



## VIGNAN'S INSTITUTE OF MANAGEMENT AND TECHNOLOGY FOR WOMEN

(Approved by AICTE, Affiliated to JNTU, Hyderabad)  
KONDAPUR VILLAGE, GHATKESAR MANDAL, RANGA REDDY DISTRICT - 501 301.

Volume - 6

### NEWS LETTER

# TECHINNOVATION

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**“ Science is about knowing, engineering is about doing. ” – Henry Petroski**

**Empowering the women fraternity, Celebrating Womanhood", was to bring light on the hidden talent of the female students.**

## EDITORIAL DESK

Hello!!! We are happy to welcome you all aboard the fledgling 6th edition for the scintillating year 2017. TECHINNOVATION is the newsletter of the ELECTRONICS & COMMUNICATION ENGINEERING which aims to bring forward the buzz from the department in the past few months. The edition demystifies the realms of Electronics & Communication Engineering and also provides insight to the latest technology adopted in the field. Hope our deeds would ignite everyone's life!!!

## HOD'S DESK

It is a theme of happiness to articulate with all of you Through this 6th newsletter. Within these pages you will Find much news related to Diverse activities from the Whole faculty and students Of ECE department. I am cheerful for the initiatives taken by the faculty to disseminate knowledge by organizing various activities in the department. I hope everyone will find this news letter Exciting and interesting.

## ECE DEPARTMENT

Department of Electronics and Communication Engineering was started since the inception of VIGNAN'S Institute of Management and Technology for Women during 2008 with an initial

intake of 60. The strength was enhanced to 120 during 2005. The Department had added Post graduate program in VLSI during the year 2012 and Embedded Systems during 2014 with an intake of 18 each. The Department is headed by well qualified

### VISION

To transform the students into technologically competent professionals, with abilities to address the societal challenges of the time through innovative technical practices in electronics & communication engineering

### MISSION

M1: To foster inquisitive-driven advanced knowledge building among students for reinforcing the domain knowledge, develop capabilities, skills and solve complex engineering problems

M2: To prepare industry-ready graduates for global Electronics as well as communication based engineering companies by conducting training programs, workshops and industry visits.

M3: To build leadership qualities, research aptitude among students for the contribution of economic and technological development in cutting edge technologies in national and as well as in the global arena.

### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

**PEO1:** To develop the student's ability on technical concepts to design, simulate, and synthesize various electronic and communication circuits & systems for their research advancements.

**PEO2:** To impart analytical skills and to prepare the students excel in applying state of the art hardware and software tools to solve complex engineering problems for R&D, Industry and societal requirements.

**PEO3:** To prepare students to work in teams, take independent decisions and integrate engineering issues for successful career in multi-disciplinary environment.

**PEO4:** To promote entrepreneurship among the students to become successful entrepreneurs with professional ethics.

### PROGRAM SPECIFIC OUTCOMES (PSOS):

**PSO1:1.** Professional Skills Ability: Identify, design electronics & communication circuits and conduct experiments with electronics & communication systems, analyze and interpret data, formulate and solve electronics & communication engineering problems.

**PSO2:** Industrial Skills - Ability: Design digital and analog systems, algorithms, firm ware, modern engineering tools, software, etc. as per needs and specifications and work in laboratory and multidisciplinary tasks.

**PSO3:** Ethical and Social Responsibility : Communicate effectively in both verbal and written form, will have knowledge of professional and ethical responsibilities and will show the understanding of impact of engineering solutions on the society and also will be aware of contemporary issues

**PRAJWALAN 2K17**  
11th – 13th April, 2017.

CULTURAL EVENTS,  
TECHNICAL ACTIVITIES  
& SPORTS

Chief Guest

**Mr. Nayini Narsimha Reddy,**  
Home Minister, T.S.

Chief Patrons

**Dr.L.Rathiah,**  
Chairman Vignan Group  
**Mr. B.Shravan,**  
C.E.O Vignan Group

Matron

**Dr. P.Sudhakara Rao,**  
Principal VMTW

Convener

**Mrs.V.Indrani**

Co-Conveners

**Mrs.A.Narmada**  
**Mr. L.Kiran kumar**

### INDUSTRIAL/INTERNSHIP /SUMMER TRAINING

The Students have attended an internship program by BITS PILANI and ECIL where they have gained knowledge in designing an embedded product, PCB design and fabrication process that was a hand on experience.

### PLACEMENT & TRAINING ACTIVITIES

Assessment Test was conducted by AMCAT on 1st March 2017 where III & IV Year Students Participated and Trained by AMCAT Faculty.



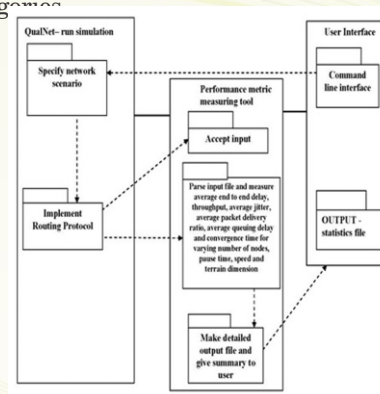
## Faculty Technical Article : Title - AntHocNet

### Introduction

The term routing refers to the process of selecting paths in a computer network along which data is sent. This process is carried out by a routing protocol, used to exchange information about topology and link weights, and a routing algorithm, that computes paths between nodes. The routing protocols are divided into three categories

Firstly the proactive protocols like DSDV, OLSR, reactive protocols like AODV and hybrid protocols like TORA, ZRP, and MPOLSR. Another most important type of protocols in recent times is the Bio-inspired protocols. Bio-inspired protocols are found to be capable of demonstrating self organizing behavior due to their robustness and efficiency; examples of such protocols are AntHocNet, BeeAdHoc, and ANSI.

The simulator chosen to evaluate the two protocols is QualNet 5.0 as it offers a number of important advantages when compared to other simulators. Some of the features of QualNet are: it includes an extensive documentation and technical support, user-friendly tools, tools for building scenarios and analyzing simulation output. It offers large set of modules and protocols for both wired and wireless



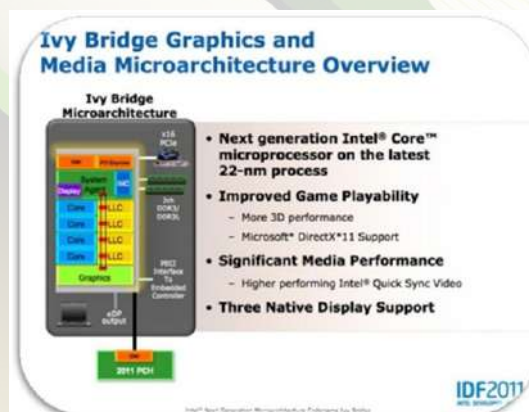
## Student Technical Article : Title - IVY Bridge

### Introduction

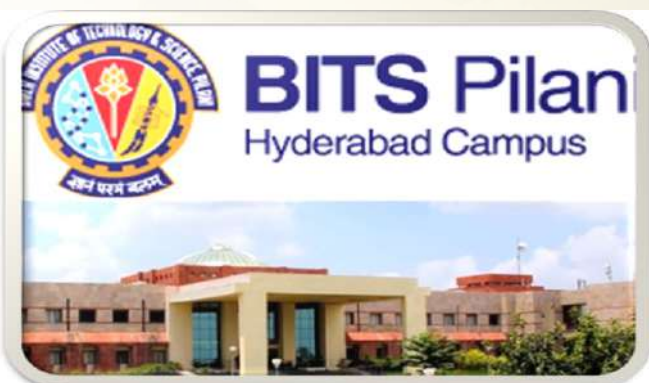
The Core i7-3770k model becomes the spearhead with a price similar to Core i7-2700K, but reducing consumption to 77W, the frequency are nailed (3.5GHz to 3.9GHz turbo mode), the cache is also the same (8MB), also the number of cores and all other associated technologies. Of course the Core i7-3770k receives the new Intel graphics which is definitely an improvement important as it will allow us to achieve superior performance to models before and some additional tricks. addition, has **Features such as :** The memory controller is integrated on the same processor. Three-channel memory (192-bit data width). The motherboard supports Intel Core i7 has four or six slots DIMM. Supports only DDR3 Allows you to use the integrated DDR3 512 MB ??to 8 GB, you can also use 16 GB. FSB is replaced in the interface Quick Path i7 and i5.

### Conclusion

The new generation of Intel Core processors, codenamed Ivy Bridge are largely unchanged from previous ones but with key improvements in much needed areas. It's reduction of manufacturing process and production optimizations allow you to be up to 10-20% faster compared to previous generation processors. This adds up to a much more powerful graphics and more modernized where find better acceleration overall result, better graphics and enough speed. All well seasoned with a consumption reduction of nearly 20% of these processors makes an interesting bet of performance, integration and consumption reduction. We might see this trend



## INDUSTRIAL VISIT : BITS PILANI & ECIL





## WOMEN'S DAY CELEBRATIONS

One of Hyderabad most prominent and reputed Institute VMTW College celebrated woman hood on International Women's Day with a different enthusiasm. Bringing together all the female staffs (teaching and non-teaching), the college decided to hold an interactive session where everyone could put forward their views and perspectives freely.

Centered on the theme empowering the women fraternity, Celebrating Womanhood", an idea generated by HOD, the female colleagues exchanged several views on topics related to both personal and professional lives. In the college and various issues in the society.

"We decided to highlight that fact in the campus and the important suggestions, welfare scheme and objectives towards the development of women. Therefore, we thought to organize a platform for all our female staff, and students to allow them to express themselves."

DR. ALAPARTHI NARMADHA, Head of Department of electronics and communication engineering and the editor of the newsletter, said, "The purpose behind publishing a special edition of:" empowering the women fraternity "Celebrating Womanhood" was to bring light on the hidden talent of the female teaching and non-teaching staff of the college.



## HOLI CELEBRATIONS

The HOLI Festival Is An Ancient Indian Tradition Which Celebrates The Triumph Of Good Over Evil. Colored Powder Is Thrown and Rubbed on People's Faces and People Come Together in Song And Dance. The Festival Is Filled with So Much Fun That the Very Mention of The Word HOLI Brings a Smile to Anyone's Face. HOLI Also Celebrates The Arrival Of Spring, A Season Of Joy And Hope. The HOLI Day Was The Perfect Reminder Of All The Benefits Of Studying In VMTW Because Of All The Fun That Can Come From Learning About Different People's Cultures.





## RESEARCH PUBLICATIONS

### 1. JOHN WILLIAM CAREY MEDITHI, USHA RANI NELAKUDITI,

**Title :** Influence of Light through Optical Glasses on Electroencephalogram, April 2017

**ABSTRACT:** In General, optical powered glasses are used to have good focus and clear vision. But, this practice may also bring noticeable variation in light intensity which in turn affects neural behavior. These changes can be interpreted from the EEG recordings. Thus, in this present study, the grounds for amendments in different physiological variables due to light intensity through optical glasses experienced by the subject have been reviewed and verified.

### 2. NAGARAJU NADDI1, K.L.NAGA KISHORE2, NARENDRA GALI3, A.V.VINOD KUMAR4,

**Title:** Multi Band Curved U-Slot Edge Feed Triangular Micro-strip Patch Antenna International Research Journal of Engineering and Technology (IRJET), e-ISSN 2395-0096, 06.june 2017

**ABSTRACT:** In This Paper A Curved U-Slot Edge Feed Triangular Micro-Strip Patch Antenna Was Introduced. The Antenna Is Designed To Function At 6.8 GHz Wireless Radio Band. It Achieves Return Loss -21.6 Db By The Using FR4-Epoxy Substrate. The Designed Antenna Has Many Practical Applications Like In Bluetooth, WLAN, WI-FI. The Patch Design Is Simulated In ANSYS HFSS Vs 17 Software.

### 3. B.SEKHARBABU1, G.NARENDRA

**Title:** Design and Analysis of a Low Noise Amplifier with matching Networks IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) e-ISSN: 2278-2834, p-ISSN: 2278-8735. Volume 12, Issue 3, Ver. III (May - June 2017), PP 53-57

**ABSTRACT:** An Electronic equipment will increase the ability of each the signal and also the noise gift at its input. However there square measure disadvantages with the increasing noise power throughout amplification. Therefore, there was a desire for various such signals ought to be amplified maintaining noise power constant. Hence, LNAs square measure designed to attenuate further noise. Low-noise electronic equipment (LNA) is electronic equipment that amplifies an awfully low-power signal while not considerably degrading performance is measured in an exceedingly variety of figures of advantage. We'll be planning noise electronic equipment that operates at 0.9GHz and expected to own a Gamy of 12.69dB and smith chart is employed to form matched circuits to attain the expected gain.

## PRAJWALAN 2K17, 11th – 13th April, 2017.

