



Vol #2| Issue #1 | 16 pages Jul-Sep 2012

## A year before



## Every year on a birthday, we get a chance to start new...

“Seasonal Delights” - the e-Newsletter, started in September a year ago, has been really successful in its dissemination of our Departmental activities. It has showcased and highlighted all the activities that have taken place in the Department of MCA.

Seasonal Delights has always been a platform for students for sharing their thoughts, let it be about Academics, Art, Technology or Literature.

Seasonal Delights believes in the vision - “A platform to transform our Visions into Actions” - because of which it has gained momentum and has been successful over this short period of time.

Each of our editions is released with their names in harmony with Mother Nature – Rain Ripples, Spring Splash, Winter Wizard and Summer Spark at the end of September, November, March and May respectively.

Rain is considered to be a sign of goodness, when you have a new beginning, and that's exactly what the Rain Ripples edition focuses on; We shower our love towards Mother nature and our feelings of *patriotism* would pour out with this edition. The varied cultures and traditions are portrayed in the Spring Splash edition. Students are always the best athletes, as they are strong and love competing with each other to prove who the BEST is and the Winter Wizard edition captures these experiences. Students, our greatest assets, shine even brighter with the Summer Spark.

This issue of “Seasonal Delights” is special because we are completing one year since its release, depicting the Department Activities and Achievements. Moreover, because of the high success rate it has experienced within CMR Institute of Technology, we have decided to circulate our e-newsletter to all sister concerns under the CMR Group of Institutions, so that our outreach will be even better.

## What you learn after you know it is all that counts!

Resolution is the Annual Inter-Collegiate Technical Fest organized by the Department of MCA. Resolution '12, the successor of the first edition, Resolution '11 (that witnessed more than 250 students from over 50 colleges across Bangalore) is scheduled on 14th of September 2012.

Resolution has always been an excellent arena for all the technically sound students as this is where they get to know their strengths and weaknesses, as competition is a vital element of our fest.

The theme of this version of the fest is “Open Source”. We believe “Sharing is Caring” and that is what motivated us to

decide upon this theme. We live in a world of technology, where the words piracy, copyrights, patents etc. are repeatedly echoed into our ears. But by means of this fest, we want to support the use of Free and Open Source software (FOSS) – Say NO to piracy!

The efforts of faculties and all the students are immense. The events include Ice Breaker, Web Designing, Coding, Treasure Hunt, Photography, Best Manager, Dumb Charades, Paper Presentation, Quiz and Gaming.

Various organizations sponsoring our fest were a backbone for us as well.

# The road to knowledge sharing

The Department regularly conducts Faculty Club meetings, where faculty members present their views on any topic of mutual interest. It could be a foray into their research efforts, recent technological advances or any other general topic for the enlightenment of all.

The first session for this semester was conducted by Mr. Nagendra N, on 23<sup>rd</sup> June 2012. He provided valuable insights into **ERP**, backing it up with the practical experience he has gained over the years, with his wide industry background. He effectively used a *role play* to emphasize the essence of coordination in the ERP process. On 26<sup>th</sup> June 2012, Mrs. Nithya Ramesh gave **An Overview of Biometric Recognition** in which she discussed the biometric classifications and also displayed the equipments used. Her session highlighted the future biometrics in development and their security performances.

The next day, 27<sup>th</sup> June 2012, was focussed on Wireless technology revolutionizing the communication world. The first session by Mr. Sudipto Das elaborated on the attempts of the world in **Moving to a Wireless World – 3G**, which was furthered by Mrs. Rachna Sharma, who threw some light upon the **Early Development and Impact of 4G**.

A similar wave seemed to be riding on 28<sup>th</sup> June 2012, as Mrs. Arshdeep Kaur, during her presentation on **Mobile Computing focussing on Android App Development**, delved into various aspects of mobile computing like different mobile operating systems, programming languages used to develop mobile applications, architecture and lifecycle of mobile app development. She discussed Android Apps development in detail and also gave a demo of how Android apps could be developed easily.

The other presenter of the day, Mrs. Neha Agarwal gave everyone interesting details about the use of **Near Field Communication (NFC)**. She described how NFC-enabled mobiles can be used for a variety of applications like contactless payment, travelling, social networking etc. The session ended with the audience getting their doubts clarified from Mrs. Neha, which gave a better understanding of the topic.

On 2<sup>nd</sup> July 2012, Ms. Pratima spoke about **Cloud computing -Software- Platform- and Infrastructure-as-a-Service Usage among Enterprise and Midmarket Organizations**. She explained how we can subscribe through the cloud to a vast number of services, paying relatively small amounts of cash to *Amazon Web Services* or the like for the facilities and bandwidth we use. She gave several examples to describe the facets of SaaS, Paas and IaaS.

This was followed by an interactive session, by Mrs. Gomathi. T., on **Is Cue the Cure for Information Overload**.

It began with an introduction to Greplin (a personal search engine), its features and its use. She discussed the birth of Cue, What's new in it from Greplin and how it is used as a Web Application.

The next day, on 3<sup>rd</sup> July 2012, Mr. Baswaraj gave an **Overview of RSA** to equip faculty members with specialized knowledge of tools that would enable them to migrate their Java skills in order to understand the aspects of real time development using UML (As per Industry Requirements or standards). It can be further helpful for their syllabus with respect to OOMD theory as well as Software Design Laboratory, Mini Projects and Final-year Project.

The final session was presented by Dr. K. Prasada Rao, who gave us valuable tips about **Journal Publications**. It would be helpful for all faculty members who would be aspiring to get their articles published in reputed journals, as a part of their further academic growth.



# Like Teacher, Like Student

The statement, "Like Teacher, Like Student", will never be wrong anytime. Hence, "Mission 10x", a training programme, which is a joint initiative from WIPRO & Dale Carnegie Associates Inc., is targeted at the academic fraternity of technical colleges, all over INDIA, with a motive to produce the best students of today, through well-equipped/appropriately trained teachers and to give the world, tomorrow's excellent corporates. In general, the Mission 10x is quite a useful and an essential programme for all teachers.

The Mission 10x training programme comprises 2-parts, namely the BASIC and ADVANCED training.

The WIPRO organized the basic training for the colleges in Bangalore East, from 26<sup>th</sup> to 30<sup>th</sup> March 2012, at MVJ College Of Engineering, Channasandra, Bangalore. The 5-day workshop was attended by 4 members viz., myself, one of my colleagues, Mr. Sudipto Das from MCA Department along with two other teachers from the UG (BE) departments of CMR Institute Of Technology, Bangalore -37. There were other participants too from three other institutions totaling over 60 members in all.

After a 1-hour inaugural session on 26<sup>th</sup> morning, the training sessions for the 5 days were packed with topics, activities, games etc., including several individual presentations by the participants, based on their work domains and focusing on the best, innovative pedagogical practices.

The first two days aimed at high impact teaching skills (HITS) while the last three days were on teaching-session planning and effective delivery. The programme culminated with a group presentation on session-planning. Mr. Sudipto and me, had a demonstration of **software application development process using evolutionary model** as the part of the group presentation.

Dr. Dattakumar from WIPRO presided over the valedictory function during which we were given participation certificates and teaching skills (HITS) certificates from Dale Carnegie Associates Inc. Overall, it was an interesting workshop, the second part (i.e., advanced workshop) of which is due shortly and we are eager to attend the same.

**Mr. Nagendra.N  
Asst. Prof, MCA Dept.**



## A platform to hone new skills

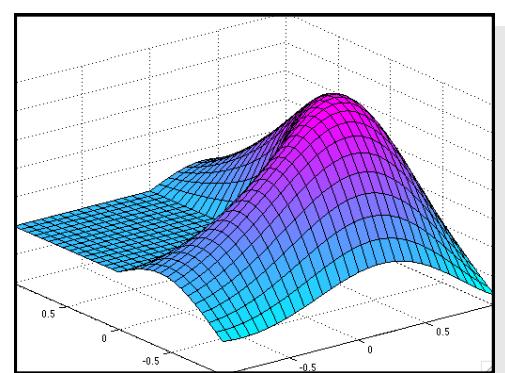
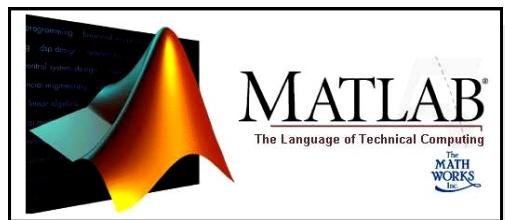
A One day National Level Workshop on "**I M A G E PROCESSING USING MATLAB**" was organized by **Department of Information Technology, CMRIMS** in Association with **Computer Society of India** on 6<sup>th</sup> July 2012.

MATLAB (Matrix Laboratory) is a programming environment for algorithm development, data analysis, visualization and numerical computation. Mrs.T.Gomathi and me were deputed to attend this interesting topic.

The programme was aimed towards the participants implementing Image Processing techniques using MATLAB by means of hands-on training. Additionally, they would be learning how to enhance image characteristics, filter an image and reduce the effects of noise and blurring in the image.

The FDP commenced with an Inauguration function to welcome the participants, who represented various institutions, and brief them about the objective. **Prof. Lakshmi Akkaram from Rensselaer Polytechnic Institute, Troy, New York, USA** began session 1 with hands-on to MATLAB, followed by **Dr. H. N. Shankar** and **Dr. Murali Shankar**.

We would like to thank all the three trainers for their effective knowledge sharing. We would also like to thank Prof. Vakula Rani J, HoD, MCA, CMRIMS, Prof. Jayanthi M, HoD, BCA, CMRIMS and the organizing committee for their hospitality and their efforts to create a wonderful knowledge pool.



**Mrs. Neha Agrawal  
Lecturer, MCA Dept.**

# Effective Training - a major key to success



A Deep Drive Faculty Enablement Program (FEP) on “Business English” was held at Infosys Mysore from 24<sup>th</sup> to 26<sup>th</sup> July 2012. The FEP brought together more than 55 faculty members from 15 partner colleges.

The program offered an activity based, interactive forum of learning based on adult learning principles, focusing on facilitating a smooth transition from the academic to the corporate environment. We had a lot of warm-up activities helping us to learn the techniques of good facilitator.

Infosys has also hosted a Campus Connect portal to enable students and faculty to access technology related information and courseware that is relevant to the IT industry.

The expected outcome of the event is a well-defined FP roll-out plan and faculty exposure to Infosys’ way of professional training and sharing industry best practices, enhancing the readiness of graduates and making them industry-ready by training the faculty on industry-oriented courses.

The sessions were handled efficiently by Subject Matter Experts Mrs. Vindya M and Mrs. Begi Margret, with experience sharing on areas such as: Facilitation Skills, and more on Business English which included grammar, reading, writing etc.

The campus is huge and breathtakingly beautiful. It’s like a small city with greenery all around. It was a great learning experience.

**Ms. Pratima V Patil  
Lecturer ,MCA Dept.**



## Not everything that is learned is contained in books

A two days Faculty Development Workshop on Innovations in Technology, Advanced Software Engineering and Cloud Computing Fundamentals was conducted by TCS on 29<sup>th</sup> and 30<sup>th</sup> August 2012.



The resource persons were Dr. N M Bhatta, Domestic Delivery Director, TCS and Mr. Murari, Program Director of Innovations, TCS. Both have around more than 34 years of experience in the industry.

Faculty from various colleges were invited to participate in this workshop. Mrs. T. Gomathi and I, from the MCA Department, were part of a 6 member faculty team representing CMRIT.



The topics discussed in the workshop included Innovations in Technology, Advanced Software Engineering, Cloud Computing

fundamentals and Focus on Project Management aspects for Graduating students.

This workshop, conducted under TCS AIP (Academic Initiative Programme), is part of its initiative aimed to fill the gap between academic output and industry demand. It was a great opportunity for us to meet the corporate executives and HR personnel, to try and understand their expectations from our graduating students. It was also exciting to meet our colleagues from other colleges and have engaging interactive sessions during the workshop.

The knowledge that we gained will surely help us in guiding our students better so that they reach greater heights of success and make a mark in the industry, thus making our college, CMRIT, proud of their achievements.

**Mrs. Arshdeep Kaur  
Lecturer ,MCA Dept.**

# Visit by Mauricio Sucasas, IBM

The meeting was organized by the IBM CoE team of CMRIT. One of the senior executives from IBM World Wide, Mr. Mauricio Sucasas, Director, ISV & Developer Relations visited our campus on 26<sup>th</sup> July 2012 as we are designated as an IBM Centre of Excellence (CoE) for the past 3 years.

Mauricio Sucasas is Director, ISV and Developer Relations, Growth Markets Unit. In this role, he is responsible for IBM's relationship with independent software vendors (ISVs).

He also manages the key partnerships with the development, academic, and venture capital communities which comprise IBM's industry-leading ecosystem of influencers. The meeting was attended by delegations from both CMR Group of Institutions and IBM.

The opening ceremony was chaired by Mr. Mauricio Sucasas, Mr. Jayadeep, CEO, CMRGI and Mrs. Shreya

Jayadeep, Director, Finance & Admin, CMRGI.

Mrs. Rachna Sharma, HoD, Department of MCA, CMRIT delivered the welcome address, before presenting a brief report on the IBM CoE activities conducted. Mr. Jayadeep rightly pointed out the expectations the College has from the IBM CoE and insisted on the point that it should reach all departments in the institution.

Mr. Mauricio Sucasas, in his address, came up with the future plans of the IBM CoE trying to reach the students of all disciplines and also answered queries from the student's end.

As this was a very special moment for the Department and the entire Organization, we had made sure that the remembrance of this event should also be of the same effect. A special crystal memento had been specially ordered, to make our esteemed guest aware of our sentiments for this.



## Teaching creates all other professions

A Four day Faculty Development Programme on IBM **Rational Application Developer** (RAD) was organized by Department of MCA in association with IBM Academic Initiative. The Programme was held between 6<sup>th</sup> and 9<sup>th</sup> August 2012. The trainer, Mr. Vinod Patidar, works as a Sr. Technical Consultant for IBM-BP.

The FDP program received an overwhelming response with around 25 participants from the Departments of MCA, CSE, ISE and EEE of CMRIT and the MCA Department of CMRIMS.

Mrs. Rachna Sharma, HoD, MCA in her welcome speech highlighted the importance and objectives of organizing the FDP on RAD. She shared her views with the faculty participants that attending such kind of trainings on RAD would enhance their skills at teaching Java concepts practically.

The resource person began his discussion with the basic idea of RAD and its important aspects before he carried on with the practical sessions.

In the valedictory function, the HoD thanked Mr. Vinod Patidar for sharing his knowledge and extended her gratitude to the faculties of the Engineering departments of CMRIT as well as the faculties of CMRIMS for their enormous cooperation for this event.

The training was followed by a RAD certification examination that was conducted on 16<sup>th</sup> August 2012. It was an achievement that 21 faculties were successfully certified as "IBM CERTIFIED ASSOCIATE DEVELOPER".

The Department has been fortunate enough to be backed by a team of very motivated and dedicated faculty who know their job best. IBM CoE Coordinators had also put a splendid effort to make the FDP successful.



# Cyber - Forensics



The word *cyber* itself brings across a breath of fresh air into our normal programming academics.

This was a great opportunity for all the student to learn and experience the various aspects of cyber crime and how it can be handled . As the technology has grown, it is necessary for us to keep our identity secure from online cheating and identity theft.



We had a good theory session and practical about various forms of cyber crime and also they touched upon various cases that have occurred in the industry. The session was very informative as the presentation included not only theory but also few examples that had actually taken place.

These sessions made us realize how easily a cybercrime could be

committed and it also showed us the procedures to handle the crime scene involving computers and other gadgets.

The practical sessions were also very interesting as they completely focused on investigation of evidence using tools. We got a chance to be hands-on to perform analysis and retrieve the evidence. We understood the methodologies of how the data could be hidden, as well as decrypted, and also of how to identify hacks.

The practical session ensured that we fully understood the tool and its significance in investigating. Overall, it was an excellent experience to have undergone this training. Cyber forensics is the need of the hour and I am proud to say I am a CFI (Cyber Forensics Investigator).

**Naveen P  
V Sem. MCA.**

## Bridging the gap



The Department of MCA organized a 4-Day Workshop on IBM **Websphere Integration Developer** (WID), as a part of IBM CoE activity, from 1<sup>st</sup> September to 4<sup>th</sup> September 2012.

An eminent expert in the programming field, Mr. Chinmay Saraswat of WebTek Labs Pvt. Ltd. trained the students on WID. 90 students from Information Science Engg., Computer Science Engg., and MCA of CMRIT and CMRIMS, participated in this event. This workshop has enlightened budding software engineers on the applications of web-based programming and has provided them enough hands-on experience with latest IBM tools.

WID is an integrated development environment for building applications based on service-oriented architecture (SOA).The workshop started on 1<sup>st</sup> September, with a brief inauguration function, in the AV hall. Each day of the workshop was devoted to intensive sessions comprising WID Overview, SCA Overview, SCA Tools

a n d Examples, Business Objects Overview, Business Flow Manager Overview, Human Task Overview, Business Rules, Business State Machines, Interface Map and Data Map Overview, Selectors, SCA\_HTTP Bindings Overview, Administrative Overview, SCA Admin, Human Task Admin.

Lab sessions gave hands-on experience to the students over the tool. These sessions included WID v6.1 installation and a demo of BPM Development. Mr. Ratan Lalkeshri, Student from CMRIMS expressed his sincere thanks for all those who had helped in organizing the workshop successfully. He also requested to organize such kind of workshops more frequently.

On the last day of the workshop, Ms. Neha Agrawal presented a brief report on the workshop and vote of thanks was given by Ms. Pratima V Patil. Prof. Rachna Sharma, HoD, MCA, expressed a sincere thanks to the trainer and presented a memento to Mr. Chinmay as a token of appreciation.



# Patriotic currents



'Free India' was a dream of all Indians under the British rule. Everyone during that rule fought in some way or the other with a common aim of ending British and other colonial authorities in India. After a century of revolutions, struggle, blood shedding, battles and sacrifices, India finally achieved independence on August 15, 1947.

India was free in 1947 from the British Empire but the country lost many men and women who were filled with undaunted courage and a spirit of patriotism.

Today, they are known as freedom fighters because they sacrificed their lives for their motherland.

Indian freedom fighters with their true spirit and impervious bravery had faced various tortures, exploitations and hardships to earn us freedom.

The pioneers of the freedom movement were Mangal Pandey, Tantia Tope, Rani of Jhansi and the great Indian leader Mahatma Gandhi who introduced non-violent ways of fighting the enemy. Other notable freedom fighters of India were Annie Besant, Lala Lajpat Rai, Bal Gangadhar Tilak,

Bhagat Singh, Bipin Chandra Pal, Sukhdev, Gopal Krishna Gokhale, Chandrashekhar Azad, Sarojini Naidu, Dadabhai Naoroji, Sucheta Kriplani and Chakravarti Rajagopalachari, just to name a few.

There are endless number of men and women other than the above list who daringly fought for India's freedom.

*60 years of*  
**This edition is a hearty tribute to all the men and women to whom we are all greatly indebted for their sacrifice.**

## MANGAL PANDEY, The Man Behind The Revolt



The First War of Independence happened because of a brave son of India, Mangal Pandey. It was this man who woke-up the Indian masses from sleep to fight for the nation, which was ailing under the British. Mangal Pandey was the torch-bearer.

The rising was, literally, triggered by a gun, the Pattern 1853 Enfield rifled musket. To load the new rifle, soldiers had to bite the cartridge, open and pour the gunpowder into the rifle's muzzle, then stuff the cartridge case, which was coated with some kind of grease to make it waterproof, into the musket as wadding, before loading it with a ball.

A rumour spread that the cartridges were greased with lard (pork fat) which was regarded as unclean by Muslims, or tallow (beef fat), regarded as sacred to Hindus. At that time it was believed that a high-caste Hindu who ate cows' flesh would lose caste, with dreadful consequences both in the present life and the next.

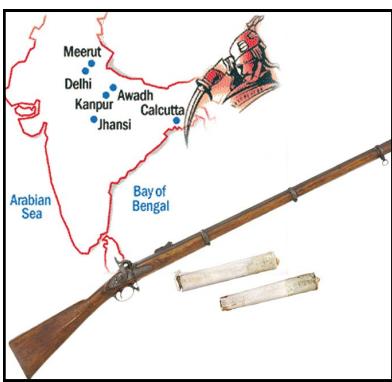
Slowly discontent was rising which ultimately lead to the revolt.

On March 29, 1857 at Barrackpore near Calcutta, Mangal Pandey attacked and injured his British sergeant on the parade ground and wounded an Adjutant with a sword after failing to shoot at him.

The officer in charge General Hearsay ordered a Jamadaar of the troops, a man called Ishwaria Pandey to arrest Mangal. But he refused. The whole regiment drew back from restraining or arresting Mangal.

Failing to incite the spirit of nationalism in his comrades, Mangal tried to end his life. He turned the gun towards himself and used his foot to try to pull the trigger to shoot himself.

But Mangal failed and was captured. He was court-martialed on April 6 and was hanged at Barrackpore on April 8, 1857.



# Before anything else, preparation is the key to success— Resolution'12



# Buzzing with Activities



“Need for Life skill classes” – Vinod



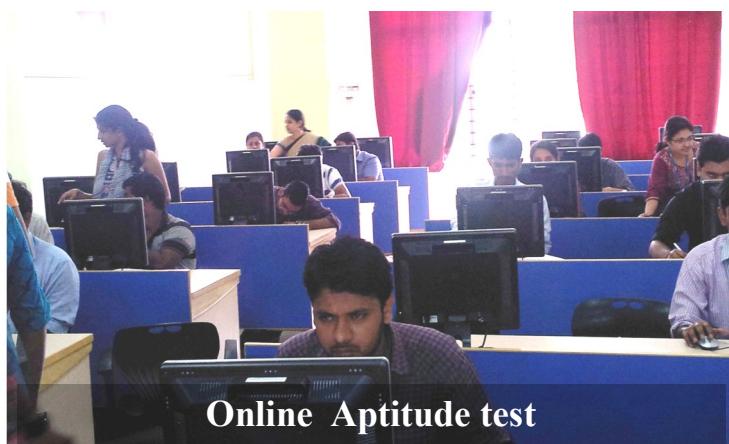
M<sup>3</sup> at Life skill class



Rj-Amit for Life skill class



Teacher's Day



Online Aptitude test



Students Engaging in Life Skill Activity



Life Skill Session by Our Own Faculty



Our winning Shot at Christ University

# One sees great things from the valley, only small things from the peak



I still remember the first day at CMRIT where a set of 60 students were made to sit in a room being explained the life at CMRIT. As expected, all of us had our own set of apprehensions and nervousness with which we began a journey that turned out to be most enjoyable for all of us.

Pursuing MCA at CMRIT gave us an exposure to all sides of the world. We studied computers along with professional values that would help us throughout. We worked in our last semester, as interns in external companies, yet our teachers always stood by us supporting us in every endeavor. The faculty, have imparted us more than just technical knowledge.

We were made aware of huge technical advancements as well as we got an incredible exposure to what IT industries would expect out of us. In addition to being teachers they were our friends, philosophers and guides.

Our fellow mates shared tough but healthy

competition when it came to academic pursuits, but it never deterred us from helping and supporting each other for overall and collective development. The togetherness and fellowship taught us not only how to improve ourselves but also provided an overall development that enables us to face all forthcoming challenges in the ever changing environment of the outside world.

The three years we spent in CMRIT have been the most memorable moments. Right from the ever-scary internals conducted each month to the easy-going and fun-filled fests, we have enjoyed these times to the utmost.

I had heard from my seniors telling me that this MCA phase is going to be the best three years of my life. After completing my 3 years here, I acknowledge they were right. I am so grateful for the opportunity to experience these best years. I cherish every experience and relationship that I have made in my tenure. Of course, as I move on with my life, I will value the education that CMRIT has granted me.

But it is the relationships that I have made with fellow students and teachers that I take with me as I graduate from here and move on to next phase, the dynamic and challenging I.T. World.

**Jyotsna Misra  
Assistant System Engineer  
TCS, Bangalore**



The One word that describes my transformed life after 3 yrs of college is Maturity.

The decision of pursuing my Post-graduation (MCA) was a bit tentative but I enrolled into it and now I am quite happy with the decision I made.

First couple of days at CMRIT were bit hard and challenging too. It took time for me to get used to the 8.00 AM college timing, three internals in a semester, class tests and assignments.

After the first semester, the hard times passed away, I got adjusted to the situation and managed my academics and other activities quite well including the last minute late night studies.

The syllabus of VTU was a lot more heavier and more intense than anything ever experienced before. The major challenges were the large volume of reading, the short deadlines, and writing, writing, writing. Friends and teachers help to manage this stuff along with the fest work activities during the tight schedule.

We had many counseling sessions with counselors which helped us to share our problems with them and they made found us appropriate solutions.

There were late nights with last moment preparation for exams, last minute assignment submissions and exam fears.

College was a fun place with friendly teachers, and a good bunch of friends present all the time.

In Classes I used to actually pay attention, tried to do well in academics, and teachers helped to be open minded to new ideas and it helped me to learn a great deal. I still feel I could have put in more efforts to live up to the potential my teachers believed I had in me.

I've realized that my life took a turn around since the time I joined college and now as I have joined the Industry, I am sure that I will surely cherish these moments, as they will help me throughout my life, not only in my career, but in all walks of life .

**Dilip Choudhary  
System Development Associate,  
ACS, Bangalore.**

# Humor is the affectionate communication of insight

If I studied, the way I do during final week all year long, I would be GENIUS. - Anurth

Being considered to others, will take you further in life than college degree. - Arijun

College is emotional ROLLER COASTER of my life. - Chaitanya

The way I figure it, everyone gets a miracle. - Pradeep

Experience the college life and enjoy, you are PAWNS, first year MINISTERS, second year KINGS OF CAMPUS, Final year.. - Namrata

A lot of it is the FRIENDSHIP made over years, we have become friends, we have become FAMILY. - Amit Bikram

Everything has its beauty, but not everyone sees it. - Krupa

Greatest barrier to SUCCESS is fear of FAILURE- Jyotsna

College is unique, because your learning a little how to be adult, take care of yourself and exposed to great minds. Feels.... Like didn't even know how to think until I go to college. - Betsy

# Doing all you can to make your dreams come true



DreamSpark is a Microsoft program to provide students with software design and development tools at no charge. The program was originally available for university/college students in Belarus, Belgium, China, Finland, France, Germany, India, Netherlands, Spain, Sweden, Switzerland, Tunisia, the U.K. and the U.S. but has now been expanded to more than 80 countries and is offered to many high school students.

To register, students must visit the DreamSpark website and verify their identity.

The DreamSpark program was announced by Bill Gates on February 19, 2008 during a speech at Stanford University. It is estimated that up to 35 million students will be able to access these software titles free of charge through this program.



## Verification

Proof of student status is required for access to the downloads and product keys of the products. Students visit the DreamSpark website to verify their identity. ISIC cards, access codes ordered by school administrators, and .edu email addresses are the ways DreamSpark verifies students. Students remain verified for 12 months afterwards. Commercial products available for free through DreamSpark :

- Visual Studio 2008, 2010 and 2012 Professional Editions
- Microsoft SQL Server 2012 Microsoft SQL Server 2008
- Windows Server 2008 Standard Edition (x86 and x64)

Only through DreamSpark Premium :

- \* Windows 7
- \* Windows 8

*Arun Kolhapur  
V Sem. MCA*

## Contact Lenses that change color levels

There is great news for diabetics. A revolutionary technology has come into being to help them measure blood sugar levels without drawing blood daily. It uses extremely small nanoparticles embedded into the **hydrogel lenses**. These engineered nanoparticles react with glucose molecules found in tears, causing a chemical reaction that changes their colour. Developed by biochemical engineering professor Jin Zhang at the University of Western Ontario.

We've seen remarkable contact lenses that allow for virtual reality vision, wash your eyes with medicated tears, or give you vampire or blinged out pupils. These are all very cool, but now one researcher is developing a contact lens that could save lives of diabetics by monitoring blood sugar and changing color accordingly.

Millions of people who have diabetes may be able to get rid of their painful blood testing devices in favor of a prototype being developed at the University of Akron. These lenses

sense the glucose in your tears that, if not being metabolized correctly, would build up just as it would in your blood. The contact lens would recognize the problem and change color to alert the wearer.

Dr. Jun Hu, an organic chemistry researcher, has been working on the project for the University of Akron since 1999. He notes that since the color in the lens would not be visible to the wearer, currently they'd only know about the change if they looked in the mirror or were alerted by someone.

The contact lens testing is painless and can be done rapidly and more often through the day. Because of this, it is hoped the combination of lenses and smartphone apps will increase compliance in monitoring.

The development of the lenses has come a long way, but are still in the testing phase. Here's hoping they are made available soon and the painful finger prick testing will become a thing of the past!



# My curiosity is –“Are we alone”

NASA's Mars rover Curiosity is doing a bit of mechanical navel-gazing on the Red Planet, snapping ultra-clear pictures of itself while testing a powerful camera at the tip of its robotic arm.

The Curiosity rover is a car-sized robotic rover exploring Gale Crater on Mars as part of NASA's Mars Science Laboratory mission (MSL). Curiosity was launched from Cape Canaveral on November 26, 2011, aboard the MSL spacecraft and successfully landed on Mars on August 6, 2012. The Bradbury Landing site was less than 2.4 km (1.5 mi) from the center of the rover's touchdown target after a 563,000,000 km (350,000,000 mi) journey.

The rover's goals include: investigation of the Martian climate and geology; whether Mars ever supported life, including investigation of the role of water; and planetary habitability studies in preparation for future human exploration.

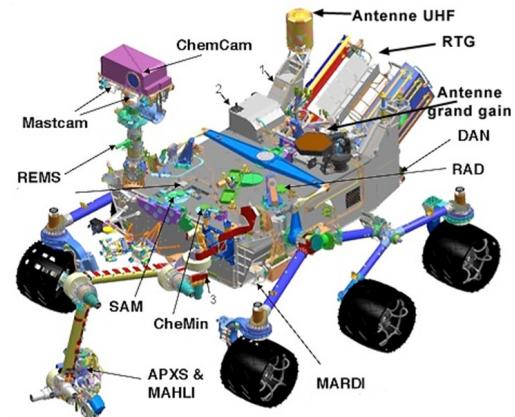
As established by the Mars Exploration Program, the main scientific goals of the MSL mission are to help determine whether Mars could ever have supported life, as well as determining the role of water, and to study the climate and geology of Mars. The mission will also help prepare for human exploration.

Attempting these goals, the Curiosity rover has eight main scientific objectives:

- Determine the nature and inventory of organic carbon compounds
- Inventory the chemical building blocks of life (carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulfur)
- Identify features that may represent the effects of biological processes (biosignatures)
- Investigate the chemical, isotopic, and mineralogical composition of the Martian surface and near-surface geological materials
- Interpret the processes that have formed and modified rocks and soils
- Assess long-timescale (i.e., 4-billion-year) Martian atmospheric evolution processes
- Determine present state, distribution, and cycling of water and carbon dioxide
- Characterize the broad spectrum of surface radiation, including galactic radiation, cosmic radiation, solar proton events and secondary neutrons.

The general sample analysis strategy begins with high resolution cameras to look for features of interest. If a particular surface is of interest, Curiosity can vaporize a small portion of it with an infrared laser and examine the resulting spectra signature to query the rock's elemental composition. If that signature is intriguing, the rover will use its long arm to swing over a microscope and an X-ray spectrometer to take a closer look. If the specimen warrants

further analysis, Curiosity can drill into the boulder and deliver a powdered sample to either the SAM or the CheMin analytical laboratories inside the rover .The MastCam, Mars Hand Lens Imager (MAHLI), and Mars Descent Imager (MARDI) cameras were developed by Malin Space Science Systems and they all share common design components, such as on-board electronic imaging processing boxes, 1600×1200 CCDs, and a RGB Bayer pattern filter.



It has 17 cameras: HazCams (8), Navcams (4), MastCams (2), MAHLI (1), MARDI(1) and ChemCam (1).



Nasa today revealed stunning new images of Curiosity's wheel on the martian surface taken using the high resolution Mahli camera, which had its dustcover removed for the first time



# Rooting Android Phones



Rooting is a process allowing users of smartphones, tablets, and other devices running the Android operating system to attain privileged control (known as "root access") within Android's subsystem.

Rooting is often performed with the goal of overcoming limitations that carriers and hardware manufacturers put on some devices, resulting in the ability to alter or replace system applications and settings, run specialized apps that require administrator-level permissions, or perform other operations that are otherwise inaccessible to a normal Android user.

Rooting is analogous to jailbreaking devices running the Apple iOS operating system or the Sony PlayStation 3. On Android, rooting can also facilitate the complete removal and replacement of the device's operating system, usually with a more recent release of its current operating system.

As Android was derived from the Linux kernel, rooting an Android

device is similar in practice to accessing administrative permissions on Linux or any other Unix-like operating system such as FreeBSD or OS X.

The process of rooting varies widely by device, but usually includes exploiting a security weakness in the firmware of the device, and then copying the `su` binary to a location in the current process's PATH (e.g. `/system/xbin/su`) and granting it executable permissions with the `chmod` command. A supervisor application like SuperUser or SuperSU can regulate and log elevated permission requests from other applications. Many guides, tutorials, and automatic processes exist for popular Android devices facilitating a fast and easy rooting process.

The Google-branded Android devices, the Nexus One, Nexus S and the Galaxy Nexus, can be boot-loader unlocked by simply connecting the device to a computer while in boot-loader mode and running the Fastboot program with the command "fastboot oem unlock".

## Gateway breached

Sep 10<sup>th</sup> and 11<sup>th</sup> 2012 will remain etched in the memories of the Department of MCA of CMRIT, when a group of 5 students managed to win the overall winner's trophy in the Christ University Fest "Gateways- 2012".

The Team Consisted of **Narendra Shetty, Rahul Joseph, Deanish, Jijo Joy** and me . I managed to win a couple of events and the whole team ended up being runners up in the counter strike gaming event.

The events in which we have taken part were Dumb charades, Best Manager and Gaming. The team managed to get into the finals of Coding & Debugging. **Gateways** is a National Level Inter College Technical Fest. The Best Manager event was a wonderful mixture of Analytical,

Creative and Public Speaking skills which involved the participants being put into uncomfortable and tough situations and we were judged on the basis of stress management methods.

The team took part in counterstrike and bored into the semifinals and ended up being runners-up. I also managed to win an excellent prize in the form of a **Tablet** in the **Best Manager** event.

The most surprising was when they announced the overall winners as CMRIT. This made us all realize that it's not about the size of the team; it's about how the team gels and performs under tough conditions.



**Naveen P  
V Sem. MCA.**

# Art of Poetry

*Before writing a poem on Teachers I want to explain what the word TEACHER stands for:-*

*T is for talented that you surely are  
 E is for explaining so patiently  
 A is for the ability to make the class fun  
 C is for correcting us when we are wrong  
 H is for helping us in every way  
 E is for encouraging us to do our best  
 R is for rare; there is only one of you!*

A teacher is like spring,  
 Who nurtures new green sprouts,  
 Encourages and leads them,  
 Whenever they have doubts.

A teacher is like Summer,  
 Whose sunny temperament  
 Makes studying a pleasure,  
 Preventing discontent.

A teacher is like Fall,  
 With methods crisp and clear,  
 Lessons of bright colors  
 And a happy atmosphere.

A teacher is like Winter,  
 While it's snowing hard outside,  
 Keeping students comfortable,  
 As a warm and helpful guide.

Teacher, you do all these things,  
 With a pleasant attitude;  
 You're a teacher for all seasons,  
 And you have all students  
 gratitude!!!!

**KUMAR PIYUSH**  
 V Sem. MCA.



## Roaring higher

My fire in heart is aggressive  
 Keeps burning all time  
 Roaring higher! Roaring higher!

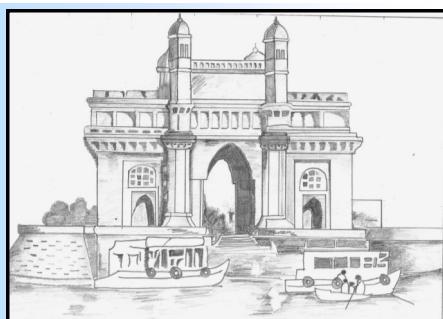
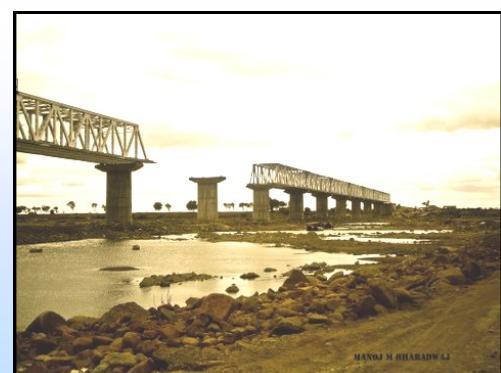
My fire can destruct the jealous world  
 Till it end fortunate and convenient  
 Roaring higher! Roaring higher!

My fire can create the ability  
 To create the gentle heart with success  
 Roaring higher! Roaring higher!

My fire can be the spirit  
 To light up the heart in the darkness  
 Roaring higher! Roaring higher!

**Swetha**  
 V Sem. MCA.

## Photo Gallery



Sandeep  
V Sem



Subrat  
V Sem

*"Art is... a question mark  
 in the minds of those  
 who want to know what's  
 happening."*  
 ~Aaron Howard

# Of Interest to Faculty and Students

## 'Urban Square' - A new hangout on MG Road

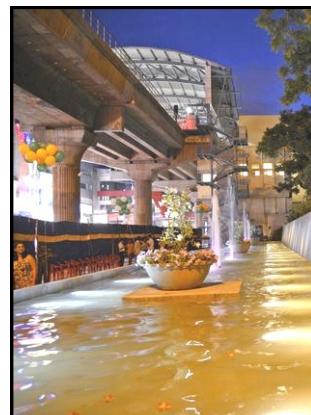
Bangalore, Sep 5, 2012, DHNS:

'Urban Square', a beauty space adjacent to the MG Road Metro Station, complete with a cascading waterfall and landscaping with rare variety of flowers, was inaugurated on Sep 5, 2012.

"This space — near the MG Road-Brigade Road junction — is our first step in restoring the lost glory of MG Road. People can sit and relax here in the backdrop of a waterfall and decorative lights.

In the coming days, facilities will be created to arrange laser shows in the evenings," said Sivasailam, Managing Director, Bangalore Metro Rail Corporation Limited, after inaugurating the Urban Square.

"A boulevard on the other side of the station will add beauty to the road. It will take a maximum of two months to complete the work. It just means that a multi-facility, nature-friendly corridor will be opened for the use of Bangaloreans," he added.



While the area of Urban Square is 850 square meters, there are Ficus trees lined up above the waterfall which runs from Kamaraj Road along MG Road, to form a screen.

"One of the highlights of this space is the Mondovilla flower arrangement, which is a Mexico variety and new to Bangalore. The flower in white, pink and scarlet red will be in bloom throughout the year," he said.

M Nagaraja, Deputy Director of Karnataka Rural Infrastructure Development Limited (KRIDL), contractors for the Urban Square, said the Rs 82-lakh project was completed in less than five months.

Filtration room for the fountain, rainwater harvesting, tiled walkway for public movement are the added features, he said.

## Remembering 9/11

*"We shall never forget - We shall keep this day, We shall keep the events and the tears in our minds, our memory and our hearts and take them with us as we carry on."*

*"If we learn nothing else from this tragedy, we learn that life is short and there is no time for hate," said Sandy Dahl, the wife of Flight 93 pilot Jason Dahl.*

The editorial team, are extremely grateful for your warm words of encouragement. We will be approaching you in the near future, to make the newsletter more interactive and informative.

We invite suggestions and contributions from students, alumni and faculties of MCA, CMRIT.

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*"Be to our virtues very kind, be to our faults little blind".*



(Department Of Computer Applications)