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DEPARTMENT OF ELECTRONICS AND COMMUNICATION

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Vision

- Producing competent engineers with innovative ideas to meet the global needs and standards.

Mission

- **M1.** To produce graduates with technical expertise, professional attitude & ethical values.
- **M2.** To reform the potency of Engineering through exploration-based learning.
- **M3.** To create a passion amongst students for contributing to research by providing industry-oriented training
- **M4.** To inculcate in the graduates, the thirst for self-learning & guide them to obtain knowledge in their chosen field.

About the Department



Dr. A.Poonguzhali

Professor & Head of the Dept

Department of Electronics and Communication Engineering was established at this institution in 1997. The department is AICTE approved and permanently affiliated to VTU and accredited by NAAC and NBA. The Department Offers UG courses. Further, it is recognized as "Research Centre" by VTU. The department is strengthened with qualified Doctorates, Professors, Assoc.Professors, Asst. Professors and technical staffs. Apart from the academic events department also oversees the overall development activities. The students are being provided with training /certification programs, industrial visits, periodic technical talks, workshops, conferences, empowering employability skills.

Department Activities

Workshop / Seminar / Conference/ Technical Talks

1. Department of Electronics and Communication Engineering, Sri Sairam College of Engineering, Bengaluru conducted a four-days workshop on PLC programming and its applications under ISTE banner from 26/11/2024 to 29/11/2024 for second year ECE students in association with IROBO Automation Pvt Ltd. Mr. Bharath T S was invited as a resource person for this workshop.



2..Department of Electronics and Communication Engineering, Sri Sairam College of Engineering, Bengaluru conducted a boot camp Exploring artificial intelligence and machine learning it is schedule at 29 Oct 2024 at Dr.G.U.Pope college of Engineering.



Industrial Visit

1.The Department of Electronics and Communication Engineering, Sri Sairam College of Engineering, Bengaluru organized an Industrial Visit: Sir. M. Visvesvaraya Rain Water Harvesting Theme Park, Jayanagar, Bengaluru. A team of 65 students(2nd year) accompanied with 2 faculties.



Paper Publications

1. H. P. P *et al.*, "Advancements in Cybersecurity Using H. P. P et al., "Advancements in Cybersecurity Using Deep Learning Techniques Attack Detection for Trojan Horses," 2024 International Conference on Electrical Electronics and Computing Technologies (ICEECT), Greater Noida,India,2024,pp.1-6,doi: 10.1109/ICEE CT61 758.2024.10739164.
2. E. Parimalasundar, S. Jayakumar, H. Sita, S. Muthukaruppasamy, K. Suresh and B. H. Kumar, "Analyzing Dual-Stage Inverter Performance for Solar Grid Integration," 2024 7th International Conference on Circuit Power and Computing Technologies (ICCPCT), Kollam, India, 2024, pp. 669-674,doi: 10.1109/ ICCPCT61 902.2024.1067 3348.
3. Aa, Ahila & Princye, Hosanna & A, Poonguzhali & Kavivendhan, & Deepa, M. & Arthy, A. & Saravanakumar, R.. (2024). Artificial Intelligence For Realtime Face Recognition Attendance Using College Classrooms and Buses. 1-6. 10.1109/ICEECT61758.2024.10738995.
4. M. Santhoshi, K. Mohanathi, P. Venugopal and H. L. Shilpashree, "Car Model Recognition Using Convolution Neural Networks," 2024 3rd International Conference for Advancement in Technology (ICONAT), GOA, India, 2024, pp. 1-5, doi: 10.1109/ICONAT61936.2024.10775205.
5. E. Parimalasundar, S. Jayakumar, R. Ravikumar, V. K. Kannan, R. Sindhuja and K. Suresh, "Strategic Power Factor Management for Elevated Lift and Hoist Performance," 2024 10th International Conference on Advanced Computing and

Communication Systems (ICACCS), Coimbatore, India, 2024, pp. 270-274, doi: 10.1109/ICACCS 60874 .2024.10717154.

6. H. P. P et al., "Advancements in Cybersecurity Using Deep Learning Techniques Attack Detection for Trojan Horses," 2024 International Conference on Electrical Electronics and Computing Technologies (ICEECT), Greater Noida, India, 2024, pp. 1-6, doi: 10.1109/ICEECT61758.2024.10739164.

7. J.P.R., A.A., M.K., P.N., G.V and A.S.S, "Generalized Discriminate Analysis for Classification Algorithms in a Tuned Machine Learning Model for Steganalysis," 2024 International Conference on System, Computation, Automation and Networking (ICSCAN), PUDUCHERRY, India, 2024, pp. 1-5, doi: 10.1109/ICSCAN62807.2024.10894458.

8. M. S. M, R. Ramamoorthy, A. Velu, A. D. F and C. S, "Deep Learning-Based Age and Gender Prediction through Feature Extraction from Facial Images using Convolutional Neural Networks," 2024 5th International Conference on Communication, Computing & Industry 6.0 (C2I6), Bengaluru, India, 2024, pp. 1-7, doi: 10.1109/C2I66324.2024.10895767.

9. Ramkumar, Sivaranjani & K, Mohanthi & P, Deepika & Rathnam, Martin. (2024). Automation of Cataloging an Abnormal Condition of Glaucoma Using Fundas Image of the Retina. 1-5. 10.1109/ICEEICT61591.2024.10718487.

10. Velu, Anitha, Ramamoorthy, Raghu, Manasa, S. M. and Prasanth, A.. "5 LLM Pretraining Methods". Generative AI and LLMs: Natural Language Processing and Generative Adversarial Networks, edited by S. Balasubramaniam, Seifedine Kadry, A. Prasanth and Rajesh Kumar Dhanaraj, Berlin, Boston: De Gruyter, 2024, pp. 93-116. <https://doi.org/10.1515/9783111425078-005>

11. Lurdhumary, J., Princy, P.H., Arul Prakash, M., Sangeetha, L., Kumar, G.S.V.S., Maheswari, S., Kirubakaran, D., Umaralikhhan, L., Vijayan, V. (2024). Optimizing supercapacitor performance with LSCF, ST, BST, and coconut shell activated carbon. Journal of New Materials for Electrochemical Systems, Vol. 27, No. 3, pp. 215-226. <https://doi.org/10.14447/jnmes.v27i3.a07>

12. Ramamoorthy, R., Smitha, J.A., Velu, A. (2024). Reliable Smart Wrist Pulse Oximeter for Hypoxemia and COVID-19 Patients. In: Ranganathan, G., Papakostas, G.A., Shi, Y. (eds) Inventive Communication and Computational Technologies. ICICCT 2024. Lecture

Notes in Networks and Systems, vol 23. Springer, Singapore. https://doi.org/10.1007/978-981-97-7710-5_21

13. S. Farook, B. V. S. Thrinath, K. Nagalingachary., V. B. Boyinasetty, S. Jayakumar and B. A. Kumar, "Advanced Power Quality in Hybrid PV-Wind Systems with TSK Fuzzy Control," 2024 IEEE International Conference on Information Technology, Electronics and Intelligent Communication Systems (ICITEICS), Bangalore, India, 2024, pp. 1-5, doi: 10.1109/ICITEICS61368.2024.10625248.

14. R. Ramamoorthy, A. Velu, R. C. Appala Naidu, A. K. A, A. D. F and H. K. M, "Impact of Ant Colony Optimization on Optimal Routing for Vehicular Ad Hoc Networks," 2024 5th International Conference on Communication, Computing & Industry 6.0 (C2I6), Bengaluru, India, 2024, pp. 1-6, doi: 10.1109/C2I663243.2024.10894774.

15. E. Parimalasundar, S. Jayakumar, H. Sita, R. Jayanthi, B. H. Kumar and K. Suresh, "Analysis of Nine Level Single-Phase Cascaded H-Bridge Inverters for EVs," 2024 Third International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN), Villupuram, India, 2024, pp. 1-6, doi: 10.1109/ICSTSN61422.2024.10671325.

16. E. Parimalasundar, S. Jayakumar, H. Sita, S. Muthukaruppasamy, K. Suresh and B. H. Kumar, "Analyzing Dual-Stage Inverter Performance for Solar Grid Integration," 2024 7th International Conference on Circuit Power and Computing Technologies (ICCPCT), Kollam, India, 2024, pp. 669-674, doi: 10.1109/ICCPCT61902.2024.10673348.

17. Velu, A.; Ramamoorthy, R.; Prasanth, A.; Dhanaraj, R. IoT-based Thermal Management System by Embedding Physical Sensors in Hybrid Vehicles, in Proceedings of the 11th International Electronic Conference on Sensors and Applications, 26–28 November 2024, MDPI: Basel, Switzerland, doi:10.3390/ecsa-11-20494

18. M. R, N. P, N. L. Christy S, M. K, P. N and M. U, "Integrating CNN and Random Forest Algorithm for Multi Satellite Image Compression in Data Mining," 2024 International Conference on System, Computation, Automation and Networking (ICSCAN), PUDUCHERRY, India, 2024, pp. 1-5, doi: 10.1109/ICSCAN62807.2024.10894190.

19. P. Reddy, C. Shreyas, P. Bhargavi, R. G. V, D. L. Rani and S. Maheswari, "Machine Learning for Signal Processing in Communication Systems," 2024 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical.

FDP's Attended

SL NO	NAME	FDP NAME	DATE	NO OF DAYS	NAME OF THE INSTITUTE
1	Prof.Selva Sherin T	Integrating AI in Medieval Electronics	23/12/2024 to 30/12/2024	8 Days	KIT,Chennai
2	Prof.Selva Sherin T	Deep Learning and IOT Technologies in Precision Health care	16/08/2024 to 17/08/2024	2 Days	Kongu Engineering College
3	Dr.P.Hosanna Princye	Innovation Ambassador (IA) training 'Advanced Level'	31/08/2024	1 Day	AICTE
4	Dr.Narmatha P	Innovation Ambassador (IA) training 'Advanced Level'	31/08/2024	1 Day	AICTE
5	Dr.S.Jaykumar	The role of fiber optic sensors in sustainable Technology	19/08/2024 to 24/08/2024	6 Days	ATAL Academy
6	Prof.Santosh Kumar N	Next-Gen System-on-Chip Design for advanced Semiconductor Solutions	12/08/2024 to 24/08/2024	13Days	ATAL Academy
7	Dr.Ahila.A	Innovation Ambassador (IA) training 'Advanced Level'	31/08/2024	1 Day	AICTE
8	Prof..P Venugopal	Emerging Technologies for 5G/6G wireless communication	24/09/2024 to 28/09/2024	5 Days	DON BOSCO Institute of Technology
9	Prof.Savitha HS	Emerging Technologies for 5G/6G wireless communication	24/09/2024 to 28/09/2024	5 Days	DON BOSCO Institute of Technology
10	Prof..J Hema Shubraja	Digital Design and Signoff faculty Development Program	16/09/2024 to 20/09/2024	5 Days	CADENCE in collaboration with AICTE
11	Prof. Radhika	Digital Design and Signoff Faculty Development Program	16/09/2024 to 20/09/2024	5 Days	CADENCE in collaboration with AICTE

Patent Filed




SI No	Design No	Status of Patent (Published / Granted)	Inventor's Name	Title of the Patent	Applicant's Name	Patent Filed Date (DD/MM/YYYY)	Patent Published Date / Granted Date (DD/MM/YYYY)
1	425241-001	Published	Dr. Anitha Velu	Autonomous Drone Navigation Device for Obstacle Avoidance	Dr. Anitha Velu	30/07/2024	03/10/2024
2	438048-001	Published	Dr. Narmatha P.	AI Based Walking Stick for Visually Impaired People	Dr. Narmatha P.	21/11/2024	27/01/2025

Students Papers presentation




Name of the Student	Venue	Date
Sushmitha Nagashree Ira B J Pushpa N Rohini Y	IJATEM Journal,Sri Sairam College of Engineering, Bangalore	November- 2024
Raghul R Thanushree SK Monika Lakshmi S Punith N	ADVAYA,ICRCCT'2K24,Sri Sairam College of Engineering, Bangalore	14/11/2024- 15/11/2024
Bhaskar G Manoj kumar V M S Sreehitha Kavana M A Nikhitha V Giriraj S Ganga S Moulya H M	MECHTECK'2K24,Sri Sairam College of Engineering, Bangalore	09/12/2024- 10/12/2024
K Abinaya	Velalar College of Engineering and Technology,Erode	05/10/2024

Student Topper List



Second Year

Sl.No	USN	Name of the Student	PERCENTAGE	Student Photo
1	1SB23EC042	KEERTHANA.R	90	
2	1SB23EC005	ASWINI.S	87.1	
3	1SB23EC070	NIKITHA.A	87	

Third Year

Sl.No	USN	Name of the Student	PERCENTAGE	Student Photo
1	1SB22EC032	DEEPA.S	90.8	
2	1SB22EC015	BHOOMIKA .L	89	
3	1SB22EC08	BABITHA	88	

Final Year

Sl.No	USN	Name of the Student	PERCENTAGE	Student Photo
1	1SB21EC057	MONIKA LAKSHMI .S	97	
2	1SB21EC052	MEGA.S	96	
3	1SB21EC067	PAVAN RAJ	95	