



VISION

To be one of the best ECE departments in the university providing globally relevant learning experience for students

MISSION

Enrich learning experience of students with creative and innovative teaching methods. Inculcate societal responsibility in students. Develop entrepreneurial skills of students to make them entrepreneurs rather than employees.

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Chairman: Sri G. Dayanand

The “ECE pulse” newsletter of the department ECE is providing great space for the faculty and students to pen down their innovative ideas, imagination and perceptions to showcase their creativity. So, I take the opportunity to congratulate the department of ECE and its editorial team to successful release of this issue. I am sure that students and faculty will find the content of this edition very interesting and educating.



Executive Director: Sri G. D. Manoj

I am indeed happy to know that the department of ECE has taken initiative in realizing its monthly newsletter “ECE pulse” and urge faculties and students to make use of the platform to share and educate among themselves in publishing articles pertaining to the emerging domain and articles of interesting. I congratulate the team of editorial community and department of ECE.

Principal: Dr. H Ramakrishna

It gives me immense pleasure to note that, SCE has been publishing bi-annual newsletter and I am sure, this will provide an opportunity for the faculty and students to share their knowledge and beacon the information about various issues and activities that are being taking place in the department. I look forward for more activities and achievements for the department to march towards excellence in the future. I would like to thank all teaching, supporting staff and our beloved students for their active participation in publishing this magazine. My special compliments and congratulation to the editorial team of the department for their consistent effort in publishing this newsletter.



Vice-Principal: Dr. M H Annaiah

I am very happy and delighted to know that our college is bringing out the college newsletter. SCE is one of the leading premier engineering colleges in the country offering quality technical education to students thereby enabling them to become globally acceptable engineers in their domains. The newsletter provides a platform for both faculty and students to showcase their achievements and hidden talents. I congratulate our beloved principal and members of editorial board for bringing out this excellent and informative newsletter on time.



Head of Department: Dr. Satish Kumar H C

It gives me an immense pleasure to note that ECE Department bringing out department Newsletter. I am sure this newsletter provides an opportunity to the students and the faculties of the department to project their talents through articles, reports of the various academic and technical programs. I congratulate our beloved principal, Vice-Principal and members of editorial board for bringing out this excellent and informative newsletter.



Guest lecture on Machine learning



The guest lecture was conducted on Machine learning and Python programming by TCSion on 20/03/2019, Mr. Chinmaya Mishra Lead Data Scientist UTC, Bengaluru and Mr. Patil TCSion, Bengaluru are the speakers of the day. Machine learning is the science of getting computers to act without being explicitly programmed. In the past decade, machine learning has given us self-driving cars, practical speech recognition, effective web search, and a vastly improved understanding of the human genome. The session continued with fundamentals of Machine Learning with types of Machine learning, Python programming language basics and Data Processing. They also illustrated some of the applications of machine learning. about practical applications of Computer network

Guest lecture on Effective Career planning

A guest lecture was conducted on Effective Career planning for engineering students by Mr. Prakash from Vani Institute Bengaluru on 26/08/2019.



Faculty achievements

1. Sangeeta K.Siri assistant professor from ECE department awarded Ph.D. degree from VTU Belagavi, on image segmentation in 2019 May.
2. Dr. Dinesh Anvekar, Dr.Prakash Jadav and Dr. Satish Kumar H C professors of ECE department has developed GPS based accurate clock and GPS based traffic light control for ambulance. This program was broad casted in radio, Television and published in paper.
3. Prof. K Srinivas Rao received best research papers award from VDGOOD™ Technology factory Vishakhapatnam India.

Publications, conferences, workshop and FDP attended by Faculty

Conference, Workshop and FDP

Name	Conference, Workshop and FDP	Title	Place and Date
Agalya P	One week workshop	Image fusion and multimodal fusion	15 th to 20 th July 2019 at MSRIT Bangalore
Preethi K	Two weeks AICTE sponsored work shop	Machine learning ,artificial intelligence in image processing using Matlab and Xilinx system generator for DSP	22nd July to 5 th August 2019 KIT Tiptur
Vinay H C	Two weeks AICTE sponsored work shop	Machine learning ,artificial intelligence in image processing using Matlab and Xilinx system generator for DSP	22nd July to 5 th August 2019 KIT Tiptur
Ravi Shankar M N	2 days workshop	Effectiveness of education	2 nd august to 4 th august 2019 Sri Ramakrishna Student home VV Puram Bangalore
Suma V Shetty	One week AICTE sponsored FDP	Implication of IO using Android application	15 th July to 27 th July 2019 Ambedkar college Bangalore
Shilpa V	One week AICTE sponsored FDP	Implication of IO using Android application	15 th July to 27 th July 2019 Ambedkar college Bangalore
Pratibha P	5 days workshop	Physical design and its Verification using cadence tool	22 nd to 26 th of July 2019 AIT Bangalore
Sudha M S	5 days workshop	Physical design and its Verification using cadence tool	22 nd to 26 th of July 2019 AIT Bangalore
Varshini K	5 days workshop	Physical design and its Verification using cadence tool	22 nd to 26 th of July 2019 AIT Bangalore

Vani A	5 days workshop	IoT and AI in Robotics	Department of CSE BNM Institute of Technology, from 24th to 28th June 2019.
Vani A	1 day workshop	Practical Implementation of IoT using Python and Raspberry Pi	19 Jan 2019 by ISM Univ Bengaluru
Dr.Prakash Jadav	5 days work shop	Hands on training on DSP and embedded controllers	17 th to 22 nd of June 2019 NITTE Bengaluru

Publications

1. Sangeeta K.Siri, & Mrityunjaya V. Latte. Universal Liver Extraction Algorithm: An Improved Chan–Vese Model, *Journal of Intelligent Systems*, 2018.
2. Agalya P “Development and implementation of VLSI reconfigurable architecture for Crabor filters in medical imaging application” *IJEMR* volume8 june 2018
3. Padmavathi C.”An AutomatedDetection of CAD Using the Method of Signal Decomposition and Non Linear Entropy Using Heart Signals” *International Journal of Image, Graphics and Signal Processing(IJIGSP)* Vol.11, No.2, pp. 30-39,2019.DOI:10.5815/ijigsp.2019.02.04
4. Sudha M S , Thanuja T C “FPGA Implementation of DTCWT and PCA Based Watermarking Technique” *International Journal of New Innovations in Engineering and Technology* Volume 10 Issue 1 February 2019 ISSN:2319-6319.
5. Pruthvi R., Mohan Varma K., Vinayaka L. S., Veeresh M., Vani A.. “Fire detection and extinguisher robot”, *International Journal of Advance Research, Ideas and Innovations in Technology*(www.IJARIIT.com), ISSN: 2454-132x, Vol.5, Issue 2, page no. 1878-1880, April-2019.
6. Prakash Jadav, Sai Eshwar K R Sheja Pandey “compression using ANN for virtual multi media” *IJMTE* Volume 9 Issue 6 pages 1830-1840 ISSN NO:2249-7455
7. Vani A, Dr. Mamatha MN, "Visual feedback system for visually impaired using tACS – a proof of concept study", *International Journal of Emerging Technologies and Innovative*

Student achievements

1. Students of 6 'A' has visited "open day" at IISc (Indian institute of science) on 23rd March 2019 .They visited the laboratories like centre for nano science and



engineering(CeNSE).Students got an opportunity to learn designing, development, fabrication process and packaging of certain electronics components. Students visited Signal processing block to visualize the various analysis.Lavanya P , ECE 7 'A' has participated in IEEE young professionals program conducted at Dayananda Sagar University Bangalore. The program was Student transition and elevation partnership program specialized in INNOVATION TO PRODUCTIZATION.

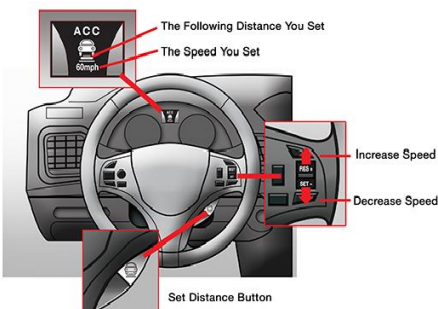
2. The students of 5 'A' has involved in developing GPS accurate clock and ambulance traffic control under the guidance of Dr. Dinesh Anvekar, Dr.Prakash Jadav and Dr. Satish Kumar H C professors of ECE department. The work was well appreciated in medias like TV, Newspaper , broadcasted in Radio.



Technical article by Student

A.C.C VEHICLE'S THAT HELP REDUCE TRAFFIC

Traffic jams can form out of the simplest things. One driver gets too close to another and has to brake, as does the driver behind, as does the driver behind him — pretty soon, the first driver has sent a stop-and-go shock wave down the highway. One driving-simulator study found that nearly half the time one vehicle passed another, the lead vehicle had a faster average speed. All this leads to highway turbulence, which is why many traffic modelers see adaptive cruise control (A.C.C.) which automatically maintains a set distance behind a car and the vehicle in front of it as the key to congestion relief. Simulations have found that if some 20 percent of vehicles on a highway were equipped with advanced A.C.C., certain jams could be avoided simply through harmonizing speeds and smoothing driver reactions. One study shows that even



a highway that is running at peak capacity has only 4.5 percent of its surface area occupied. More sophisticated adaptive cruise control systems could presumably fit more cars on the road.