



ece SYNCOM

A VOICE OF ELECTRONICS AND COMMUNICATION ENGINEERING

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KITS

KKR & KSR Institute of Technology & Sciences

(Approved by AICTE New Delhi, Affiliated to JNTU Kakinada, Accredited by NAAC with "A" Grade)



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VISION, MISSION & PEO'S

Vision

Developing highly Qualitative, Technically Competent and Socially Responsible Engineers.

Mission

To provide quality education in the domain of Electronics and Communication Engineering through

- Enriched curriculum for addressing the needs of Industry.
- Effective teaching learning processes through congenial environment.
- Gaining contemporary knowledge through research, development, curricular, co and extra-curricular.

ECE Program Educational Objectives

Graduates of Electronics & Communication Engineering Shall

PEO1: Develop a strong background in basic science and mathematics and ability to use these tools in their chosen fields of specialization.

PEO2: Have the ability to demonstrate technical competence in the fields of electronics and communication engineering and develop solutions to the problems.

PEO3: Attain professional competence through life-long learning such as advanced degrees, professional registration, and other professional activities.

PEO4: Function effectively in a multi-disciplinary environment and individually, within a global, societal, and environmental context.

PEO5: Take individual responsibility and to work as a part of a team towards the fulfillment of both individual and organizational goals.

The institute is a symbol of egalitarian outlook without discretions. KITS student activity council is organized exclusively by students with representatives from various disciplines stands for the advocacy of democracy and leadership opportunities provided by the institute. KITS student clubs enable all the students and staff mingle freely to express their views and share their talents and expertise. **KITS imparts Outcome Based Education (OBE)** which gives equal opportunities to teaching and learning curricular, co-curricular and extra-curricular activities.



Google's search engine is a powerful tool. Without search engines like Google, it would be

practically impossible to find the information you need when you browse the Web. Like all search engines, Google uses a **special algorithm** to generate search results. While Google shares general facts about its algorithm, the specifics are a company secret. This helps Google remain competitive with other search engines on the Web and reduces the chance of someone finding out how to abuse the system.

Google uses automated programs called **spiders** or **crawlers**, just like most search engines. Also like other search engines, Google has a large index of **keywords** and where those words can be found. What sets Google apart is how it ranks search results, which in turn determines the order Google displays results on its search engine results page (SERP). Google uses a trademarked algorithm called **PageRank**, which assigns each Web page a relevancy score.

Web page's Page Rank depends on a few factors:

- **The frequency and location of keywords within the Web page:** If the keyword only appears once within the body of a page, it will receive a low score for that keyword.
- **How long the Web page has existed:** People create new Web pages every day, and not all of them stick around for long. Google places more value on pages with an established history.

Out of these three factors, the third is the most important. It's easier to understand it with an example. Let's look at a search for the terms "Planet Earth."

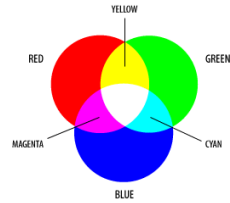
As more Web pages link to Discovery's Planet Earth page, the Discovery page's rank increases. When Discovery's page ranks higher than other pages, it shows up at the top of the Google search results page. Because Google looks at links to a Web page as a vote, it's not easy to cheat the system. The best way to make sure your Web page is high up on Google's search results is to provide great content so that people will link back to your page. The more links your page gets, the higher its PageRank score will be. If you attract the attention of sites with a high PageRank score, your score will grow faster.

Google initiated an experiment with its search engine in 2008. For the first time, Google is allowing a group of beta testers to change the ranking order of search results. In this experiment, beta testers can promote or demote search results and tailor their search experience so that it's more personally relevant. Google executives say there's no guarantee that the company will ever implement this feature into the search engine globally.

By/- G.Saketh III ECE-I



INTRODUCTION TO RGB COLOR



The **RGB** color system is one of the most well-known color systems in the world, and perhaps the most ubiquitous. As an additive color system, it combines **RED**, **GREEN**, and **BLUE** light to create the colors we see on our TV screens, computer monitors, and smartphones.

Although used extensively in modern technology, **RGB** color has been in existence since the mid-1800's, and was originally based on theories developed by physicists such as Thomas Young, Hermann Helmholtz, and James Maxwell. Some early examples of **RGB** color in use were in vintage photographs (the above photo was taken in 1861) and cathode ray tubes. In modern technology, LCD displays, plasma displays, and Light Emitting Diodes are also configured to display **RGB** color.

How does RGB Color Work?



The parts of the human eye that are responsible for color perception are called *cone cells* or *photoreceptors*. **RGB** is called an additive color system because the combinations of red, green, and blue light create the colors that we perceive by stimulating the different types of cone cells simultaneously.

As shown above, the combinations of red, green, and blue light will cause us to perceive different colors. For example, a combination of red and green light will appear to be yellow, while blue and green light will appear to be cyan. Red and blue light will appear magenta, and a combination of all three will appear to be white.

Advantages of RGB Color:

Almost every well-known application is compatible with **RGB**, such as Microsoft Office, Adobe Creative Suite (InDesign, Photoshop, etc.), and other digital editors.

Drawbacks of RGB Color:

One of the major limitations of the **RGB** color system is that it doesn't translate well to print, which uses the **CMYK** system. This has led to a great deal of frustration when people print out documents from Microsoft Office, only to have them turn out to be the wrong color.

In addition, different devices often use different types of LEDs. This means that the same color co-ordinates do not display consistently across smartphones, TV screens, or even monitors. This can present some unique problems for professionals who work with precise digital color, from special effects to graphic or print design.

By/-B.Venu, Asst. Prof








RESULTS

I-II Result:

Congratulations to toppers of II years for magnificent performance in I-II exam. Let this be considered as a source of inspiration to the entire students of the department and an impetus to excellence. Big thumbs to all the faculty members who geared up the students for such a great triumph.

The pass percentage of I-II results is

80.34

NO	REGDNO	NAME	PERCENTAGE	PHOTO ID
1	17JR1A0495	PASUPULETI VALLI NAGA LAKSHMI	9.63	
2	17JR1A04H8	VARE RUDRA REDDY	9.25	
3	17JR1A0421	DURGA NAGA SAI VENKATA SREEJA T	9.13	
4	17JR1A04D2	SAGAMREDDY VIDYA	9.13	
5	17JR1A04F4	YERRAMALLI SYAMALA	9.13	

SPACE DAY -2018

The student association, **SPACE**, was established on 16/7/2016 by the dept of ECE. It has been organizing successfully. The first anniversary of association naming **SPACE DAY** was celebrated on 15th June 2017, in the College. Now the second annual space day named as “**DIA ANNUAL SPACE DAY**” was organized on 28th July 2018. The chief guest of the program was **Mr. G.V Manoj Kumar Irs, General Manager BSNL Vijayawada**.



The program has started with the classical dance . After that the guests of honor of the event the HOD, Management members and the chief guest **Mr. G.V Manoj Kumar Irs , General Manager BSNL Vijayawada** were invited on to the dais. As a mark of our tradition and culture, the dignitaries lighted the Lamp.



It was followed by delivering a few messages by the **Dr. M.Siva Ganga Prasad, Principal Sir, Secretary Sir , Chairman Sir and The Chief Guest**. Later the **SPACE** team for 2018-19 Academic year was introduced by Space coordinator **Mr. A.Sarat Kumar**.



Later the SPACE magazine was released by the Chief Guest and the copies are distributed to the dignitaries on the stage. The association calendar for the current year was launched by Honorable Chairman, KITS College.

In this occasion, the SPACE had conducted Technical Quiz, Paper Presentations & Project Expo to ECE students. Prizes and certificates were distributed to all the winners and runners of Paper presentation, Technical Quiz and Project expo on SPACE DAY by the Honorable Secretary and Principal, KITS College



After that, the felicitation of the chief guest was done. The Vote of thanks was delivered by **Mr. A. Sarat Kumar**, Assistant Professor of ECE, on behalf of the department by extending his gratitude to the College Management, Principal, Vice Principal, HOD, Delegates, Panelists and Organizing Committee. The program ended with the National Anthem.

FACULTY ACHIEVEMENTS

	<p>Dr. Ch.Aruna Bala attended for one week workshop on "Python" organized by Department of Computer Science engineering ,KITS</p> <p>With Her interest she participated in the IUCEE International Engineering Educator Pre Certification workshop ,Organized by APSSDC</p>	
	<p>Dr. Sk. Khammuruddin, Assoc. Prof, is became a reviewer of "International Conference on Transformations in Engineering Education (ICTIEE AP' 18)". Also He attended for one week workshop on "Python" organized by Department of Computer Science engineering ,KITS</p>	
	<p>It is happy to inform you that, two of our faculty Mr. R.Rama Mohan, Asst.Prof&Mr.B.Brahmaiah, Asst.Prof are authored & Published a book on "Raspberry Pi Based Automatic Gate Open/ Close System for Town Ship "in " Lambert Academic Publications " an International Publishers</p> <p>Raspberry PI based Automatic Gate Open/Close System for Township Design, development, embedded and applications</p>	 <p>CH. V. Ramana B. Brahmaiah R. Rama Mohan</p>
 <p>978-613-9-86999-2</p>		
	<p>Mr. A.Sarath Kumar ,Asst. Prof attended for one week workshop on "Python" organized by Department of Computer Science engineering ,KITS.</p> <p>With his interest he participated in the IUCEE International Engineering Educator Pre Certification workshop ,Organized by APSSDC</p>	 <p>Indo Universal Collaboration for Engineering Education</p>



Mrs. P.Sarala ,Asst. Prof presented a paper on “Reducing of PAPR for the MIMO OFDM systems- IEEE Conference Publication-2017 International Conference on Energy, Communication, data Analytics and soft computing(ICECDS)



©DOI: [10.1109/ICECDS.2017.8389690](https://doi.org/10.1109/ICECDS.2017.8389690)

And also she attended for the short course on “**mmWave MIMO and filter bank Multi Carrier Technologies for 5G Network**” organized by Electronics and communication engineering, IIT Kanpur during 25th to 28th July.

And she was participated in the CVX-MATLAB Capstone Projects in the same venue.



Mr. Maduguri Sudhir got member ship of “**The society of Digital Information and wireless Communication (SDIWC)**” with membership ID: 21888



Mr. B.Brahmaiah got member ship of “**The society of Digital Information and wireless Communication (SDIWC)**” with membership ID: 21889



STUDENT ACHIEVEMENTS

SPACE DAY 2018 Project Expo Winners

Name	Roll. Number	Prize
Ch. Omkhar G.Saketh Sk.Subhani K.Naga Cgaitanya K.Yasaswi N.Venkatesh	16JR1A0438 16JR1A0446 17JR5A0405 17JR1A04A7 17JR1A04A8 17JR1A04C0	I
G.Naga Sai J.Praveen J.Gopi Krishna N.Pooja N.Laxmi Chaitanya	16JR1A0447 16JR1A0454 16JR1A0456 17JR1A0491 17JR1A0492	II

SPACE DAY 2018 Paper Presentation Winners

Name	Roll. Number	Prize
R.Keerthi Sree P.Navya	17JR1A04D0 17JR1A04C8	I
Sd.Haseena	16JR1A04D0	II

SPACE DAY 2018 Technical Quiz Winners

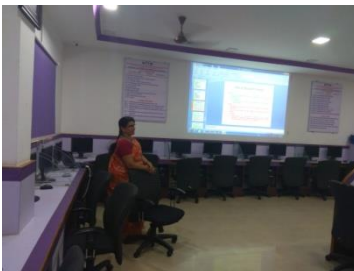
Name	Roll. Number	Prize
Ch.Laxmi Thirupathamma G.Pavan Kumar G.Aparna	15JR1A0422 16JR1A04H5 17JR1A0424	I
B.Malleswari M.Aneela Bhavani A.Tarun	15JR1A0408 16JR1A0477 17JR1A0441	II



The ECE department's Research and development team conducted a seminar on **"Research & Development in Engineer- Role of Funding Projects"** on 26th, July 2018 from 4.00 PM to 5.10 PM in the ECAD Lab . **Dr. Ch. Aruna Bala, Professor ECE, of KITS** was resource person for this Seminar . This Seminar was conducted to get the awareness among the faculty members towards Research & Development.

The following topics explained by the resource person:

- What is the difference between conference and symposium
- What is research and development?
- How to do research?
- The research and development includes what?
- How to do a quality research?
- Objectives of research and development
- Structure of research and development
- Various stages of research and development



ABOUT 5G

