



COMPLIT

A Computer Literature

VOLUME 1, ISSUE 2

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Department of Computer Engineering

About Department:

Computer Engineering Department has been started in 2008, with intake of 60. Our department has 6 well-equipped laboratories. We have established the association "COMPIT" in which we conduct various activities like Quiz Competition, Power Point Presentation, Blind C, Poster presentation, LAN gaming etc. Our department has organized various expert lectures and workshops like Android, .NET, PHP for the overall development of students. These types of activities are arranged to get better results in academics as well as overall development of students. Our department also organizes Communication Improvement Program and Training & Placement activities for our students.



MESSAGE OF HOD

It is our pleasure to present second issue of News Letter "CompLit" of our department. This News Letter is the one of the way in which we can disseminate the information about our department. The past semester was full of various activities by the students and faculty in Academics, Co-curricular and Extra-curricular activities. As you read through pages, you will realize that we have succeeded in academics as well as in different co-curricular activities.

Mr. Bhandare P. S.



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Education does not mean knowledge only, it also contains life within it; it is not an arrangement, it is a duty. It is not merely a means of livelihood; it is the precious treasure of noble tradition of giving, bestowing.

-Prime Minister Mr. Narendra Modi

GLASS KEYBOARD

The Bastorn glass touch smart keyboard is a sleek glass touch keyboard interface that features typing and multi touch gestures for both MAC and windows computer. The keyboard features an aluminum frame and blue back lighting that add to it's beautiful design. Inventor and engineer Jason Giddings hopes you have a few extra bucks to back his idea for multi touch keyboard concept made entirely out of a glass and metal The glass keyboard is nothing short of incredible, all the way from the hyper-futuristic design to incredible tech inside it makes all work.



Fig. Glass keyboard

The keyboard work by sending an infrared light bouncing around inside the glass surface and when your finger presses down on the side surface.

Long-lasting quality and attractive design is present in glass keyboard. Get them with a pink or blue backlight and enjoy a totally new world of keyboard experience with the Glass Keyboard by Bastorn. The best feature of this keyboard is the fact that it can work as a mouse with touch sensitive key controls and gesture controls too. You need to plug and play the micro USB in order to connect it to your computer or other devices. The keyboard can support Windows/Android/iOS and is made of aluminum and tempered glass. Apart from the great typing experience, you'll get to add a fresh design to your workspace as well.

MR. HRITVIK NAMADE SY CO

First Generation -Vacuum Tubes: The first computers used vacuum tubes for circuitry and magnetic drums for memory, and were often enormous, taking up entire rooms. They were very expensive to operate and in addition to using a great deal of electricity.

Second Generation -Transistors: Transistors replace vacuum tubes and ushered in the second generation of computers. The transistor was far superior to the vacuum tube, allowing computers to become smaller, faster, cheaper, more energy-efficient and more reliable.

Third Generation- Integrated Circuits: The development of the integrated circuit was the hallmark of the third generation of computers. Transistors were miniaturized and placed on silicon chips, called semiconductors, which drastically increased the speed and efficiency of computers.

Fourth Generation Microprocessors: The microprocessor brought the fourth generation of computers, as thousands of integrated circuits were built onto a single silicon chip. What in the first generation filled an entire room could now fit in the palm of the hand.

SMART PHONE MEDICINE

In the relatively short time span of eight years, smart phones have had a profound impact on our everyday lives, but have yet to display any substantial impact in the field of healthcare and medicine. This article aims to explore the ways in which smart phones and the Internet of medical things can improve medicine, both today and in the future. Today, wearable technologies or devices that attach directly to a smart phone can be used to measure an ever-growing set of personal biometrics, including blood pressure, heart rate, respiratory rate, and blood oxygen concentration. These devices have enabled patients, for the first time, to personally capture, measure, and track their own vital signs and other such information; individuals can easily acquire and store this information via their smart phone. Furthermore, these technologies have enabled real time data streaming, superseding the traditional "snapshot" view of vital sign measurement that often took place only when patients encountered

a healthcare provider. In addition to facilitating basic vital sign acquisition, smart-phones also serve as a hub for many advanced medical diagnostic platforms, including inexpensive handheld ultrasound technologies such as the Lumify (Philips Healthcare), a smart phone add on that performs at a fraction of the cost the majority of functions that an existing ultrasound platform also provides. Access to advanced imaging technologies, such as handheld ultrasound, provides point-of-care, hospital level diagnostics to the patient; just as importantly, this is done with interpretation capabilities that can be performed either remotely by a trained specialist or by using the algorithmic processes that are already in place for investigations such as ECG. Beyond a detailed picture of what is

happening from a moment-to-moment perspective inside the body, smart phone sensors will provide in-depth insight into our personal environment, including air quality measurements, pollen count, ambient radiation and ultraviolet light, preservatives in our food, and pollution particulate counts. Just as the collective information acquired from millions of smart phones in cars worldwide allows for the accurate estimation of travel times on Google Maps, so too will the environmental information captured from smart phones allow for the assessment of individualized decisions regarding environmental exposure risk. Smart phones further offer a unique opportunity to immediately access medical records and all diagnostic testing that an individual has performed or undertaken throughout his or her lifetime. Services such as Picnic Health, which aggregates all historical medical records also to avoid the duplication of medical testing, the extra costs, and the often harmful radiation exposure that accompanies it.

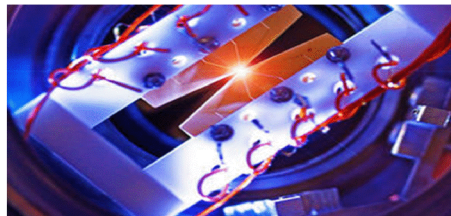


Ms. DEOKAR B. M.

FIRST PROGRAMMABLE QUANTUM COMPUTER CREATED

Scientists have created the first programmable and reprogrammable quantum computer, according to a new study. The technology could usher in a much-anticipated era of quantum computing, which researchers say could help scientists run complex simulations and produce rapid solutions to tricky calculations. Previous research suggested that quantum computers could simultaneously perform more calculations in one instant than there are atoms in the universe. Prior work also found that such capabilities would allow quantum computers to solve certain problems much faster than conventional computers can, for instance, breaking encryption that would take regular computers longer than the lifetime of the sun to crack. The functioning of quantum computers depends on the bizarre, surreal nature of quantum physics. The field suggests

that atoms and other fundamental building blocks of the universe actually exist in states of flux known as "superposition's" This That means that atoms, for example, can spin in two opposite directions at the same time.



That kind of superposition makes quantum computing fundamentally different from traditional computers. Classical computers represent data as 1's and 0's, binary digits known as "bits" and symbolized by flicking switch-like transistors either on or off. Quantum computers, on the other hand, use quantum bits, or "qubits," that are in super positions, meaning that

they are simultaneously on and off. This enables a qubit to essentially perform two calculations simultaneously. Many research groups previously created small but functional quantum computers. However, these devices are typically specialized to run just one algorithm, or step-by-step set of operations. The researchers tested their device on three algorithms that quantum computers, as prior work showed, could execute quickly. Another, the Bernstein-Vazirani algorithm, can also be used to probe for errors in quantum computing. The last, the quantum Fourier transform algorithm, is an element in quantum-computing encryption-breaking applications.

Ms. SNEHA PATIL SY CO

GESTURE RECOGNITION BRACELET

The Gesture Recognition Bracelet is one of the cool new gadgets, that lets you control devices by moving your hands. It is Invented by Stephen lake, Mathew bailey and Aaron Grant. The MYO armband (derived from 'myo' meaning related to muscles) can identify hand gestures by interpreting bio metric signals in your arm. You can use hand signals to interact with Televisions, Computers, Phones, or Any Smart Technology System. The Importance of the Technology is that it enables you to interact more naturally with devices by reducing the need for input peripherals like Mice, Keyboards or Touch Screens. It uses Bluetooth 4.0, feature on-board, rechargeable lithium batteries and works out-of-the box with your Mac or Windows PC.



MS. KASHMIRA BHALWANKAR SYCO

Students' Achievements -Toppers (Academic Year : 2015-16)

COMPUTER ENGINEERING

Sr. No.	Class	Name of the student	Percentage
1	FY - CO	Ms. PANDIT SNEHA NAGESH	90.38
2	FY - CO	Ms. BAJAJ BHAKTI RAJGOPAL	88.13
3	FY - CO	Ms. SONI BHAGYASHREE DAYAL	87.75
4	SY -CO	Ms. TAKSALE RUTUJA SUNIL	91.89
5	SY -CO	Mr. MASKE GAURAV SUGRIV	89.78
6	SY -CO	Ms. YADAV SMITA BHARAT	86.33
7	TY - CO	Ms. HAJARE RUPALI BHAGAVAT	89.38
8	TY - CO	Ms. RAUT SUPRIYA TRIMBAK	87.75
9	TY - CO	Ms. SAWANT POONAM BALASO	87.50

Subject-Wise Toppers

FIRST YEAR

COMMUNICATION SKILL

Sr. No.	Class	Name of the student	Marks out of 100
1	FY-CO	SAROLKAR AKANKSHA A.	99
2	FY-CO	JADHAV MEERA N.	94
3	FY-CO	PANDIT SNEHA NAGESH	94
4	FY-CO	PATIL SUPRIYA P.	93
5	FY-CO	SONI BHAGYASHREE D.	93
6	FY-CO	KULKARNI SHIVANI N.	93
7	FY-CO	BHANDARE HARSHDA S.	92
8	FY-CO	PATIL SWAPNALI GANESH	92
9	FY-CO	JARE ANU VINOD	92
10	FY-CO	BAJAJ BHAKTI RAJGOPAL	91
11	FY-CO	MOHITE RUTUJA NAGESH	91
12	FY-CO	PATIL SNEHA SHIVPUTRA	90

APPLIED SCIENCE

Sr. No.	Class	Name of the student	Marks out of 100
1	FY-CO	PATIL SNEHA SHIVPUTRA	97
2	FY-CO	BAJAJ BHAKTI RAJGOPAL	95
3	FY-CO	SONI BHAGYASHREE DAYAL	93
4	FY-CO	SAROLKAR AKANKSHA AMOL	93
5	FY-CO	KULKARNI SHIVANI NAGESH	92

IMAGE QUALITY ASSESSMENT: FROM ERROR VISIBILITY TO STRUCTURAL SIMILARITY

Objective methods for assessing perceptual image quality traditionally attempted to quantify the visibility of errors (differences) between a distorted image and a reference image using a variety of known properties of the human visual system. Under the assumption that human visual perception is highly adapted for extracting structural information from a scene, in this introduce an alternative (Continued at page no. 4)

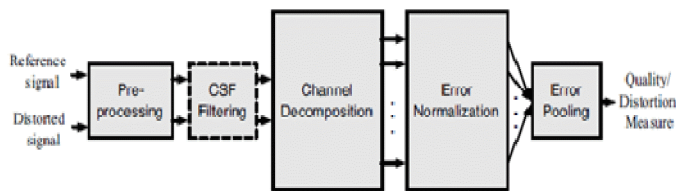


Fig. A prototypical quality assessment system based on error sensitivity.

(From Page No. 3) complementary framework for quality assessment based on the degradation of structural information. As a specific example of this concept, develop a Structural Similarity Index and demonstrate its promise through a set of intuitive examples, as well as comparison to both subjective ratings and state-of-the-art objective methods on a database of images compressed with JPEG and JPEG2000.

MS. V. V. KHANDAGALE

SUBJECT-WISE TOPPERS OF SY & TY

COMPUTER HARDWARE & MAINTENANCE

Sr. No.	Class	Name of the student	Marks out of 100
1	SY-CO	MS. TAKSALE RUTUJA S.	95
2	SY-CO	MR. MASKE GAURAV S.	90

SOFTWARE TESTING

Sr. No.	Class	Name of the student	Marks out of 100
1	TY-CO	MS. KOKARE SUKESHANI J.	93
2	TY-CO	MS. JADHAV PRIYANKA P.	93
3	TY-CO	MS. DIDWAL NEHA NITIN	92
4	TY-CO	MS. RAUT SUPRIYA T.	90
5	TY-CO	MS. SAWANT POONAM B.	90
6	TY-CO	MS. CHORAGE POOJA V.	90

COMPUTER NETWORKS

Sr. No.	Class	Name of the student	Marks out of 100
1	SY-CO	MS. TAKSALE RUTUJA S.	91
2	SY-CO	MS. GAIKWAD SNEHAL N.	91
3	SY-CO	MS. YADAV SMITA B.	90

OBJECT ORIENTED PROGRAMMING

Sr. No.	Class	Name of the student	Marks out of 100
1	SY-CO	MR. MASKE GAURAV S.	93
2	SY-CO	MS. TAKSALE RUTUJA S.	91
3	SY-CO	MR. RATHOD MAYUR R.	91

CO-CURRICULAR AND EXTRA CURRICULAR ACTIVITIES

- We celebrated International Yog-Din on 21st June 2016.
- Our department participated in Tree Plantation Activity on 1st July 2016.
- Our staff members had actively participated in 2 days workshop on Video Creation organized by our Institute.
- Blood Donation Camp had been Organized on occasion of ShivJayati.
- 10 Days Workshop on "Android Application Development " arranged by Dalvik Apps from 03st June to 13th June 2016.

STAFF ACHIEVEMENTS

M.E. Completed:

1. Mr. A. S. Bhatlavande
2. Ms. V. V. Khandagale
3. Ms. B. M. Deokar
4. Ms. P. V. Gawali

M.E. Appeared:

1. Mr. P. S. Bhandare
2. Mr. P. P. Bhosale
3. Ms. S. V. Pore
4. Mr. S. M. Jagdale

UP-COMING EVENTS

- Institute level Event COMPIT "Techno-Rise 2K16" on 15th Sep. 2016
- Industrial Visit for Third Year Students will scheduled in month of August 2016.
- Industrial Visit for Second Year Students will scheduled in month of August 2016.
- Workshop on Project Development for Third Year students will scheduled in the month of December 2016

COMPLIT EDITORIAL

PUBLICATIONS

- Rhythm Based Authentication Model: Towards Secure and Convenient Authentication for Mobile Devices By Ms. P. V. Gawali in an International Journal- IJARCSE.

It gives me great pleasure to present the Second issue of our departmental newsletter - Complit, which gives us the opportunity to see the achievements in our department.

I am thankful to all the students and faculties who have contributed during the preparation of this newsletter. I tried my best and gave positive efforts, expecting creative responses from everyone.

MR. SACHIN JAGDALE