



# SAPTHAGIRI COLLEGE OF ENGINEERING

#14/5 Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057

(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi)

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION

March 2021 Volume 7

**ECE PULSE**



### VISION

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

### Mission

To Develop entrepreneurial skills of students to make them entrepreneurs 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.

### Inside the issue

- Webinars
- Paper Publication
- Student Chapter
- Sports and Articles
- Editorial Team

### 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



## Head of the Department: Dr. Sateesh Kumar H C

Head of Department: 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



## Webinar on "Power of Planning Early"

Mr. Keerthi Natarajan, CEO, Goldenagefilmhouse an Alumni of ECE department Sapthagiri college of Engineering batch 2005-2009 has delivered talk on "Power of planning early" on 4th January 2021 from 10.30AM to 12.15 PM. He is an engineer turned film maker and hence follows an engineering approach in film making. The Speech was about importance of positive thinking and attitude which brings optimism into life and such constructive changes can make one brighter and successful. He also motivated students to become entrepreneurs as he himself is an engineer turned entrepreneur



Student observed Webinar offline at ECE Dept. ↑



Student and Faculty observed Webinar offline at ECE Dept



## Webinar on "Computer Vision and Artificial Intelligence"

Gautham N, Senior Software Engineer, Qualitas Technologies, Bangalore brought out important information about scope of AI and Machine Vision in the present world and its contribution for modernization. He gave brief introduction on machine vision in industrial automation and in robotics. This one-day Webinar as conducted on 6th March 2021 from 10:30 to 12:30. The number of students attended this webinar are 122.



Mr. Gautham N speaking to Students



Online Program is hosted by Dr. Prakash Jadhav and Prof. Pratikha. P



## Paper Publications

NAME	TITLE OF THE PAPER	NAME OF JOURNAL	YEAR OF PUBLICATION	DOI/ISBN/ISSN NUMBER
Dr.Sateesh Kumar H C	Low light image denoising solution with contrast enhancement in curvelet domain using Gaussian mixture adaptation model	International Journal of Wavelets, Multiresolution and, Information Processing(SCI indexed)	Sep 2020	DOI: 10.1142/S021969132050054X
Kavitha R J	A Novel Characteristic Mechanism for different microstrip patch antenna	International Journal of Advanced Research in Engineering and Technology( SCI indexed)	Nov 2020	DOI: 10.34218/IJA RET.11.11.20 20.066

## Student Chapter: Pencil Sketch, Painting, Photography, Article

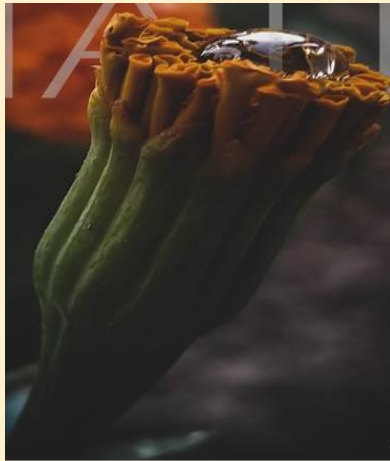
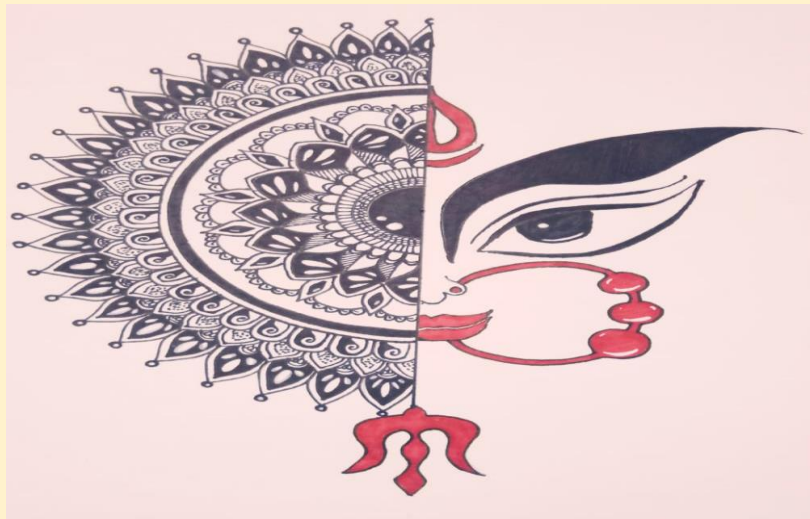


Pencil Sketch by Anusha L ECE A Section 1<sup>st</sup> year

Pencil Sketch by Arpitha ECE A 1<sup>st</sup> year



Painting by Sahana C ECE 'B' 1<sup>st</sup> year



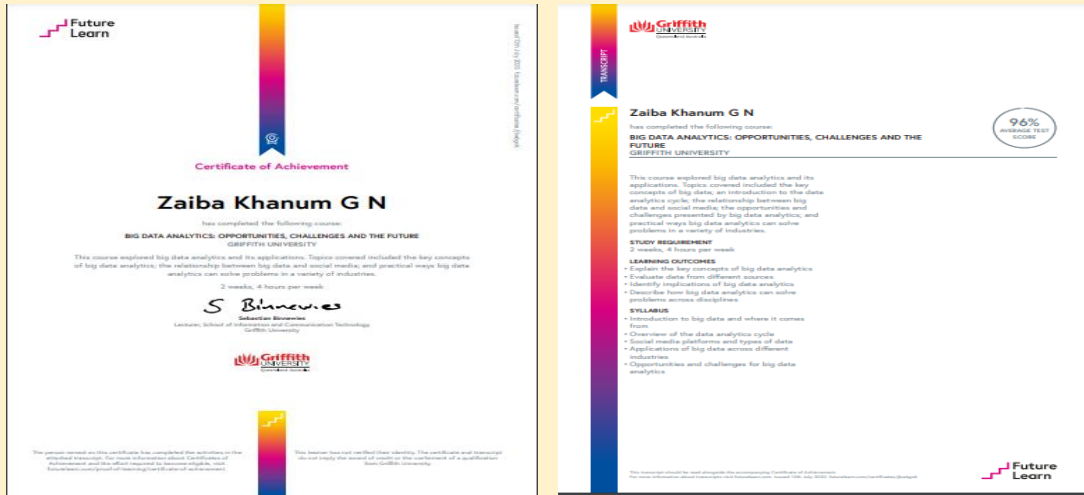
Nature Photography by Varun Teja S ECE B 1<sup>st</sup> year



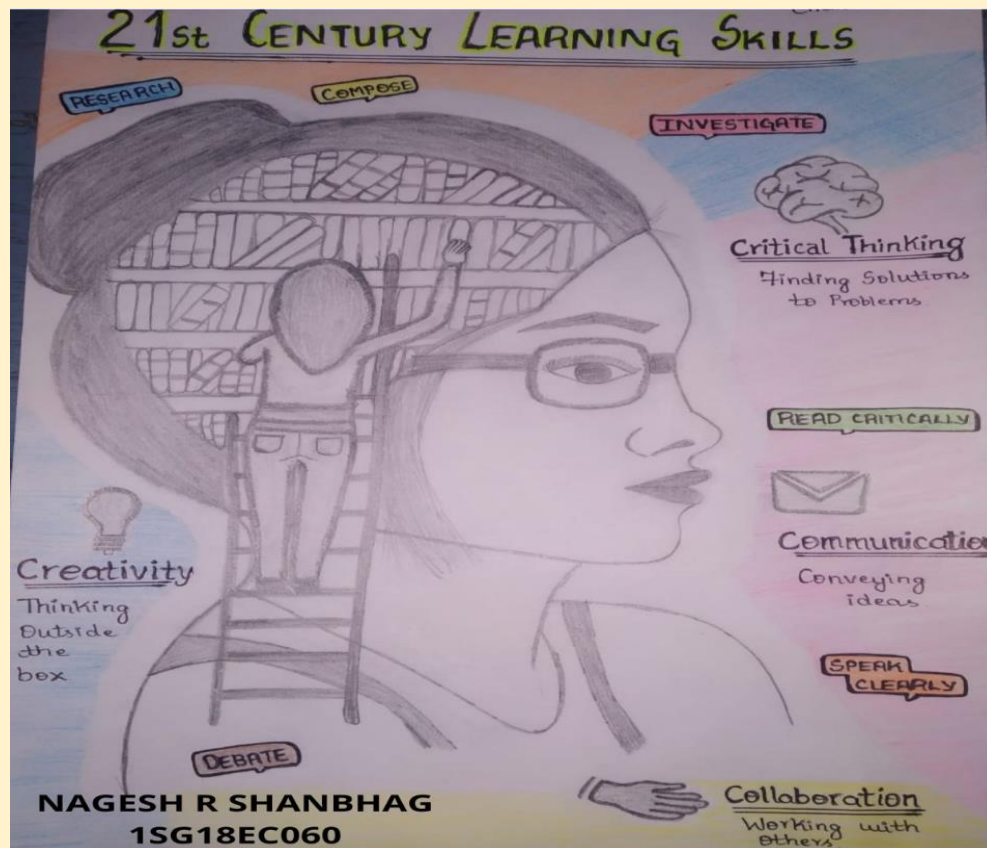
Acrylic Painting by M S Vibha ECE B 1<sup>st</sup> Year

## Student interaction with outside world

Zaiba Khanum G N first year student completed short term course of 2 weeks in Big Data Analytics: Opportunities, Challenges and the Future from Griffith university.



## Creative art by Student Nagesh R Shanbhag 3rd year 'A'



## Sports" Fresher's Championship 2021"

Fresher's championship was conducted by physical education department saphthagiri college engineering from march 5 to 6 2021 in order to encourage first year students in sports activity. Girls ECE department has become runners in the Throw ball game.



Participants



Winning Team with Faculty Sports Coordinator



First year ECE student winners with Principal and faculty

## Article by Faculty

### CONCENTRATION

Concentration is essential for everyone in this universe. Based on the time, situations, and incidents creates to cultivate concentration in them to fulfill their profession demands. Mind is restless and not so easy to keep it under control. By good and constant practice one can control the fickle mind. Speaking with respect to youth mind, it is like water falls. A huge volume of water, pouring down from the heights of a mountain, flows everywhere blindly and at last, serving no purpose ends up in sea by losing its identity. Assume on the other hand, if a dam is built across it and the same water is made to flow in regulated canals, agriculture fields can be irrigated where rich crops can be harvested and a drinking water system can be established for the whole city. Youths must be module in such a way that he should be like a water from a dam.

\*\*\* To improve your concentration try to walk backward direction when you are free \*\*\*

By J R GIRISH ASST. PROF.

## Article by Student **AUTOMOTIVE SEMICONDUCTORS** Is shortage of resource hindering us from extreme technological advancement?

### Short Supply

**5-30% production** in automotive, mobile, laptop, TV segments may be affected due to shortage of parts

**Shortage of** chipsets, ICs & displays

**Shortage of ECUs** for predominantly diesel-run vehicles

**Auto component makers** Bosch & Continental have flagged concerns

**Supply situation** may take 3-9 months to resolve



With vehicles on the road becoming ever more like computers on wheels, the level of innovation in semiconductor technology is at an all-time high, making it the perfect occasion to take a look at what the future holds for these critical components and the industry itself. Automotive semiconductors can be thought of as the key that opens the door to vehicle development. They are the fundamental building blocks behind everything from mapping applications, connectivity platforms and data-bases to graphics processing units, advanced driver warning systems (ADAS) and much more. As car manufacturers around the world seek

to make e-mobility more cost-efficient, practical and safer than vehicles with internal combustion engines. The automotive sector currently accounts for 9 percent of global semiconductor revenue, but with electric cars set to take a global market share of 30 percent by 2030, this percentage will only increase with time. With so much revenue up for grabs, many semiconductor companies are aggressively seeking to carve out a market share while they have the chance. Even those semiconductor manufacturers that were not previously involved in the automotive industry including heavyweights such as Intel, NVIDIA, Samsung, Sony and Panasonic are now producing products designed to capitalize on the wave of e-mobility. If the Electric Vehicles Initiative which is supported by the likes of China, the UK, Canada, India, Japan and France meets its target to put 44 million vehicles on the road each year up to 2030, it is safe to say that the automotive semiconductor market will only seek to benefit from the e-mobility revolution. The only question is which market players will emerge on top by the end of the next decade and which innovations will become commonplace.

#### Editorial Team

<b>Chief Editor:</b>	<b>Dr. H C Sateesh Kumar</b>
<b>Editor:</b>	<b>Dr. Sudha M S</b>
<b>Student coordinator:</b>	<b>Lavanya N &amp; Nagesh (5A)</b>
	<b>Prateek &amp; Divya (5 B)</b>
	<b>Sanrupti (7 A) &amp; Chandra Kumar U (7 A)</b>



