

## ELECTRONICS & COMMUNICATION ENGINEERING

# DEPARTMENT NEWSLETTER ELECTRUM-2K18

ACADEMIC YEAR 2018-19

#### **HOD's Message**

The small initiatives that are taken will a go a long way in building upon existing knowledge. The newsletter is a good way to let all know about the department activities and development. We are glad to bring out this edition of our department newsletter ELECTRUM which happens to be our first online publication. The main objective of the newsletter is carrying forward agenda our and delving information about the department. The intiatives of the department have been showcased in the newsletter. It covers source of activities the department has witnessed in the academic year.

I would like to thank everyone who has helped me with this edition, featuring various articles on electronics and communication. I am pretty hopeful that reading the newsletter would be as rewarding as it was to compile it.

#### <u>Editorial Board</u>

Dr. Ashwath Rao HOD, Dpt. of ECE

Mr. Sachin C N Shetty
Assistant Professor

Ms. Deepthi
6th SEMESTER

Mr.Prathwik R Amin 6th SEMESTER

Ms. Amrutha Wagle
4th SEMESTER

Ms.Sameeksha.Rai 4th SEMESTER

> Mr. Rahul N L 2nd SEMESTER

We feel glad to acknowledge the kind support & encouragement of all those who contributed directly or indirectly to bring out this newsletter.

#### **VISION:**

To establish the department as a center of excellence in creating globally competitive, socially responsible engineers to excel in the field of Electronics and Communication by transforming future challenges to sustainable opportunities.

#### **MISSION:**

- Inculcating a distinctive teaching learning process to provide extensive knowledge of principles to provide solutions to challenges in the relevant domain.
- Nurturing the growth of every individual through inventive, dynamic and conducive learning environment using modern education techniques and industry oriented pedagogy.
- Imparting leadership qualities with ethical values among students to cater societal and environmental needs.

### PROGRAM EDUCATIONAL OBJECTIVES:

- Applying the concepts of mathematics, science and engineering for solving problems relevant to environment and society.
- Inculcating lifelong learning skills to adapt to dynamic global economics and technological trends.
- Inducing ethics, communication skills and leadership qualities with the application of innovative tools and techniques for the betterment of mankind.

#### **PROGRAM SPECIFIC OUTCOME:**

- Exhibit competency in Embedded system and VLSI Design.
- Capability to comprehend the technological advancement in Signal processing and Communication.

## <u>Faculty Professional Development Activities</u> <u>Certification Courses</u>

#### **NPTEL Certification**

The National Programme on Technology Enhanced Learning (NPTEL) was initiated by seven Indian Institutes of Technology (Bombay, Delhi, Kanpur, Kharagpur, Madras, Guwahati and Roorkee) along with the Indian Institute of Science, Bengaluru, in various core disciplines. NPTEL began offering open online courses along with certificates from the IITs/IISc for those who completed the courses successfully. The objective of enabling faculty and students obtain certificates for courses is to make faculty deliver effectively the course content and make students employable in the industry or pursue a suitable higher education programme.

<u>Name of the faculty</u>	<u>Courses Completed</u>
Dr. Ashwath Rao	
Mrs. Megha N	
Mr. Sunil Kumar P	CMOS Digital VLSI Design
Mrs Smitha	
Ms. Shruthi Shetty	
Mrs. Roopashree	Digital Image Processing
Mrs. Sikha K V	
Mr. Gurusiddayya Hiremath	Introduction to Machine Learning
Mr. Kiran Kumar V G	Cryptography and Network Security
Mr. Savidhan Shetty C S	Microwave Theory and Technique
Mr. Pateel G P	Modern Digital Communication

### <u>Half-Day workshop on "Technical Paper Writing" for</u> <u>Faculty</u>





Dr. Shyam Lal, Assistant Professor, Dept. of Electronics & Communication Engineering, NITK, Surathkal was the resource person for the workshop. His area of research includes Python and MATLAB programming for signal and image processing, Satellite Image Processing and Analysis, Medical Image Processing, Machine and Deep Learning Algorithms with applications. He is a recipient of the prestigious "Young Faculty Research Fellowship" award under Visvesvaraya PhD Scheme for Electronics & IT from Digital India Corporation (formerly Media Lab Asia), Ministry of Communications & Information Technology, Govt. of India and Early Career Research Award (Young Scientist Award) from SERB-DST, Govt. of India.

During the workshop, he highlighted the need to find a narrow research field and conduct a research on that particular field before writing a research paper. He emphasized about the tools required to conduct a research. He gave an insight into the different ways of finding research ideas; either by reading recent research papers from good quality journals, reading recent technical magazines from the reputed publisher or discussions with colleagues & industry experts. He also focused on the reasons why a paper gets rejected based on title, abstract, conclusions etc. He also spoke about the different components to be included in a research paper and threw light into each section of the research paper. He concluded his talk by suggesting publishing less but quality paper in SCI & Scopus Indexed journals.

#### **Teachers Day Celebration**



The teachers' day celebration was organized on 5th September 2018 by the association in order to thank the department lecturers for their constant support throughout. The Association too organized the Teachers day celebration this year in order to thank the department lecturers for their constant support throughout.

Teacher is one who shapes up the whole life of the students through his/her knowledge, patience, love and care. A teacher is the person who shapes the future of everyone by providing best education to her/his students. Teacher plays a great role in the education of every student.

The celebration started by invoking God's blessings. All the students welcomed the lecturers happily to the function with lots of cheers and applause. Department HOD Dr. Ashwath Rao cut the cake to mark the teachers' day on behalf of all the teachers. Later a game was conducted by the students to the lecturers. All the lecturers enjoyed the game. And finally they also shared their experiences about how a teacher should be and also on the occasion they thanked their teachers who helped them shape their future. The celebration concluded with joy and happiness.

#### ECE Faculty has been conferred with the Doctorate Degree at IIIT-A



Mr. Anush Bekal, Associate Professor, Department of Electronics & Communications Engineering has been conferred with the doctorate degree at the 13th convocation held at the prestigious Indian Institute of Information Technology, Allahabad (IIIT-A). The title of his PhD thesis is "Improved Design of Asynchronous ADC with Reduced Comparator Counts" which was carried out under the guidance of Dr. Manish Goswami, Associate Professor & HOD, Department of Electronics & Communication (Microelectronics Division), IIIT-A. This research work was jointly carried out with Prof. Ashok Srivastava, Louisiana State University, USA which has lead to the fabrication of the Integrated Circuit prototype (credits: MOSIS foundry) and has resulted in 6 publications in the standard SCI-journals and IEEE International conferences.

#### <u>Faculty recommended for Teachers Research</u> <u>Fellowship Scheme</u>



Ms. Nisha, Faculty from the Department of Electronics & Communication has been recommended by ISRO for AICTE-INAE Teachers Research Fellowship Scheme to conduct research in the area of "Microelectronics, Transducers & Actuators, Microelectromechanical System (MEMS), Electromagnetics, Communication Systems". President, GB - IIST/Chairman/ISRO/Secretary, DOS has consented to extend this opportunity to Ms. Nisha. Mr. Manjunath Bhandary, Chairman and Dr. S. Manjappa, Director-Research, have congratulated Ms. Nisha for this achievement.

#### Students Achievement & Events

#### MSP430 Embedded systems and IOT workshop



The entirety of the short term course was stretched across various phases in 5 days span of time. The first day began with brief introduction of Embedded System Design principles and comprehensive discussion on the MSP430 architecture and its trade-offs, after theoretical discussions, practical classes were ascertained with hardware implementation of the concepts learnt using the code- composer studio and Energia IDE platforms. The second day focused on advanced concepts of embedded systems design and implementation of customized code for various sensors and actuators using the MSP430F55 platform. The third day of the workshop was a transition from Embedded systems to the brief introduction of internet of things which required us to understand various industry standard IOT protocols and their theoretical understanding. The fourth day of the workshop revolved around familiarizing with the CC3100 booster-pack hardware and front-end/back-end understanding of MQTT and IOT protocols which was followed by practical implementation of all theoretical concepts simultaneously on the hardware. The fifth and the final day of the workshop was completely focused on developing a miniproject "rash driving alert system using CC3100 booster-pack and MSP430" binding all concepts learnt previously to one project, prelude to conclusion the resource personnel curated student registrations to Texas instrument's IICDC, E2E and platform registrations to emphasize the importance of online community.

#### **Orientation for 2nd year students**





Orientation program for Third Semester students of Electronics & Communication Engineering was organized by the Department of Electronics & Communication. Dr. Ashwath Rao, Head of the Department gave an overview of the department. Dr. Umesh M Bhushi, Director Strategic Planning addressed the gathering. Speaking on the occasion, he conveyed the importance of orientation program and also advised the students that by taking small steps and being focused in life they can reach the goal.

### Workshop on DSP TMS320C6748 programming and its architecture





A One-Day workshop on Digital Signal Processor TMS320C6748 was conducted for the pre-final year students of Electronics and Communication Department. Mr. Ganesh from Edgate Technologies Pvt. Ltd., Bengaluru was the resource person. He gave a brief note on Analog and Digital signal processing, advantages of digital signal processing over Analog signal processing with emphasis on DSP applications. Various types of Micro-controllers were dealt with in detail during the session. The architecture of TMS320C6748 was thoroughly explained. He also demonstrated the application of Digital signal processing on TMS320C6748 processor. Students had hands-on experience on the processor. Session concluded with discussion on various domains of signal processing and its scope in electronics industries.

#### **School Visit by AEnCES**





A visit to Navodaya high school was a memorable experience for all the participants. Students were eagerly waiting for the session. Students of Kannada medium schools located at rural areas are unaware about the engineering and technology. They don't have the all the facilities to conduct the experiments which comes in their syllabus. The program was started with the inaugural function in the presence of Dr. Ashwath Rao (HOD ECE), Mr.Gurusiddayya Hiremath(Faculty ECE), Balakrishna Bhat (Director of Navodaya high school) and the faculty of Navodaya high school. Ten students of Sahyadri college participated in which 3 were from 7th semester and 7 were from 3rd semester ECE. Students of Navodaya high school were divided into several groups and each group was assigned with a mentor.

In the morning session students were taught about all the Physics and Electronics experiments which are in their syllabus and in the afternoon session students were given some hands-on experiments, they were given with the electronics components and guided to make their own mini-electronic project. In the evening session videos about electronics circuits were played and a quiz program was held on that topic. Students who had given the correct answers were awarded with the prizes. A photo session was held at the last, in which all the memorable moments were captured. Students and faculty of Navodaya high school were very happy with the event and encouraged us to host such programs more often.

#### **Orphanage Visit by AEnCES**



On the occasion of Children's Day (14th November), students of AEnCES organized an orphanage visit to Infant Mary's Convent, Jeppu. The age group of children was ranging from seven to twelve years. Our interactive session with the children began at 10 am. The session started with a prayer and then children were called upon the stage to showcase their talent. Drawing competition was held. Chocolates, cake, ice-cream, books, crayons and pens were distributed. Creative items were made from color paper and waste materials. Prizes were distributed for games and drawing competition. The AEnCES students got to learn a lot of things from them. The visit to orphanage was a life changing experience as it was filled with emotions and sentiments.

#### Workshop On PCB DESIGN





Department of Electronics and Communication organized PCB design workshop with the initiation and support from our Principal Dr. Srinivasa Rao Kunte. The objective of the workshop was to help the second year students render better circuit designs for their projects. Mr. Ashwin Kumar, Assistant professor of Electronics and Communication department gave an insight in to PCB Design, giving the students a brief overview on components, Simulators and Fabrication process. The third year students of Electronics and Communication Department were the mentors for the second year students.

The workshop included designing PCB using 'EAGLE' software followed by preparing the circuit board, printing the circuit layout on the board and etching the unwanted area. Asst. Prof Ashwin Kumar briefed the students about the importance of PCB design. After these session students were divided into 3 batches each handled by students from 5th semester. Designing of circuit UM66 Melody Generated was taught in the morning session of the workshop. Using EAGLE software, the afternoon session included tracing the designed circuit on the copper boards & dissolving these boards in the Ferric Chloride solution to etch the board. The components required for the circuits were placed in their respective places and soldered. At the end of the day students were asked to report with the circuit they had built.

#### <u>Inauguration of IETE Students Forum (ISF) and</u> <u>Professional Activates Centre (PAC)</u>





Institute of Electronics and Telecommunication Engineers Student's Forum (ISF) and Professional Activities Center (PAC) was inaugurated by Dr. KTV Reddy, IETE President New Delhi in the presence of Dr. MH Kori, IETE Distinguished Fellow and Former Technical Director Alcatel Lucent Technologies and Dr. R Srinivasa Rao Kunte, Principal, Sahyadri College of Engineering and Management on 10-11-2018. IETE is India's leading recognized professional society devoted to the advancement of Science and Technology of Electronics, Telecommunication & IT with motive of reach to un-reach. IETE is the National Apex Professional body of Computer Electronics and Telecommunication, Science and Professionals. Government of India has recognized IETE as a Scientific and Industrial Research Organization (SIRO) and also notified as an educational Institution of national eminence.

The objectives of IETE focus on advancing electro-technology. IETE conducts and sponsors technical meetings, conferences, symposium, and exhibitions all over India, publishes technical journals and provides continuing education as well as career advancement opportunities to its members.

All the faculty members of Department of Electronics and Communication have enrolled themselves as corporate members of IETE and around 123 students have enrolled as student members. Ms. Nishal Nivya Rodrigues, the MC for the inauguration gave the general welcome followed by invocation by Ms. Madhura. Dr. Ashwath Rao, HoD- E&C department welcomed the gathering and briefed about the IETE benefits the staff, students and the institute could avail. He also deliberated about the IETE financial assistance to organize various technical events like seminars, symposiums, expert guest lectures which in turn help the faculty and students to get exposed to advanced technology. The inauguration was done in a different way where the chief guest unveiled the curtains by pressing the remote which activated the dc motor drive and one more switch activated the servo motor and microcontroller for the flower petals stored to fall down. It was designed by one of the student Mr. Shamanth Gowda.

During his inaugural address Dr. KTV Reddy mentioned various schemes for students and staff and also while working one can get masters degree from IETE. He expressed his sincere thanks to Sahyadri College of Engineering and Management for inviting and starting ISF and PAC at Sahyadri. The guest of honour Dr M. H Kori briefed the audience about how IETE facilitates in arranging invited talks by experts working in various domains for the benefit of the students and faculty members. He also emphasized in what way IETE forum can help other branch students and faculty members if they are fascinated about learning and getting degree in electronics and computer science. Dr. R Srinivasa Rao Kunte gave the presidential remarks and shared experience about his IETE journey at his previous institute and how we can take it forward at Sahyadri to make one of the best south zone centres of IETE with collective support from all staff, students and management by engaging in regular activities of IETE. Mr. Gurusiddayya Hiremath, Assistant Professor proposed the vote of thanks. The faculty members and students of Department of Electronics and Communication Engineering were present and program concluded with the photo session.

#### **Interaction Session**





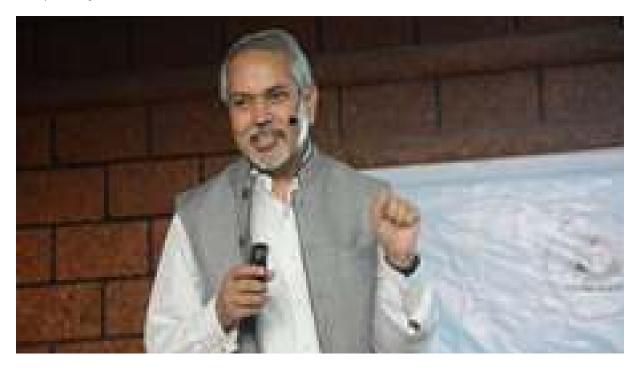
An interaction session between 12.00 pm to 1.00 pm was arranged for the students and faculty members of ECE to understand the importance and benefits of IETE. The session was chaired by Dr K T V Reddy (President, IETE) and Dr M H Kori (IETE Distinguished Fellow, Former Technical Director, Alcatel Lucent Technologies) and Dr Srinivasa Rao Kunte (Principal, SCEM). Dr Ashwath Rao, HOD, ECE, SCEM introduced the guests to the delegates to the gathering.

The students were briefed about the benefits such as funding and sponsorship done by IETE and scholarship facilities as the IETE member. Dr K T V Reddy briefed regarding the sponsorship from IETE for innovative projects. He also spoke IETE funding for M.Tech students for their education if the student is from economically poor background. Dr M H Kori told about the impact of our fundamentals in engineering for the future, he also stressed practical use of the concepts studied in the theory part, algorithms, statistical information. Dr. R Srinivasa Rao Kunte, Principal SCEM, thanked the guests for briefing about IETE and its benefits to the audience.

#### **TECHNICAL TALK**

#### Speaker: Dr M H Kori

A technical talk on "WIRELESS AN EXPRESSION OF FREEDOM" by Dr. M H Kori, IETE Distinguished Fellow, Former Technical Director, Alcatel Lucent Technologies was held on 10/11/2018 between 2.00 pm to 3.45 pm for the faculty members and students of Electronics and Communication Engineering. He gave an insight on the evolution of wireless communication, cellular communication & its revolution and also elaborated various topics like cell splitting, sectoring and importance of frequency reuse.



He also said about bits accommodation in bandwidth, FDMA, TDMA, CDMA and LTE network. He concluded his talk by briefing about current technologies like 3G, 4G, 4.5G and future 5G technology and the opportunity in the field of research.

### <u>"INNVOIDEA" Project idea presentation in association with IETE</u>



The department of Electronics & Communication Engineering of Sahyadri college of Engineering and Management took up the initiative to organize the innovative idea presentation event with a view to promote new ideas in the existing technology and its application in a smart built environment. The two days project idea presentation "INNOVIDEA" was held in association with IETE Student's forum (ISF) and Professional Activities Center (PAC) for the interested students of Electronics and Communication Engineering on 29th and 30th November, 2018.

The program started with inaugural ceremony chaired by chief guest for the event Dr. R Srinivasa Rao Kunte, Principal, Sahyadri college of Engineering and Management along with Dr. Ashwath Rao, HOD, Department of Electronics and Communication Engineering and Mr.Sharathchandra N R, Project Coordinator. Mr. Gurusiddayya Hiremath welcomed the dignitaries, faculty members, participants and students. Mr.Sharathchandra N R gave a brief report on the events happened before and the future plans on how to proceed further with the ideas which will be presented in the event.

He also explained the rubrics involved in the presentation and evaluation scheme. Dr. Ashwath Rao emphasized on how students should make use and take forward the ideas presented in "INNOVIDEA" and how it can be utilized to take up creative projects in their interested fields. He also reminded the students regarding the rules, responsibilities professional attitude towards the Engineering discipline to be inculcated through the project work execution. The presidential remark was given by Dr. R Srinivasa Rao Kunte where he inspired young minds through his vast experience in the field of Electronics and Communication and also shared few instances which enlightened the students regarding the importance of conducting a project in a systematic and well-mannered way for successful and timely completion. He also encouraged the faculty members to guide the participants help them to convert their idea into product and extended his support for the overall development and improvement of students. The ideas presented during "INNOVIDEA" could cater to addressing societal issues in health, agriculture, water and energy conservation.

Students presented various social innovation projects like detection of adulteration in milk wherein the system can be used in milk collection centers to detect the presence of various additives like urea and other chemicals to increase the fat in the milk, Sleeping disorder monitor and control, farmers problems like yield improvement and fertilizer feeding. Another interesting idea named Smart Wind Tree using wind at sea shore to generate electricity with constant efficiency was presented. One of the project Smart Mirror for water conservation used to measure the water usage of each individual when they wash hands and face in front of the wash basin was also highlighted. Various ideas like accident prevention using eye blinking, portable fridge with smart display, firefighting robot were presented. The students presented project ideas for helping physically challenged people using Image processing and embedded systems. IOT based projects such as industrial automation setup and virtual banking system presented helpful for the society was presented.

#### **Virtual Lab Workshop**





A workshop on Virtual Labs was organized by Electronics and Communication Engineering Department. A team of ten Research Scholars from NITK conducted the sessions. Virtual Labs is an initiative of Ministry of Human Resource Development under the National Mission on Education through ICT. It provides remote-access to Labs in various disciplines of Science and Engineering. These have collaboration with 12 institutions all over India which includes IIT's, NIT's & IIIT's.

The broad areas of Virtual Labs are Electronics & Communications, Computer Science & Engineering, Electrical Engineering, Mechanical Engineering, Civil Engineering etc. The sessions at Sahyadri were conducted for second & third year students of Electronics & Communication Engineering, Computer Science Engineering Information Science Engineering. Aishwarya Shetty, JRF of NITK, Surathkal gave an insight to the experiments available in the Virtual labs under different broad areas. E&C students analyzed the characteristics of digital logic families, learnt sampling theorems, convolution of signals, Ohm's law, full wave rectification, half wave rectification, characteristics of RC, RL RLC networks. Students executed and analyzed the various digital logic circuits, verified Thevenin's & superposition theorem, HALF ADDER, full adder and subtractor, ripple carry adder and concept of simple pendulum. Students also got a hands-on experience on simulation, calculations and available. These lab experiments experiments had theoretical explanations of the experiment with procedure to simulate the experiment in Virtual Lab. There were options to change parameter values in circuit, simulate them and display the output through graph.

Students can also access the lab experiments which are set up at participating institutions. They can trigger those experiments and obtain the result. CSE & ISE students conducted experiments based on Karnaugh maps, combinational circuits, programming languages, computer organization etc. It helped to understand practical lab concept in a very effective and interesting way.

#### **Introduction to Electronics Engineering**





Department of ECE conducted one day event on "Introduction to Electronics Engineering" to the students of Navodaya high school to create awareness on engineering. During the event various sessions were conducted like basics of electronic circuits, circuit debugging and hands on experiment. Students were divided into various groups and were assigned with two mentors each.

The students were briefed about RLC circuits and semiconductor devices followed by quiz and various experiments conducted on semiconductor devices. The students were also guided about various scholarship schemes like NMMS, NTSE etc. Mr. Ravishankar alumni of Navodaya School, currently studying in final year ECE at Sahyadri placed in Infosys along with students from third semester and faculty members were part of the daylong event. Navodaya High School management and staff appreciated the initiative from Department of ECE, Sahyadri College of Engineering and Management towards helping rural students in motivating them to understand fundamentals of electronics engineering. Further they were also very curious to visit the college and connect with the college.

### Former Scientist Aeronautical Development Agency IICDC Review Report





Mr. B.S. Madhyastha is a former scientist of the prestigious Aeronautical Development Agency (ADA), he completed his masters in technology (M.tech) from National institute of technology, Surathkal (NIT-K). He has considerable experience in design, development, testing and trials of 5A fighter aircraft avionics (USMS systems). His areas of expertise include process control and instrumentation.

The distinguished guest interacted with the members of the IICDC shortlist team of 8 final year students. The guest was briefed on the project and provided his review on the technical aspects of the projects, he was very keen on solving the associated technical problems constructively together with the students, and the discussions were comprehensively about the idea of self-test systems, development of standards for security and the various process of project development cycles. The guest stressed on the importance of documentation and tabulation of the project. The discussion was instrumental in advancing for the next phase of the project development.

#### **Cultural Events**



Dhanush D, Arshiya and Rahul N L, students of Electronics and Communication Engineering participated in "HALCYON" a state level summer fest organized at Siddhaganga Institute of Technology, Tumkur and won first place in Drama. They participated in "RANGATHARANGA" a state level drama competition held at R V College of Engineering, Bangalore and "YUVAJANOTSAVA" a district level cultural fest organized by Department of Youth Empowerment and Sports of Karnataka bagged the first place.

#### **AENCES INAUGURATION**





Program was begun with a formal function which was scheduled at 9.00 am. Dr. Roshan Shetty A was invited as the chief guest for the formal inauguration. The function was presided by HOD of the department, Dr. Ashwath Rao. Association coordinator Mr. Gurusiddaya Hiremath, Association President S Vishwanath Pai, Association Secretary Chaithan, Vice President H. Ashwin Prabhu, and Treasurer Sequeira Ronston also graced the occasion. Raksha Chandrashekar from 7th Semester hosted the formal ceremony. Madhura and Pratista from 7th semester invoked God's blessings by singing a beautiful hymn. Welcome speech was given by Association President S Vishwanath Pai. The Annual Agenda was read by Association Secretary Chaithan. Beryl Priyanka of 7th Semester introduced the Chief Guest to the gathering.

The Chief Guest addressed the gathering were he shared his college experiences and also delivered few wise thoughts to the students. He inspired the students by stating as to how important it is to build a good career. He also congratulated the students of the department for their creative work which included the lighting of lamp in an innovative way. The creative work was done by students of 5th semester. Dr. Ashwath Rao conveyed his Presidential Speech. He spoke about his experiences and also gave some good tips for the upliftment of the association. AEnCES coordinator Mr. Gurusiddaya Hiremath also addressed the gathering. Sequeira Ronston delivered the vote of thanks.

#### **AENCES VALEDICTORY**





It began with a formal function which was scheduled at 10.00 am. Mr.Vardhana M was invited as the chief guest for the formal inauguration. The function was presided by Vice Principal Prof. S S Balakrishna. Dr. Ashwath Rao, HOD of the department, Association coordinator Mr. Gurusiddaya Hiremath, Association President S Vishwanath Pai, Association Secretary Chaithan, Vice President H.Ashwin Prabhu and Treasurer Sequeira Ronston also graced the occasion. Deepthi from 6th Semester hosted the formal ceremony. Madhura and Pratista from 8th

semester invoked God's blessings by singing a beautiful hymn.

Association President S Vishwanath Pai welcomed the gathering. Association Secretary Chaithan read the annual report. Sarvamangala of 6th Semester introduced the Chief Guest to the gathering. Mr. Vardhana M, Alumnus, design engineer at NXP semiconductors is an experienced Design Engineer working in the semiconductors industry. His areas include Verification and Validation (V&V), SV, Scripting, Universal Verification Methodology (UVM), and Visual Basic for Application. The Chief Guest addressed the gathering where he shared his college experiences and also delivered few wise thoughts to the students. He inspired the students by stating as to how important it is to build a good career. He also thanked the department lecturers for their support during his studies in the college. On occasion of Aaradhana various events such as face painting, Mehendi, Cooking without fire, Rangoli, Badminton, Throw Ball, Tug of War etc. were conducted as a part of extracurricular activities and the prizes for the same was distributed on the day. Prof. S Balakrishna gave a presidential speech and wished all the final year students good luck for all their future endeavors. Dr Ashwath Rao addressed the gathering and gave wise advice to the outgoing students. AEnCES coordinator Mr. Gurusiddaya Hiremath also addressed the gathering. Sequeira Ronston delivered the vote of thanks. AEnCES YouTube Channel which includes the capturing of various events of the department and college was launched on the occasion.

Chavan and Manjunath of 6th semester with the help of faculty Mr. Sharathchandra N R and also with other students in the committee worked for this channel. A technical talk by Mr. Vardhana M on VLSI design methodologies- ASIC and FPGA by to all the ECE students was very effective. He emphasized on design flow of ASICS and FPGA and also their differences. He also spoke about the industry requirements an engineer should possess and concluded by explaining the case studies on implementation of image processing on FPGA.

The informal cultural extravaganza commenced with a wonderful Flash Mob which entertained the crowd. Various cultural performances were given by the branch students which included Dancing, Singing and so on. Naela Khan of 4th semester hosted the cultural program.

#### **Technical talk**



As a part of technical talk, an innovative presentation on NBA was given by Assistant Professor Praveen Kumar Konda. This created an awareness and importance of NBA to the students. After the technical talk, a technical dumb charades was organized in which the lecturers and the students actively participated. The cultural extravaganza commenced with a wonderful Flash Mob which entertained the crowd. Various cultural performances were given by the branch students which included Dancing, Singing, Drama and so on. Naela Khan of 3rd semester and Nishal Nivya Rodrigues of 7th semester hosted the cultural program.

#### Alumni Interaction



Mr. Rajath Kumar Kodoth, an Alumnus of Dept. of Electronics and Communication Engineering (Passed out in 2017-18) shared his experience with the pre-final year students. He is currently working as an Associate Trainee in Data Science at AltraSys Technologies. As he liked Mathematics and was good at it, Rajath always preferred to get into a profile of a Data Scientist. While speaking to the students, he encouraged them on learning Python programming language since Machine Learning Artificial Intelligence are booming these days. He said it was the best career option one should opt for. As a concluding remark, he asserted that students should maintain a good aggregate in engineering and also enjoy their college life.



Mr. Vardhana M, Alumnus, design engineer at NXP semiconductors is an experienced Design Engineer working in the semiconductors industry. His areas include Verification and Validation (V&V), SV,Scripting, Universal Verification Methodology (UVM), and Visual Basic for Application. The Chief Guest addressed the gathering where he shared his college experiences and also delivered few wise thoughts to the students. He inspired the students by stating as to how important it is to build a good career.



Student alumni interaction session was held for 4th semester EC students on Friday the 8th, February, 2019. The invited alumna "Ms. Prasad" Sahana shared her knowledge about the industry. The students were updated about the various trends in the job market and also about the core principles required in a modern age employee. The topics such as Machine Learning in the present world scenario and its scope for employability was also discussed. students were made aware of the various competitive exams available for getting employed in this booming industry. The interaction concluded with a small Q&A session.



Ms. Namitha S.N, alumna of Sahyadri ECE from the 2012-2016 UG and 2016-2018 PG Batch visited the campus and interacted with the students.

Ms. Namitha S.N is presently working as a Firmware Integration and validation Engineer at UST Global, Bangalore. She shared her industrial experience and addressed students on how the interview process is carried out. Briefed about the work culture in the company and shared personal experience about the College.