





# July – December 2023

Issue: 01



EDITORIAL COMMITTEE

# **Faculty Members:**

Dr. R. Sarankumar, Prof. & Head /EC Dr. R. Selvakumar, AP/EC Mr. G. Arun Francis, AP/EC Mr. C. Mukuntharaj, AP/EC

# **Student Members:**

20L214 – Gopi P	IV EC B
717821L314 – Gunabharath K	III EC C
717821L216 – Jagath M	III EC B





# INDEX PAGE

Sl.No.	Content				
1.	EC @ Glance				
2.	Vision & Mission of EC				
3.	PEO, PSO of EC	5			
4.	Industry Institute Partnership Cell (IIPC) (Centre of Excellence / MoU's / Collaboration Activities / Partial Delivery)				
5.	Faculty Corner	10			
	a. Faculty Grants / Research Consultancy / Seed money	10			
	b. Faculty Awards / Achievements/ Patents	13			
	c. Faculty Participation – Seminar / Webinar / Workshop / FDP / STTP	16			
	d. Faculty Publications – Books / Conferences / Journals	18			
6.	Students Corner	19			
	a. Students Innovative / Inter-disciplinary Projects	19			
	b. Students Awards / Achievements/ Patents	22			
	c. Students Publications – Conferences / Journals	26			
	d. Students Participation – Seminar / Workshop / Symposium / NPTEL / AICTE / MOOC's	27			
7.	Events Organized	29			
	a. Industrial Visit / Implant Training	32			
	b. Extra-Curricular Activities – Sports / Cultural	34			

#### **DEPARTMENT** @ GLANCE



B.E. Electronics and Communication (EC) Engineering offered at Karpagam College of Engineering and established in the year 2000. The department has experienced and qualified faculty members, well equipped laboratory such as DSP lab, MEMS Lab, Communication and Microwave Engineering Lab, LIC / Digital Lab, VLSI Design Lab, Network sand Simulation and Electron Devices Lab with availability of latest and updated version of software package. The department has also promoted different center of excellence for MEMS Research and Development (CMRD),Centre for Signal Processing Research and Development (CSPRD),Centre for Embedded system Research and Development (CESRD), Centre for Image and Video Processing Research and Development (CIVRD),Centre for VLSI Design and Development(CVDD) and Centre for Research Communication and Wireless Network (CRCWN) for developing research activities in the field of Electronics and Communication Engineering.





#### **VISION OF THE DEPARTMENT**

To be recognized as a premier department for delivering competent Electronics and Communication Engineers with socio-ethical responsibility.

**MISSION OF THE DEPARTMENT** 

- Adapting innovative pedagogical methodologies for effective curriculum delivering.
- Establishing Centre of Excellence in various domains for fostering collaborative research and innovation related pursuits.
- Inculcating ethics, social responsibility with inclusive leadership skills.
- Incubating entrepreneurship ventures and imparting employability skills.

#### PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

#### MANA ANY DESCRIPTION ANY DESCRIPTION ANY

**PEO1:** Graduates will be professionals in Electronics and Communication Engineering/allied industries, pursue higher studies or entrepreneurs

**PEO2:** Graduates will be executing multidisciplinary projects with leadership skills, social responsibility and ethics

**PEO3**: Graduates will be design and develop technical solutions for contemporary technological engineering problems with continual learning

PROGRAMME SPECIFIC OUTCOMES (PSO)

**PSO1:** Good knowledge and hands-on competence to solve emerging real-world problems related to Electronic Devices and Circuits, Communication Systems, Digital Systems, and Electro-magnetics

**PSO2:** Demonstrate proficiency in specialized software packages and computer programming useful for the analysis/design of electronic engineering systems and profession



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INDUSTRY INSTITUTE PARTNERSHIP CELL (IIPC)

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(Centre of Excellence / MoU's / Collaboration Activities / Partial Delivery)

- The Department of EC signed MoU with **Gateway Software solution**, **Coimbatore**, under SPOC of Dr. S. Deepa, ASP/EC.
- In view of Alumni Interaction, **Career Guidance Opportunities in IT Industries** has been conducted on 24<sup>th</sup> August 2023 for 3<sup>rd</sup> year students. Mr. Balamururgan G (Class of 2023) acted as resource person for the event.



Fig. 1. Mr. Balamururgan G (Software Engineer, iLink Digital, Coimbatore) addressing the students.

• In view of Alumni Interaction, **Guidance for Higher Studies** Program has been conducted on 30<sup>th</sup> August 2023 for 3<sup>rd</sup> year students. Mr. Prasanna Balaji T (Class of 2023) acted as resource person for the event.



Fig. 2. Mr. Prasanna Balaji T (Software Analyzer, CTS, Bangalore) addressing the students.



• Mr.S.Ram Prasath, AP/EC and Mr.C.Mukuntharaj, AP/EC visited Enthu Technologies India Private Limited, Peelamedu, Coimbatore on 31.08.2023 on behalf of Department of EC through IIPC cell.



Fig. 3. Our FM's at Enthu Technology solutions, India pvt ltd.

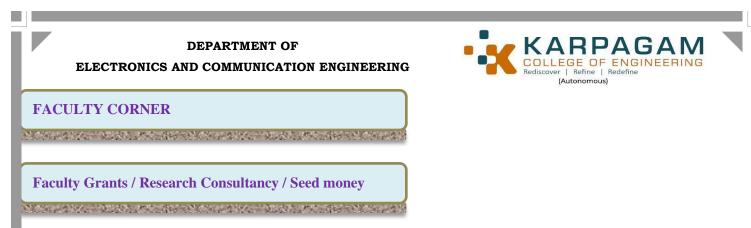
- Dr. S. Deepa, ASP/EC and Mrs. S. Malini, AP/EC organized the Partial delivery on the course 21ED23 Computer Networks by the industry expert Mr. M. Sabarinathan, Sr. Technical Manager, Gateway Software Solutions, Coimbatore, on 31<sup>st</sup> August 2023 and 16<sup>th</sup> September 2023.
- The following Centre of Excellences (CoE) are initialized in the department of EC
  - ✓ Centre of excellence for VLSI Design
  - ✓ Centre of excellence for Embedded Systems
  - ✓ Centre of excellence for Antenna design











- Dr. G. Saravanakumar, as a co-principal investigator, has received project grant of Rs. 1,04,00,780 and from Department of Science and Technology [DST] for the Project titled "Camellia–IDrone: An Intelligent Automatic System for the Pest Infestation Assessment and Spraying Intervention in Tea Plants of North East Region" in month of June 2023.
- **Dr. A. Rajendran** has received seed money of **Rs: 75,000/-** for the project titled "Smart reminder medicine box using IOT" on 29<sup>th</sup> September 2023.

Dr. R. VASANTHAKUMAR Chairman & Managing Trustee	Shri. K. MURUGAIAH Chief Executive Officer	Dr. V. KUMAR CHINNAIYAN Principal
		29.09.2023
То,		
Dr. A. Rajendran, Professor, Department of Electronics and Co Karpagam College of Engineering		
Madam,		
Sub: Project on 'Smart R release of seed money 202	Remainder Medicine Box us 23-2024.	ing loT' – Approva≬ and
With reference to the abo "Smart Remainder Medicine E budget of Rs. 75,000/- (Rupees year from the date of sanction. Yo	Seventy Five Thousand O	sanctioned with a total nly) for a period of one
Project Title	: Smart Remainder Mee	
Principal Investigator Duration Recommended Budget	: Dr. A. Rajendran, Prof : One Year : Rs. 60,000/- (Rupees	fessor/ECE Sixty Thousand Only)
On the completion of the p statement of expenditure and ut conducted once in two months. review and empowered to sugges	The panel members from in	progress review will be
The principal investigators funded projects from governme impact factor journals.	s need to produce tangible ent agencies, patents, pape	outcomes in terms of er publications in high
The management wishes g	good luck for the future ende	avors.

Fig. 4. Dr. A. Rajendran, Prof/EC received approval letter for Seed money.



• **Dr. M. Annalakshmi** has received seed money of **Rs: 37,500/-** for the project titled "Recognition of different medicinal plants using deep learning approach" on 29<sup>th</sup> September 2023.

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Dr. R. VASANTHAKUMAR Chairman & Managing Trustee	Shri. K. MURUGAIAH Chief Executive Officer	Dr. V. KUMAR CHINNAIYAN Principal
		29.09.2023
То,		
Dr. M. Annalakshmi, Assistant Professor, Department of Electronics Karpagam College of Engli	and Communication Engineering, neering	
Madam,		
	Waste Management: Compost the of seed money 2023-2024.	from Plant Wastage' –
"Waste Management: Co total budget of Rs. 37,500/	ne above, I am happy to inform the mpost from Plant Wastage" has - (Rupees Thirty Seven Thousand in the date of sanction. You may -	been sanctioned with a Five Hundred Only) for
Project Title	<b>.</b>	t: Compost from Plant
Principal Investig	Wastage ator : Dr. M. Annalakshmi,	Assistant Professor/ECE
Co-Principal Inves	stigator : Dr. R. Suguna, Assis	tant Professor/ECE
Duration	: One Year	
Recommended B	udget : Rs. 37,500/- (Rupees Five Hundred Only)	Thirty Seven Thousand
statement of expenditure	of the project, you are expected to and utilization certificate. Interim onths. The panel members from in suggest the modifications.	progress review will be
The principal invest funded projects from gov impact factor journals.	tigators need to produce tangible ernment agencies, patents, pap	e outcomes in terms of er publications in high
The management w	ishes good luck for the future ende	eavors.
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F.No. 758, 759, 760, Othakkal Mandapam, Co	oimbatore - 641032	Administrative Office:
hone - 0422 - 2619005, 06	Pollachi Main	Road, Eachanari Post, Colmbatore - 641021

Fig. 5. Dr. M. Annalakshmi, Prof/EC received approval letter for Seed money.



• **Dr. G. Saravanakumar** has received seed money of **Rs: 80,000/-** for the project titled "Development of Testing of Machine Learning based tool- PARACELSUS for Toxicity End Point Estimation of Drug Candidates" on 29<sup>th</sup> September 2023.

	RING	Accredited by NAA Accredited by NBA	E and Affiliated to Arina University, Chennai C with 'Ar' - (ECE, EEE, MECH and IT) nd ISO 14001 2015 Certified Institution
Dr. R. VASANTHAKUMAR Chairman & Managing Trustee		MURUGAIAH	Dr. V. KUMAR CHINNAIYAN
			29.09.2023
<b>To,</b> Dr. G Saravanakumar, Professor, Department of Electronics and Co Karpagam College of Engineering	ommunica	ation Engineering,	
Madam,			
Sub: Project on 'Develop PARACELSUS for Toxici Approval and release of se	ty End	Point Estimation o	Learning based tool – f Drug Candidates' –
With reference to the abo "Development of Testing of Ma Toxicity End Point Estimation total budget of Rs. 80,000/- (Rup- from the date of sanction. You ma	of Drug ees Eigh	earning based too Candidates" has t ty Thousand Only) f	I – PARACELSUS for been sanctioned with a or a period of one year
Project Title	bas	velopment of Testir sed tool – PARACE int Estimation of Dru	ng of Machine Learning ELSUS for Toxicity End ug Candidates
Principal Investigator Duration	: On	. G Saravanakumar, ie Year	
Recommended Budget	: Rs	. 80,000/- (Rupees	Eighty Thousand Only)
On the completion of the p statement of expenditure and ut conducted once in two months. review and empowered to sugges	ilization The pane	certificate. Interim p el members from in	progress review will be
The principal investigators funded projects from governme impact factor journals.	s need to nt ageno	o produce tangible cies, patents, pape	outcomes in terms of er publications in high
The management wishes g	ood luck	for the future ende	avors.
COLLEGE OF THE AUTOMOMOUS CBE-32 THE OFFICE			PRINCIPAL KARPAGAM COLLEGE OF ENGINEERING COIMBATORE - 32
S.F.No. 758, 759, 760, Othakkal Mandapam, Coimbate	ore - 641032		Administrative Office:
Phone - 0422 - 2619005, 06 E-mail: office@kce.ac.in   Web: www.kce.ac.in			Road, Eachanari Post, Coimbatore - 641021 e - 0422 - 2980011,12   Fax - 0422 - 2980022

Fig. 6. Dr. G. Saravanakumar, Prof/EC received approval letter for Seed money.



Faculty Awards / Achievements/ Patents

- Dr. T. K. Sethuramalingam, ASP/EC has design patent "AUTOMATIC FERTILIZER DISPENSER ROBOT" on 14<sup>th</sup> December 2023 (Patent No: 397065-001).
- **Dr. S. Deepa ASP/EC** has utility patent "APPARATUS FOR CRYSTAL GROWTH IN VACUUM AND A METHOD THEREOF" on 30<sup>th</sup> August 2023 (Patent No: 202141057590).
- **Dr. S. Deepa ASP/EC** has utility patent "AN APPARATUS FOR CLEANING A STORAGE TANK" on 05<sup>th</sup> September 2023 (Patent No: 201741017415).
- **Dr. S. Deepa ASP/EC** has design patent "DUCT AIR PURIFIER" on 29<sup>th</sup> September 2023 (Patent No: 389587-001).
- Dr. A. Rajendran, prof/EC got awarded with Elite plus Gold and Topper with 5% in NPTEL for the Course "Accreditation and Outcome Based Learning".



Fig. 7. Dr. A. Rajendran, Prof/EC secured elite plus gold and topper with 5% in NPTEL.



• Mrs. S. Malini, AP/EC got awarded with Elite plus Gold and Topper with 5% in NPTEL for the Course "Introduction to Internet of Things".



Fig. 8. Mrs. S. Malini, AP/EC secured elite plus gold and topper with 5% in NPTEL.





• **Dr. M Tamil Nithi, AP/EC**, acted as keynote speaker with topic "Role of IoT in Healthcare" in the International conference on "Recent Trends in Science, Engineering and Technology – 2023" held on 22<sup>nd</sup> December 2023.



Fig. 9. Dr. M. Tamil Nidhi, AP/EC acted as keynote speaker in the international conference.





Faculty Participation – Seminar / Webinar / Workshop / FDP / STTP

- **Dr. S. Sobana**, Associate Professor attended *AICTE Training and Learning (ATAL) Academy* Faculty Development Program on "Applications of IoT Integrated Wireless Biosensors in Diagnosing Public Health Issues" at Hindustan College of Engineering and technology from 11<sup>th</sup> to 16<sup>th</sup> December 2023.
- **Dr. T. K. Sethuramalingam,** Associate Professor attended *AICTE Training and Learning (ATAL) Academy* Faculty Development Program on "Applications of IoT Integrated Wireless Biosensors in Diagnosing Public Health Issues" at Hindustan College of Engineering and technology from 11<sup>th</sup> to 16<sup>th</sup> December 2023.
- **Dr C. Priya**, Associate Professor attended one-week National Level Faculty Development Program on "Cloud Infrastructure and AWS Technology" at Nandha Engineering College from 21<sup>th</sup> to 25<sup>th</sup> August 2023.
- **Mr. G. Arun Francis** Assistant Professor attended five days Faculty Development Program on "Design of High-frequency Antennas for Real-time Applications (DHARA-2023)" at Nandha Engineering College from 21<sup>th</sup> to 25<sup>th</sup> August 2023.
- Mrs. T. Happila Assistant Professor attended five days Faculty Development Program on "Design of High-frequency Antennas for Real-time Applications (DHARA-2023)" at Nandha Engineering College from 21<sup>th</sup> to 25<sup>th</sup> August 2023.
- Mr C. Mukunthraj Assistant Professor attended Workshop on "VLSI to System Design: Silicon to End Application Approach" at Arm Education and ST Microelectronics from 31<sup>st</sup> to 04<sup>th</sup> August 2023.
- **Dr R. Selvakumar** Assistant Professor attended Workshop on "VLSI to System Design: Silicon to End Application Approach" at Arm Education and ST Microelectronics from 31<sup>st</sup> to 04<sup>th</sup> August 2023.
- Mr S.Ramprasath Assistant Professor attended Workshop on "VLSI to System Design: Silicon to End Application Approach" at Arm Education and ST Microelectronics from 31<sup>st</sup> to 04<sup>th</sup> August 2023.
- **Dr R.Suguna** Assistant Professor attended Workshop on "VLSI to System Design: Silicon to End Application Approach" at Arm Education and ST Microelectronics from 31<sup>st</sup> to 04<sup>th</sup> August 2023.
- **Dr. R. Sarankumar,** Professor & Head has completed NPTEL course on "Accreditation and Outcome Based Learning" with Elite plus Silver.
- **Dr. A. Rajendran,** Professor has completed NPTEL course on "Accreditation and Outcome Based Learning" with Elite plus Gold and secured 5% topper.
- **Dr. G Saravanakumar,** Professor has completed NPTEL course on "Deep Learning" with Elite plus Silver.
- **Dr. G Saravanakumar,** Professor has completed NPTEL course on "Python for Data Science" with Elite.
- **Dr M Annalakshmi**, Professor has completed NPTEL course on "Hardware Modeling Using Verilog" with Elite plus Silver.

#### DEPARTMENT OF



#### ELECTRONICS AND COMMUNICATION ENGINEERING

- **Dr. C. Priya,** Associate Professor has completed NPTEL course on "Soft Skills" with Elite plus Silver.
- **Dr. S Deepa**, Associate Professor has successfully completed NPTEL course on "The Joy of Computing Python".
- **Dr. S. Sobana**, Associate Professor has completed NPTEL course on "Introduction to Industry 4.0 and Industrial Internet of Things" with Elite.
- **Dr. R. Suguna,** Assistant Professor has completed NPTEL course on "Hardware Modeling Using Verilog" with Elite.
- **Dr. R. Selvakumar,** Assistant Professor has completed NPTEL course on "VLSI Design Flow: RTL to GDS" with Elite plus Silver.
- Mr. C. Mukuntharaj, Assistant Professor has completed NPTEL course on "Hardware Modeling Using Verilog" with Elite.
- Mr. NM Jayadevan, Assistant Professor has completed NPTEL course on "Basic Electrical Circuits" with Elite.
- **Ms. L Saranya,** Assistant Professor has completed NPTEL course on "VLSI Design Flow:RTL to GDS" with Elite.
- Ms. L Saranya, Assistant Professor has completed NPTEL course on "Technical English for Engineers" with Elite plus Silver.
- Ms. S Malini, Assistant Professor has completed NPTEL course on "Introduction to Internet of Things" with Elite plus Gold and secured 5% Topper.
- **Ms. T Happila,** Assistant Professor has completed NPTEL course on "Digital Image Processing" with Elite.
- Ms. S Tharanipriya, Assistant Professor has successfully completed NPTEL course on "Introductory Neuroscience & Neuro-Instrumentation".
- Ms. K Sudha, Assistant Professor has successfully completed NPTEL course on "Digital Circuits".
- **Ms. PK Ghibitha Bebin,** Assistant Professor has completed NPTEL course on "Digital Circuits" with Elite.
- **Ms. P Archana,** Assistant Professor has successfully completed NPTEL course on "Introduction to Machine Learning (Tamil)".





Faculty Publications – Books / Conferences / Journals

#### NEW ANY DESTING ANY COLONY DESTING ANY COLONY

- Ms. Archana. P. has published paper titled "Face recognition-based vehicle starter using machine learning"
- **Dr. Suguna. R.** has published paper titled "Pulse Jamming Attack Detection using Swarm Intelligence in Wireless Sensor Networks"
- **Ms. Malini. S.** has published paper titled "A Web based Optimized Hybrid Power Management with IOT"
- **Ms. Malini. S.** has published paper titled "Embedded based Smart Accident Pre-alert prevention system with Machine Learning"
- **Dr. Annalakshmi. M.** has published paper titled "An approach to deep learning based on Discrete wavelet transform for the diagnosis of epilepsy"
- **Dr. Annalakshmi. M.** has published paper titled "Age Group Classification based on Bins of Gradients over Gradient Hessian space facial Images"
- **Dr. Saravanakumar. G**. has published paper titled "A Ddos Attack Categorization and Prediction Method Based on Machine Learning"
- **Dr. Tamilnidhi. M**. has published paper titled "Medical Image classification using Deep Learning Techniques: A Review"
- **Ms. Dharanika** has published paper titled "An Ample Approach for Rational Apothecary to Enhance Medication Adherence"
- **Ms. Tharanipriya** has published paper titled "Sports Applications of Biomechanics Wearable Sensors using IOT"



# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING STUDENTS CORNER Students Innovative / Inter-disciplinary Projects

- **Mr.Arun V** (III EC C) has presented the project "Robotic Dog based fire extinguisher" in GENESIS'23 conducted by Sri Ramakrishna Engineering College, Coimbatore held on 04<sup>th</sup> October 2023.
- **Mr.Arun V** (III EC C) has presented the project "Robotic Dog based fire extinguisher" in IDEATHON and HACKATHON-1.0 conducted by SRM Institute of Science and technology held during 12-13 October 2023.
- **Mr.Arun V** (III EC C) has presented the project "Wireless controlled and solar powered lawn cutter and vacuum cleaner" in IDEATHON and HACKATHON-1.0 conducted by SRM Institute of Science and technology held during 12-13 October 2023.
- For 3<sup>rd</sup> year students, Mini-project expo has been organized on 20<sup>th</sup> October 2023 by Mr G.
   Rajarathinam, Associate Professor and students showcased their project works in the expo.





Fig. 10. Students' participation and Faculty Members Visit to the Project expo.





Fig. 11. Students' participation and Faculty Members Visit to the Project expo.

20



 Ms. Dharani V, Mr. Gunabharath K, Mr. Sudarsun S, Mr. Thirumal P, Mr. Mohanraj V, Mr. Rathish S (III EC C) were actively participated in the event "Smart India Hackathon 2023" organized by Karpagam college of engineering on 14<sup>th</sup> September 2023 to exhibit their project ideas.



Fig. 12. Students' participation in Smart India Hackathon organized by KCE



• Mr. Arun V, Mr. Gokul S and Mr. Pavan kumar S (III EC C) have participated in "Hackathon & Ideation 1.0" organized by SRM Institute of Science and Technology during 12<sup>th</sup> and 13<sup>th</sup> October 2023.



Fig. 13. Students' participation in Hackathon & Ideation organized by SRM institution.

# Students Awards / Achievements/ Patents

Manually, Digitary description and Digitary description at

- Mr. Arun V, Mr. Maharajan M and Mr. Pavan kumar S (III EC C) have filed a patent titled "Piezoelectric Power Harvester on Staircase/Footstep for Domestic Lighting Application" (Application No: TEMP/E-1/87186/2023-CHE) on 30<sup>th</sup> October 2023.
- Mr.P. R. Agathesh, Mr.N.D Akash, Ms.S. Rohitha, Mr. S. Hariharasudhan have participated in online design contest and honored with JURY CHOICE AWARD by PCI Innovism 4.0 on 22<sup>nd</sup> October 2023.
- Mr.S. Gokul, Mr.S Jiyath Rashiq, Mr.Thirumal P, Mr.Lalidesh J, Mr.Keerthiraj VS, Mr.Pavankumar S and Mr.Srikanth KS have participated in National level Technical Symposium "GENESIS'23 – Project Palooza (project expo) conducted by Association of Electronics and Communication Engineers (ASELCOME) at Sri Ramakrishna Engineering College on 4<sup>th</sup> October 2023.



- Ms.Saraswathi R, Ms.Mani Santhiya C have participated in National level Technical Symposium "GENESIS'23 Ideasphere (paper presentation) conducted by Association of Electronics and Communication Engineers (ASELCOME) at Sri Ramakrishna Engineering College on 4<sup>th</sup> October 2023.
- **Mr.S Sudarsun and Mr.Lalidesh J** have participated in "Idea/Project Presentation" during "Innovism Version 4.0" and presented his idea "Smart Robotic Arm" on 22<sup>nd</sup> October 2023 organized by PCI.
- **Mr.Lalidesh J** has participated in "Idea/Project Presentation" during "Innovism Version 4.0" and presented his idea "Weather monitoring Station" on 22<sup>nd</sup> October 2023 organized by PCI.
- **Mr.Maharajan M** has participated in "Idea/Project Presentation" during "Innovism Version 4.0" and presented his idea "RFID based Access control system" on 22<sup>nd</sup> October 2023 organized by PCI.
- **Ms.L. Nandhitha** has wrote poetry in Tamil and same has been published in the book titled "VIZHITHEZHU" Authored by Mr.A. Niththan.



Fig. 14. Front cover page of the book VIZHITHEZHU





# Fig. 15. Tamil Poetry written by Ms. L. Nandhitha and same in printed in the book VIZHITHEZHU

- Ms.L. Nandhitha has participated and won 2<sup>nd</sup> place in "WisdomWaves" held as a part of SNS COLORS (A National Design Thinking Contest & Festival) on 12<sup>th</sup> September 2023.
- Ms.L. Nandhitha has participated and won 1<sup>st</sup> place in "Start-up Pitching" held as a part of SNS COLORS (A National Design Thinking Contest & Festival) on 12<sup>th</sup> September 2023
- Ms.L. Nandhitha has has participated and won 1<sup>st</sup> place in "Tech Talk Throwdown" held as a part of SNS COLORS (A National Design Thinking Contest & Festival) on 12<sup>th</sup> September 2023.



• Students of EC have arranged and celebrated the "Engineers Golu" on the behalf of Department of EC.





Fig. 16. Students and Faculty Members in "Engineers Golu"



**Students Publications – Conferences / Journals** 

- - Anuvarshni R, Bhavashri D S And Sakthi Priya K "Leveraging Deep Learning Techniques to Perform Detection And Classification of Brain Tumor" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Kaviya M, Yamini Devi M P, Princy Flora F And Pradhipa R, "Municipality Waste Segregation, Monitoring and Management using Iot" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Lingash Kumar U, Hariharasudhan V, Vijay A, Mohamed Apsar, "Self Defense System for Women Safety using Shock Effect, Audio Recording and Fingerprint based Timer" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Manimaran K, Arjun R, Vadivel M, Sandeep, "Smart Helmet-Based Personal Proximity Warning System for Underground Mine Safety" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Nandan R T, Akash R, Sachin R S And Thamil S V, "Low-Cost Ventilator Using Atmega 328p" In Innovative Research" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Surya K, Gokul P, Surendhar V, Nithish Kumar N, "Design of Modified Full Adder-Based Low Power Array Multiplier" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Alagu Thanush A, Gopi P, Jagathesh V And Kaviswaran "High Speed Triple Operand Adder for Graphic Processing And Cryptography" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Mohamed Aabid M, Selvaprakash J, Vikram Kumar S, Suresh Kumar G, "Footstep Power Generation Using RFID", In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Suvetha S, Karthiga S, Sowmiya B, "Ai Based Programmed Medical Care Squander Isolation and Removal Framework" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Ajith Kumar R, Akash K, Alismail M, Arun A, "Fruit Quality Detection using Machine Vision Techniques" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology
  - Mohamed Afzar N, Madasamy Muthukumar R, Nithersana Moorthy E, "Bluetooth based Seed Sowing Robot" In Innovative Research in Electrical, Electronics and Communication Engineering (Electrox '23), Karpagam Institute of Technology



Students Participation – Seminar / Workshop / Symposium / NPTEL / AICTE / MOOC's

- - V. Arun has successfully completed an NPTEL course entitled "Digital Circuits" and awarded with Elite plus Silver
  - JOHN JAYAPANDIAN J has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **RAMIYA SRI S** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **DHARANYA P** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **RITHANYA M** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **ELAMATHI R** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **PALANIAPPAN N** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **RATHINAVEL P** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - AGATHESH P R P has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **KARTHICK R** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **VENKATESH S** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - JANANI N has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **KIRUTHIKA J** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - AKSHITHA A has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **HARINI PRIYA S** has successfully completed an NPTEL course entitled "Data Structures and Algorithms Using Java" and awarded with Elite plus Silver
  - **RAGHUL R** has successfully completed an NPTEL course entitled "Programming in Java" and awarded with Elite plus Silver
  - **PON SELVAKUMAR V** has successfully completed an NPTEL course entitled "Introduction to Internet of Things" and awarded with Elite plus Silver
  - **VINOTH KUMAR S** has successfully completed an NPTEL course entitled "Introduction to Internet of Things" and awarded with Elite plus Silver
  - **RAKSITH C R** has successfully completed an NPTEL course entitled "Introduction to Internet of Things" and awarded with Elite plus Silver

#### DEPARTMENT OF



#### ELECTRONICS AND COMMUNICATION ENGINEERING

- **B A. Dinesh Kumar** has successfully completed an NPTEL course entitled "Digital Circuits" and awarded with Elite
- **S. Gokul** has successfully completed an NPTEL course entitled "Digital Circuits" and awarded with Elite
- **K. Gunabharath** has successfully completed an NPTEL course entitled "Digital Circuits" and awarded with Elite
- **J. Lalidhesh** has successfully completed an NPTEL course entitled "Digital Circuits" and awarded with Elite
- **M. Maharajan** has successfully completed an NPTEL course entitled "Data Structure and Algorithms Using Java" and awarded with Elite
- V. Mohanraj has successfully completed an NPTEL course entitled "Data Structure and Algorithms Using Java" and awarded with Elite
- **S. Pavankumar** has successfully completed an NPTEL course entitled "Digital Circuits" and awarded with Elite
- **G. Prawin Raj** has successfully completed an NPTEL course entitled "The Joy of Computing Using Python"
- R. Saraswathi has successfully completed an NPTEL course entitled "Programming in Java"
- V. Vinith Kumar has successfully completed an NPTEL course entitled "Data Structure and Algorithms Using Java"
- L. Nandhitha has successfully completed an NPTEL course entitled "Digital Circuits"
- **M V Muhil, R Yaswanth** has attended workshop in VIT Vellore on Phython for Science and Engineering Applications



Fig.17: Students at VIT campus for attending the workshop



#### **EVENTS ORGANIZED**

- The and additionates and a state and the second states and
  - **Dr. S. Deepa** Associate Professor, has organized the event "Women's Health" Guest Lecture on 18th Aug 2023 to facilitate the girl students and faculty members.



Fig.18: Recourse person delivering the content to audience in the event "Women's Health

• **Dr. M Annalakshmi and Dr. R. Suguna** have organized the National Level workshop on "Advanced Driver Assistant System (ADAS)" on 15<sup>th</sup> September 2023 in collaboration with IE chapter.



**Fig.19:** Group photo with Mr. Prasanth G, Project manager, Bosch Global Software Technologies Pvt. Ltd, Coimbatore and Participants of the event "Advanced Driver Assitaance System (ADAS)"



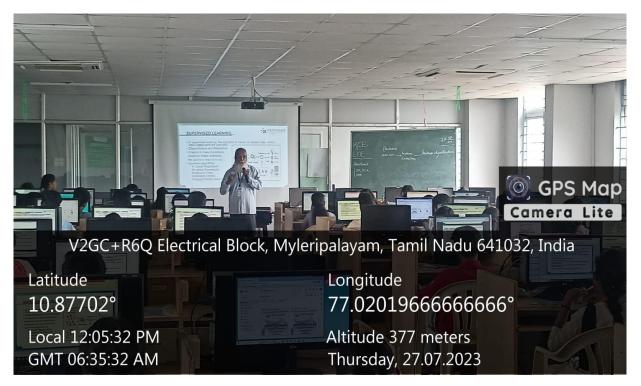
- Dr. S Deepa and Ms. S Malini have organized the Career Awareness Program on "Role of Electronics in Aviation" on 15<sup>th</sup> July 2023 in collaboration with Karuppa foundation.
- **Dr. S Deepa and Ms. S Malini** have organized the National Level workshop on "Data Analytics with Python" on 28<sup>th</sup> July 2023 in collaboration with Linumiz, Namakkal.
- **Dr. S Deepa and Ms. S Malini** have organized the National Level workshop on "Embedded based Application Development using Arduino and AVR Microcontroller" on 24<sup>th</sup> November 2023 in collaboration with Karuppa foundation.



**Fig.20:** Mr. Gajendran P, AP/EE sharing the knowledge with participants in the event "Embedded based Application Development using Arduino and AVR Microcontroller"

- Ms T Happila and Mr. S. Ramprasath have organized the National Level workshop on "Building computer vision modules with python" on 5<sup>th</sup> September 2023 in collaboration with Steps Knowledge Services.
- **Dr. C.Priya and Ms. L. Saranya** has organized on day workshop on "Industrial Internet of Things" on 4<sup>th</sup> August 2023 in collaboration with Linumiz, Namakkal.
- Dr. S. Sobana and Ms. T Dharanika has organized on day workshop on "Machine Learning Techniques for EEG Processing" on 27<sup>th</sup> July 2023 in collaboration with Bonfay TECH





**Fig.21:** Dr.G. Saravanakumar, Prof/EC sharing the knowledge with participants in the event "Machine Learning Techniques for EEG Processing"



Fig.22: Group photo of the event "Machine Learning Techniques for EEG Processing"



#### Industrial Visit / Implant Training

Sl.No.	Class	Date of the visit	Name of the Industry visited	No.of Students	Name of the accompanied Faculty Members
1	III EC A	11.08.2023	JVS Electronics, Bengaluru	111	Mr. G. Arun Francis, AP/EC Ms. S.Tharanipriya, AP/EC
2	III EC B	11.08.2023	JVS Electronics, Bengaluru	111	Mr.C.Mukuntharaj, AP/EC Ms. Ghibitha Bebin, AP/EC
3	III EC C	11.08.2023	Iroid Technologies, Kerala	57	Dr. S. Deepa, Asp/EC Dr.R.Selavakumar, AP/EC



Fig. 23: Students (III EC A) Industrial Visit to JVS Electronics, Bengaluru



Fig. 24: Students (III EC B) Industrial Visit to JVS Electronics, Bengaluru



Fig. 25: Students (III EC C) Industrial Visit to Iroid Technologies



#### Extra-Curricular Activities – Sports / Cultural

- **S.Gokul** has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- **C.K GokulaKrishna** has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- **K.Gunabharath** has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- A. Jeyasuryaprabharan have participated in "Idea/Project Presentation" during "Innovism Version 4.0" and presented his idea "Smart Robotic Arm" on 22<sup>nd</sup> October 2023 organized by PCI.
- **S.Jiyath Rashiq** has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- V.S.Keertheraj has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- **J.Lalidesh** has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- M Maharajan and M.Logesh have participated in "Idea/Project Presentation" during "Innovism Version 4.0" and presented his idea "Smart Robotic Arm" on 22<sup>nd</sup> October 2023 organized by PCI.
- **R.Saraswathi**, **S.Pavan Kumar and C Mani Santhiya** has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- S.Sudarsan and P.Thirumal has participated in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.
- S.Venkatesh has participated in "Idea/Project Presentation" during "Innovism Version 4.0" and presented his idea "Smart Robotic Arm" on 22<sup>nd</sup> October 2023 organized by PCI.
- K.S.SriKanth and Divya M has attended workshop in "Project Palzooa Genesis 2023" Organized by Sri Ramakrishna Engineering College, Coimbatore.