the society.

PROGRAMME OUTCOMES (POS)

Program Outcomes (POs)

PO1 **Engineering Graduates will be able to:**

Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2 **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3 **Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4 **Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5 **Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6 **The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7 **PEnvironment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8 **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 **Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11 **Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12 **Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

PSO1 **Professional Skill:** Specify, design and test modern electronic systems that perform analog and digital processing functions.

PSO2 **Problem – Solving Skills:** Design essential elements (circuits and antennas) of modern RF/Wireless communication systems.

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FACULTY ACHIEVEMENTS

Publications:-

NAME OF THE AUTHOR(S)	TITLE OF THE PAPER	NAME THE JOURNAL	VOLUME/ ISSUE NO	DOI/ISSN NO	YEAR
Dr.P. S.Periasamy	Micro Calcification Detection in Mammogram Images Using Contiguous Convolutional Neural Network Algorithm.	Computer Systems Science & Engineering.	45/2	10.32604/csse.2023.028808	2022
	Environmental Impact of High Voltage Insulator quality Analysis Using Improved Deep Learningapproach.	Journal of Environmental Protection and Ecology.	23(2)		2022
	Joint power allocation and channel assignment for deviceto-device communication using the Hungarian model and enhanced hybrid Red Fox-Harris Hawks Optimization.	Wileyonlinelibrary.com/journal/dac.	36/ 7	10.1002/dac.5425	2022
	Fault Detection for Photovoltaic Panels in Solar Power Plants by Using Linear Iterative Fault Diagnosis (LIFD) Technique Based on Thermal Imaging System.	Journal of Electrical Engineering & Technology Published.	18	10.1007/s42835-023-01381-7	2023
	Digital infrared thermal imaging system based breast cancer diagnosis using 4D u-net segmentation	Biomedical Signal Processing and Control		10.1016/j.bspc.2023.104792	2023

Dr.C. Gowrishankar	Adaptive Sub-Threshold Voltage Level Control for Voltage Deviate-Domino Circuits	Intelligent Automation & Soft Computing		10.32604/iasc.2023.028758	2023
Dr. S. Karthikeyan	An Advancement of Humans Activities Detection Based on Wireless Sensors and Machine Learning.	Advanced Engineering Science.	54/2		2022
	EB Energy Meter Monitoring System Using IOT	International Journal of New Innovations in Engineering and Technology	22	ISSN:2319-6319	2023
	Human Life Safety System with Electrical Information using GSM & GPS	International Journal of New Innovations in Engineering and Technology	22/ 1	ISSN: 2319-6319	2023
	Adaptive Multicale Transformation Run-Length Code-Based Test Data Compression in Benchmark Circuits.	Intelligent Automation & Soft Computing.		DOI:10.32604/iasc.2022.026651	2022
Dr. R Eswaramoorthi	Deep graph neural network optimized with fertile field algorithm based detection model for uplink multiuser massive multiple input and multiple output system.	Transactions on Emerging Telecommunications Technologies.	33/12		2022
	Land Slide Monitoring System Using IOT	International Journal of New Innovations in Engineering and Technology	22/1	ISSN:2319-6319	2023
Mr.P.Sivasankar Rajamani	Driver drowsiness detection and control system using embedded system	International Journal of New Innovations in Engineering and Technology	22/1	ISSN:2319-6319	2023
Sathishkumar T M	Areal Time Bus Monitoring System using Mobile Location	International Journal of New Innovations in Engineering and Technology	22/1	ISSN: 2319-6319	2023
	Huffman coding algorithm based adaptive noise cancellation	International research journal of engineering and technology	10/6	Issn:2395-0072	2023
Mrs.P. Thilagavathi	Adaptive Multicale Transformation Run-Length Code-Based Test Data Compression in Benchmark Circuits.	Intelligent Automation & Soft Computing.		DOI:10.32604/iasc.2022.026651	2022
	Automatic bus arrival announcement system using RF transmitter and receiver	International Journal of New Innovations in Engineering and Technology	22/1	ISSN: 2319-6319	2023
Dr.R.Satheeskumar	Evolutionary gravitational neocognitron neural network based block chain technology for a secured dynamic optimal routing in wireless sensor networks.	Journal of Experimental & Theoretical Artificial Intelligence.	35/ 6,	doi.org/10.1080/0952813X.2022.2153274	2022
	Night Vision Security Patrolling Robot with Sound Sensing	International Journal of New Innovations in Engineering and Technology	22/1	ISSN: 2319-6319	2023

Dr.P.Mahendran	Design of All Pass Make over Based Capricious Digital Filter using Eminent Speed Dual Carry Select Adder and Truncation and Rounding Approximate Multiplier for Image Processing Application.	concurrency and computation practice and experience.	35/6	https://onlinelibrary.wiley.com/doi/10.1002/cpe.7575	2023
	Automatic Electrical Appliance Fault Detection System with Remote Monitoring Through IoT	International Journal of New Innovations in Engineering and Technology	22/1		2023
Mr.R. Veeramani	Design of Broadband Microstrip Patch Antenna For 5g Applications	International Journal of Current Engineering and Scientific Research	10	ISSN:2393-8374	2023
Mr.J. Rameshkumar	Design of Broadband Microstrip Patch Antenna For 5g Applications	International Journal of Current Engineering and Scientific Research	10 /74	ISSN:2393-8374	2023
Mr.K.Karuppanasamy	Railway Track Defect Monitoring Based on IoT	International Journal of New Innovations in Engineering and Technology	22	ISSN:2319-6319	2023
Dr.R.Poornima	Evolutionary gravitional neocognitron neural network based differential spatial modulation scheme for uplink multiple user huge MIMO systems	Knowledge based systems			2022
Mr. M.Jothimani	Water Quality Monitoring System Based On IOT	International Journal of New Innovations in Engineering and Technology	22 / 1	ISSN:2319-6319	2023
Dr.K.P.Uvarajan	Automated intimation to ambulance for emergency medical service and traffic clearance using IOT	International Journal of New Innovations in Engineering and Technology	22 / 1	ISSN:2319-6319	2023
Mrs.P.Usha	Student Management System and SGPA,CGPA Calculator	International Journal of New Innovation in Engineering and Technology	22 /1	ISSN:2316-6319	2023
Gowthami D	Navigation System for Visually Imparied People by Using Raspberry Pi	International Journal of New Innovation in Engineering and Technology	22 /1	ISSN:2316-6319	2023
Krishnakumar S	IoT based Smart Greenhouse Framework and Control Strategies for Sustainable Agriculture	International Journal of New Innovations in Engineering and Technology	22 /1	ISSN:2319-6319	2023

Patent Publication / Granted

TOPIC	INVENTORS	APPLICATION NO	DATE	STATUS
Iot based solar powered agriculture robot (UK design)	Mrs.P.Thilagavathi	6285563	26 /05/2023	Granted on 05/06/2023
AL based health care system using cloud computing in smart cities	Mrs. D. Gowthami	202341011888 a	22/02/2023	Published on 17/03/2023
IOT based sensor array technique for sailing vessels motion monitoring	Dr.S.Karthikeyan	202341007820 a	07/02/2023	Published on 17/02/2023
An improved artificial Hand	Dr.P.Mahendran K.Karuppanasamy	1244/che/2015	13.03.2015	Granted on 30.01.2023
Analysis of medical records of patients using artificial intelligence	Mr.S.Krishnakumar	202241043811a	01/08/2022	Published on 19/08/2022
Intelligent network device controller (design with grant)	Mrs.P.Thilagavathi Mr.P.Sivasankar rajamani (Design with grant)	368198-001	23/07/2022	Design generated on 20/04/2023
Solar panel	Dr.P.S.Periasamy Dr.C.Gowri shankar (Design with grant patent)	363767-001	05/05/2022	Granted date: 18/10/2022
Solar mobile charger	Dr.R.Poornima Dr.R.Satheeskumar (Design with grant patent)	364442-001	19.05.2022	Design generated on 05/04/2023

Participants in Various Programmes

NAME THE FACULTY(S)	TITLE OF THE PROGRAMME	CONDUCTED BY	DATE(S) AND YEAR
Dr.C.Gowri shankar	Faculty development programe on artificial integlligence for signal processing application	PSG Tech, Coimbatore	27.03.2023- 31.03.2023
Mrs.P.Usha	Microsoft azure AI engineer associate.	ICT Academy, Excel Engineering College.	15.11.2022- 19.11.2022
Ms.S.Suruthi	Microsoft azure AI engineer associate.	ICT academy, Excel Engineering College	15.11.2022- 19.11.2022
Mr.S.Krishna kumar	Microsoft azure AI engineer associate.	ICT academy, Excel Engineering College	15.11.2022- 19.11.2022
Dr.R.Satheeskumar	Emotional intelligence.	ICT academy, Paavai Engineering College	12.12.2022-14.12.2022
	Python made simple (basic & advanced).	Inspire Soft Solutions	13.07.2022- 13.08.2023
Mr.R.Veeramani	Python made simple (basic & advanced).	Inspire Soft Solutions	13.07.2022- 13.08.2023
	Seminar on recent trends in optical communication.	K S R Institute for Engineering and Technology	12.11.2022
Mr.M.Jothimani	Faculty development programe on teaching and learning in engineering	Nptel -Aicte	Jan-feb 2023
	Faculty development programe on design and development of industry led curriculum in technology era	AMET University	14.12.2022- 22.12.2022
	Python made simple (basic & advanced)	Inspire soft solutions	13.07.2022- 13.08.2023
Dr.T.M.Satheeskumar	Faculty skill development	KSR Educational Institutions	31.03.2023
	Course on artificial intelligence using python	Marcello Tech	21.11.2022 – 25.11.2022
Mr.K.Karuppanasamy	Faculty development programe on introduction to industry 4.0 and industrial	Nptel- Aicte	12 weeks

DEPARTMENT ACTIVITIES

Events Organized:

DATE/DURATION	EVENT	NO. OF FACULTY / STUDENT ATTENDED
6.04.2023	National level technical symposium (BLOOM-2K23)	84
6.04.2023	Guest lecture on “Carrier Opportunities to Electronic Students”	87
17.3.2023	Workshop on LAB VIEW	67
10.2.2023	Seminar on VLSI and its applications	86
19.12.2022	Webinar on Exploring Cadence EDA tool	35
8.11.2022 & 9.11.22	Workshop on MATLAB and its tool box	66
20.10.2022	Seminar on Bluetooth based Smart Sensors Networks with Real World Applications	45
12.9.2022	Webinar on ASIC physical Design flow	66
6.9.2022	Workshop on Printed Circuit board (PCB) Design	74
30.8.2022	Guest lecture on Basic Electronics	92
16.8.2022	Seminar on Printed Electronics	43

STUDENT ACHIEVEMENTS

Awards Received by Students

NAME OF STUDENTS	NAME OF THE ACTIVITY	DATE	ORGANIZED BY	PRIZE/ AWARD WON
Vignesh S	Paper presentation	25.02.23	Sona college of Technology, salem	2nd prize
Naveen balaji M	Paper presentation	07.02.23	K.S.R.College of Engineering, Tiruchengode	3rd prize
Ranjithkumar B S	Paper presentation	21.02.23	K.S.R.College of Engineering, Tiruchengode	1st prize
Ranjithkumar B S	Paper presentation	07.02.23	K.S.R.College of Engineering, Tiruchengode	2nd prize
Yuvanesh N	Paper presentation	21.02.23	K.S.R.College of Engineering, Tiruchengode	2nd prize
Yuvanesh N	Paper presentation	23.06.23	Selvam college of Technology, Namakkal	2nd prize
Yuvanesh N	Paper presentation	07.02.23	K.S.R.College of Engineering, Tiruchengode	2nd prize
Yuvanesh N	Quiz	22.02.23	K.S.R.College of Engineering, Tiruchengode	1st prize
Yuvanesh N	Gd	07.02.23	K.S.R.College of Engineering, Tiruchengode	2nd prize
Yuvanesh N	Atlolobby	06.05.23	Muthayammal Engineering College, Rasipuram	1st prize
Vijayasree K	English competition	17.11.22	K.S.R.College of Engineering, Tiruchengode	1st prize
Vijayasree K	Gd	07.02.23		2nd prize
Vijayasree K	Minute jam			2nd prize
Vijayasree K	Oratorical			1st prize
Pavithra T	Oratorical	17.11.22	K.S.R.College of Engineering, Tiruchengode	1st prize
Pavithra T	Spell be	07.02.23	K.S.R.College of Engineering, Tiruchengode	1st prize

NAME OF STUDENTS	NAME OF THE ACTIVITY	DATE	ORGANIZED BY	PRIZE/ AWARD WON
Pavithra T	GD	07.02.23	K.S.R.College of Engineering, Tiruchengode	2nd Prize
Pavithra T	Oratorical	20.02.23	K S R Educational Institutions, Tiruchengode	1st Prize
Prem K S	Connection	24.02.23	Velalar College of Engineering Technology, Thindal	2nd Prize
Dharshni K M	Idea Presentation	11.03.23	Knowledge Institute of Technology, Salem	2nd Prize
Abhiramidevi K R	Circuit Debugging	28.04.23	Vivekanandha College of Engineering for Women, Tiruchengode	1st Prize
Kaviya S	Technical quiz	24.02.23 & 25.02.23	Sona college of Technology, Salem	1st prize
Kaviya S	Circuit debugging	28.04.23	Vivekanandha College of Engineering for Women, Tiruchengode	2nd prize
Jeeva P	Blowing Cup	03.03.23	M.Kumarasamy College of Engineering, Karur	2nd Prize
Nivethitha K S	Technical quiz	13.05.23	Muthayammal Engineering college, Rasipuram	1st prize
Kalavathi S	Tamil essay	17.11.22	K S R Educational Institutions, Tiruchengode	2nd prize
Kalavathi S	Tamil essay	20.02.23	K S R Educational Institutions, Tiruchengode	1st prize
Nagathrisa V	Drawing	20.02.23	K S R Educational Institutions, Tiruchengode	3rd prize
Abinaya S	Drawing competition	17.11.22	K.S.R.College of Engineering, Tiruchengode	2nd prize
Ranjith kumar B S	Quiz	22.02.23	K.S.R.College of engineering, Tiruchengode	1st prize

INFO CORNER

National Level Symposium on 02.03.2023 to 04.03.2023

Other College Achivements on 03.03.2023 & 24.02.2023

21st Annual Sports Day on 21.03.2023

Editorial Committee

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Assistant Professor ECE

N.Girivelavan- II ECE
V.Srinivasan- II ECE