Vision: To be an endeavoring Department for providing globally relevant learning experience to the students.

MISSION: To Develop entrepreneurial skills of students to make them entrepreneurs rather than employees. To Inculcate societal responsibility in students. To Develop entrepreneurial skills of students to make them entrepreneurs rather than employees. To Partner with Industry for focusing on real-life problems and make learning more practical.

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 nformative newsletter on time.

Head of Department: Dr. Sateesh Kumar H C: It gives me an immense pleasure to note that ECE Department bringing up 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

HOD ECE Greeting Speaker

The guest lecture was conducted on Machine Learning on 20/03/2019by TCSion. 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 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. Theyalso illustrated some of the applications of machine learning. about practical applications of Computernetwork

Mr. Chinmaya Mishra speaking to audience

Guest Lecture
"Recent Trends on Networking"

Guest lecture on Recent trends on Networking was conducted on 16.03.2019 and speaker was Mrs. Sunita Amingad Technical Manager Jetking Bangalore. Speaker briefed about the topics such as Scope of Network, Working of OSI Model, Firewall, types of routing andsecurity in networking.. Hands-on was conducted using packet tracer software on various topics such as wired and wireless

communication with security.speaker suggested the implementation ideas for their project

Workshop on
"Microsoft certificationIoT"

Department of ECE conducted workshop from 06.02.2019 to 09.02.2019.The speaker Mr.Sumit SharmaMicrosoft Technologies Bangalore started session withintroduction to IoT (Internet of Things) and Python programming language with Raspberry Pi Microcontroller. Later simple programs were executed using Python programming functions, syntax and programming of Python were thought using Python codes and hardware interfacing programs like LED, Relays were executed. Sensors and actuators like proximity sensor, LDR, RF detector, Stepper motor and DC motors interfacing using Raspberry Pi were demonstrated. Also Adafruit and IFTT application were introduced to control the lights using Google Assistant.The certification was a platform to venture into the areas of IoT, Embedded, Python scripting, Raspberry Pi and many others. It is amongst some of the rapidly growing technologies today, with its applications in various aspects of embedded systems.

Students participation in the workshop

Industrial Visit to "Kaynes Technology"

On the visit to the Kaynes Technology, Mysore – a PCB design and manufacturing unit on 21 Jan 2019, the student and staff received valuable insights into different technologies used in the PCB Design and manufacturing. The students and the staff had an opportunity to visit thedifferent departments of Kaynes Technology such as PCB selection, PCB design, PCB assembly, Soldering, and PCB Testing department etc.Kaynes Technology has the expertise, capability and infrastructure to manufacture SMD & THDboards with latest packaging of QFPs, Multiple BGAs, LGAs/QFNs and 0201/01005 chips andprovides new product development service from NPI to volume manufacture.

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 broadcasted in radio, Television and published in paper.

3. Prof. K Srinivas Rao received best research papers award from VDGOOD™ Technology factory VishakhapatnamIndia.

Publications, conferences, workshop and FDP attended by Faculty

Conference, Workshop and FDP

Name	Conference, Workshop and FDP	Title	Place and Date
Agalya P	Oneweek workshop	Image fusion and multimodal fusion	15th to 20th 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 5th 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 5th August 2019 KIT Tiptur
Ravi Shankar M N	2 days workshop	Effectiveness of education	2nd august to 4th august 2019 Sri Ramakrishna Student home VV Puram Bangalore
Suma V Shetty	One week AICTE sponsored FDP	Implication of IO using Android application	15th July to 27th July 2019 Ambedkar college Bangalore
Shilpa V	One week AICTE sponsored FDP	Implication of IO using Android application	15th July to 27th July 2019 Ambedkar college Bangalore
Pratibha P	5 days workshop	Physical design and its Verification using cadence tool	22nd to 26th of July 2019 AIT Bangalore
Sudha M S	5 days workshop	Physical design and its Verification using cadence tool	22nd to 26th of July 2019 AIT Bangalore
Varshini K	5 days workshop	Physical design and its Verification using cadence tool	22nd to 26th 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	17th to 22nd of June 2019 NITTEBengaluru

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.

Mr. Chilkuri Vamshi Krishna Reddy Secured 1st place in Men's wrestling, Inter zonal/Single Zonal Tournament 2019-20 held at SJCIT, Chikkaballapur, Karnataka. 5th -7th Sept 2019
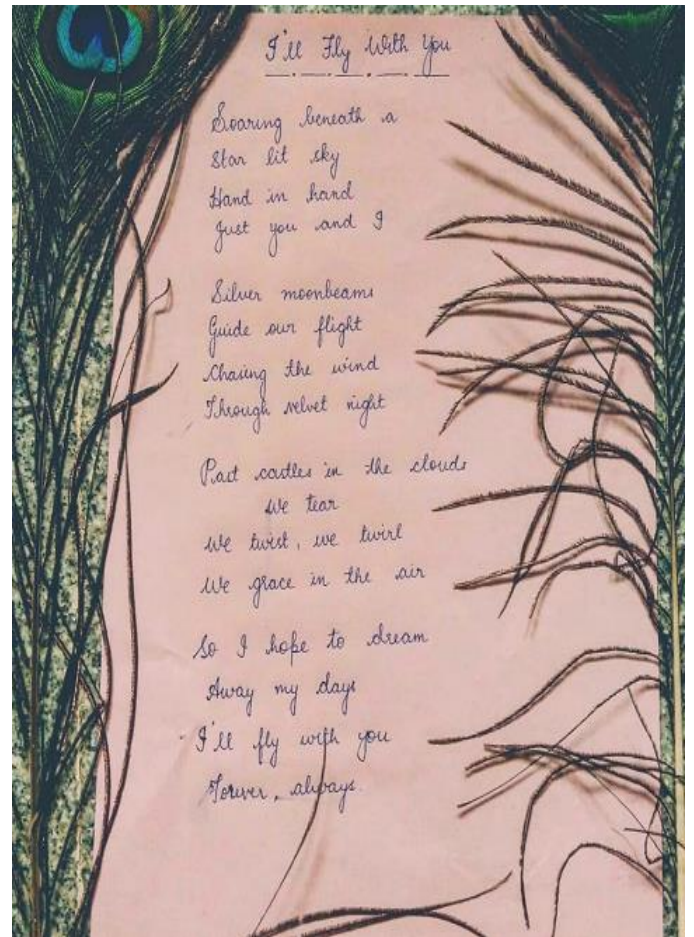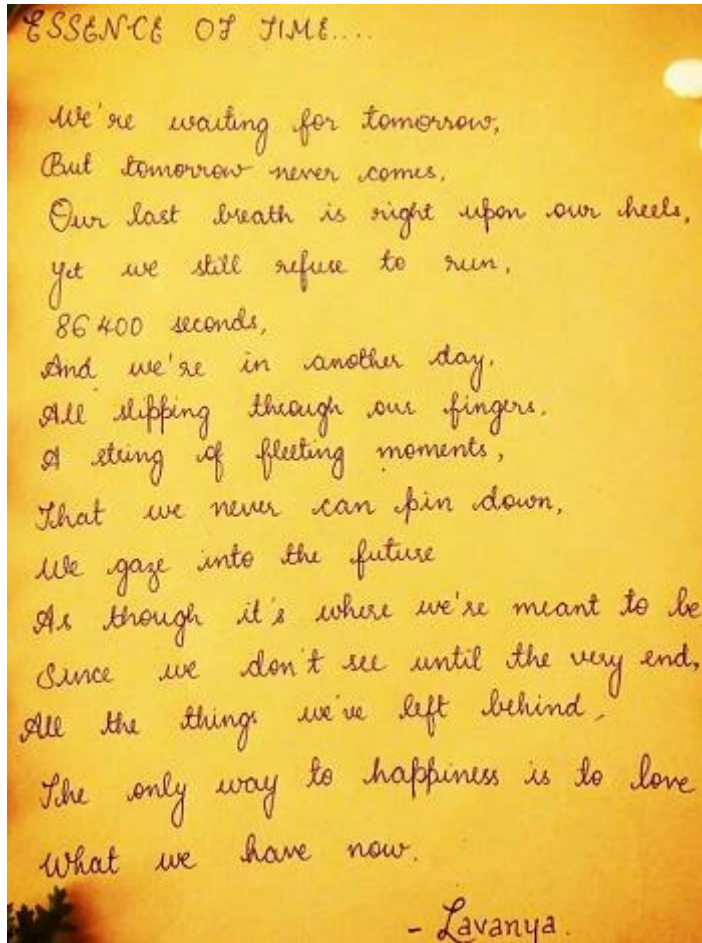
1. Project titled **"Digital Clock based on GPS signals"** presented at press conference in Bangalore. The Project is carried out Prateka V M, Harshityth, B K Hemanth Kumar The students of 5'A' has involved in developing GPS accurate clock and ambulance traffic control under the guidance of Dr.Dinesh Anvekar, Dr. Prakash Jadhav and Dr. Satish Kumar H C professors of ECE department. The work was well appreciated in medias like TV, News paper, broadcasted in Radio.

2. A unique accurate digital clock based on GPS signals and displaying time like traditional clocks with 3 hands has been developed in the Department of Electronics and Communication Engineering of the Sapthagiri College of Engineering have guided the students in developing the clock. The specialty of the clock is that it gets the time information from GPS satellites and displays the time in analog manner even though all processing is done digitally. It has 'moving' second, minute and hour hands, but there are no moving parts at all as the impression of motion of hands is created by switching light emitting diode (LED) strings. There is no need to manually adjust the time at any time. Once the clock is powered, it receives GPS signals from a compact antenna from at least 3 satellites and extracts the time value given as GMT. This time is converted to IST by adding the lead time value with reference to GMT. The functions of the clock are implemented with an Arduino microcontroller board and a GPS receiver board. Only an uninterrupted power supply is required to keep the clock running.

GPS DIGITAL CLOCK

ESSENCE OF TIME....

We're waiting for tomorrow,
But tomorrow never comes.
Our last breath is right upon our heels,
yet we still refuse to run.
86 400 seconds,
And we're in another day,
All slipping through our fingers.
A string of fleeting moments,
That we never can pin down,
We gaze into the future
As though it's where we're meant to be.
Since we don't see until the very end,
All the things we've left behind,
The only way to happiness is to love
What we have now.

— Lavanya.

I'll Fly With You
....

Soaring beneath a
star lit sky
Hand in hand
Just you and I

Silver moonbeams
Guide our flight
Chasing the wind
Through velvet night

Past castles in the clouds
we tear
we twist, we twirl
we grace in the air

So I hope to dream
Away my days
I'll fly with you
Forever, always.

Lavanya N, 3rd A, 1SG18EC049

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