



DRONACHARYA COLLEGE OF ENGINEERING

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ISSUE OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

From Editor's Desk :

**"Khuda nighebaan ho ab tumhara
Jaate huye sab ka salam le lo,
Nai manzilon ko ab tum ja rahe ho
Jate huye hamara paigam le lo!"**



This is the April issue of Dronacharya News Letter and this almost concludes the academic session 2008-2009, it heralds the University examinations commencing sometime in May.

The academic Bon Voyage of the college covers 11 mile stones of steady progress and growing popularity. April appears in apparel adorned with fully blooming multi-coloured flowers. **Geoffrey Chaucer, the father of English Poetry**, begins his famous Prologue to the Canterbury Tales with the words "**when April with its showers sweet**" and refers to this month's popularity with pilgrims to holy places and modern English Nobel Laureate **T. S. Eliot** begins his greatest poem '**The Wasteland**' with the words '**April is the cruellest month**'.

Evidently the difference highlights the drastic difference in attitude which determines human character and destiny. At Dronacharya College of Engineering, as at several other Institutions, April ushers in the Farewell time for the finalists of the current session and the Convocation for the passouts of the last year. We often fix up a convenient day as the meeting time of the two presenting a criss-cross of meeting and parting which have a profound symbolic significance in the journey of life.

The Management, the Principal, the Dean Academics, the HODs, the Registrar, the Faculties and all the supportive staff exhort our dearest Dronacharyans to exert their utmost to maintain the myriad Merits achieved during yesteryears and propel the popularity, name and fame of their Alma Mater to still greater heights.

"God bless you all"!

 Editor, (Dr. R. C. Narula)

From HOD's Desk :

CSE & IT Department is in constant pursuit of excellence. On the march towards excellence, **a technical festival DRONTECH'09 was organized on 26th and 27th February 2009**. It is still a phase of transition, into a bright future. **Tech Fest DronTech'09 was a "technical venture"**, which aimed at fostering the innovation and provided a platform to stage students' ideas, which could evoke the technical thirst by endorsing a new era of current technical excellence. Further, **DronTech'09 helped in crafting skilled engineers and technologists who are daring to lead the IT revolution of the future.**



This landmark event offered a variety of fields for the brain to go underway. This technical extravaganza got much bigger this time through a plethora of 13 events which involved almost everything like Paper Presentation, Project Exhibition, Quiz, Web Designing, Technical Group Discussion, Rangoli etc. Students and staff of the college had been paramount in making the Tech Fest a benchmark for the fests to come.



Our Department in its ongoing quest for excellence in teaching, research, outreach, and leadership started a **"Faculty Development Program"** which aims at providing faculty members a unique opportunity for self-development which enhances their teaching and research capabilities and improves their knowledge substantively in specific functional areas.

These activities build capacity for both individual and organizational vitality through a framework of comprehensive professional development that addresses responsibilities of academic service, capability to adapt to challenges, and building communities of learning and practice. Academic is always on our top most priority. The Department is having a rich history of producing University toppers and rank holders. **In the previous University exam results we got maximum number of merits in the entire University.** Reaching at the top was certainly not easy but retaining it is even tougher. In pursuit of retaining our position at top we have started extra classes on Saturdays where faculty members are putting special emphasis on weak students.

On behalf of all the staff members I wish all the very best to all Final year students.

 Head of the Department, (Mr. Jitender Yadav)

Faculty Development Program :

"The Faculty Development Programme" is aimed at contributing to the participants' development into effective researchers and teachers. The programme enables participants to develop competence in general technical education as well as in technical research. Computers, statistical kits and audio-visual aids complement these methods.

FDP enhances their skills and updates their academic tools. To accomplish this goal, our faculty offered a broad range of seminars and programs on various topics. They practiced and shared their new learning with all the faculty members of different Departments slowly bringing about a major qualitative change in academics and practice. **In the last 3 months Prof. Supriya Panda, Mr. Anil Balara, Ms. Minisha Sharma, Ms. Pooja Kamra, Mr. Bhanu Partap gave seminars on File Handling, Finite State System, AVL Tree, Unix OS, Computer Networks respectively.** The seminars were attended by all the staff members of the college and were appreciated for the knowledge imparted through the seminars.

Besides this **CSE & IT Department invited a highly professional team from "IBM" to deliver Technical Seminars on Database Management System "Db2"** which included both theory and practical sessions for all the faculty members of the college. We got an overwhelming response from all the staff members.

Seminars :

Students are the future of the country and with this view we want to provide a platform to students to get guidance and be successful in life and become responsible citizens of the country. To radiate optimism and responsibility in students, **the College organized motivational seminars by Mr. Anil Sethi**, who put light on the following topics:

- Communication skills
- How to face an interview
- Personality development
- Skills beyond technical
- Various education options
- Job options for generation next

Campus Placements :

The global recession could not stop our brilliant students from getting placed in some of the prestigious firms. CSE & IT Department has been actively engaged not only in disseminating information of job opportunities in the Public and Private sectors for getting our students placed there but also is making our students well equipped to face and clear any interview.

Live Projects Undertaken By Students :

SAIT TRACK SYSTEM

The use of and dependence on technology has grown tremendously in the last two decades, and with it comes distinct responsibilities and new problems that must be addressed. SAIT track is used for the challenges of personnel signal verification, identification and generation. This project discusses the available and emerging techniques of SAIT track. In this project we can control or track dish antenna towards satellite using PC parallel port, using turbo c coding. The dish (sensor attached) can rotate and cover total orbit of 360 degree of angle so that it can receive signal from each direction (north, south, east and west) for these purposes we use stepper motor. In our project for demo purpose we use fixed infrared receiver attached to the disc. This receiver response only to infrared signal and it is directional sensor. On the other hand we make infrared transmitter. So that we transmit a frequency in particular angle and when rotating disc comes in that direction it receives the signal and gives indication of catch location on PC. It deals with the following parts:

Sources:

- INFRARED: It can be detected at a small distance.
- ULTRASONIC: Ultrasonic is expensive.
- LASER: Laser is a single beam from source to receiver. There should be accurate alignment.

Interfacing Circuit:

Interface circuit is used to interface the motor with the computer's parallel port; we will build up a circuit through the use of TTL device to get a supply voltage of 12V. This is because, our stepper motor used is a 12V one and the parallel port gives us only 5V.

Team Members



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FOLDER SECURITY SYSTEM

The project "**FOLDER SECURITY SYSTEM**" is the way to stress the security at basic level. It is a Product development project based on Java. The folder security system helps us to change the '**icon**' and the '**path**' of any folder that we have on our system. Changing the icon makes the folder difficult to recognize and even if someone tries to open the folder instead of folder the control panel is opened. This project is simply to provide the basic necessity of students, teachers, employees, anyone and everyone. With a little bit of cryptography encryption concepts and normal java awt and swings we were able to make this project. **It has a future scope also where we are not only trying to hide the complete c or d drive but also working on how we can hide the folders and their protection status also.** Seeing the requirement of security in today's mad rat race this was our thinking to put our share of going forward.

Team Members



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8273



Kalpana
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Technology Focus :



Vibhutee Kohli
VI Sem (IT)

VIDEO CONFERENCING

A videoconference is a set of interactive telecommunication technologies which allow two or more locations to interact via two-way video and audio transmissions simultaneously. The core technology used in a video teleconference (VTC) system is digital compression of audio and video streams in real time. The hardware or software that performs compression is called a codec (coder/decoder). Compression rates of up to 1:500 can be achieved. The resulting digital stream of 1s and 0s is subdivided into labelled packets, which are then transmitted through a digital network of some kind (usually ISDN or IP). The use of audio modems in the transmission line allows the use of POTS, or the Plain Old Telephone System, in some low-speed applications, such as video telephony, because they convert the digital pulses to/from analog waves in the audio spectrum range.

The other **components required for a VTC system include Video input, Video output, Audio input, Audio output and Data transfer network e.g. LAN or Internet.** In recent years, IP based videoconferencing has emerged as a common communications interface and standard provided by VTC manufacturers in their traditional ISDN-based systems. Videoconferencing provides students with the opportunity to learn by participating in a 2-way communication platform. Furthermore, teachers and lecturers from all over the world can be brought to classes in remote or otherwise isolated places. Videoconferencing is a very useful technology for telemedicine and telenursing applications, such as diagnosis, consulting, transmission of medical images, etc., in real time in countries where this is legal. Using VTC, patients may contact nurses and physicians in emergency or routine situations, physicians and other paramedical professionals can discuss cases across large distances. Videoconferencing can enable individuals in far away places to have meetings on short notice. Time and money that used to be spent in travelling can be used to have short meetings. Technology such as VOIP can be used in conjunction with desktop videoconferencing to enable low-cost face-to-face business meetings without leaving the desk, especially for businesses with wide-spread offices.

Student's Viewpoint About The Department :



"Education is not the filling of a pail, but the lighting of a fire."

It is common belief that in today's progressive times one has to be in tune with the latest trends. The Department with its veteran faculty and industrious students always tries to bring laurels to the college. The "**Guru-Shishya**" parampra is truly followed in our College. Highly experienced and painstaking faculty members devote their valuable time to impart not only the technical education but also the much needed social values. There are fully furnished labs, best faculty, University toppers, MNC's for placement, co-curricular activities so on and so forth.

Special PDP classes and seminars are conducted to boost up the confidence of students. A Tech Fest is organized every year with the sole aim of providing platform for students to showcase their technical know-how and skills. The Placement Cell has turned out to be another feather in the cap. Students are being placed in reputed companies across the length and breadth of the country and even abroad. **Under the supervision and guidance of experienced and trained faculty members of the college, I have been able to get a placement offer at Converges IMG.** I express my thankfulness to our respected **HOD Prof. Jitender Yadav** and all faculty members of our department for their constant help and guidance. I feel proud to see myself at a place where elements of knowledge, discipline and education merge to light up the lamp of success.

Gulshan Kathuria
(Roll No. 8290)



Our Department, one of the vast departments, is under **Mr. Jitender Yadav (HOD)**. The Department excels in every field, be it academics, placements, University ranks, discipline or talent. This Department is well managed and the faculty and students give their best to prove themselves. Ours has been the best Department of the college for the past four years. And the success is but natural seeing the efforts of the staff, faculty and students of the Department. **The students of this Department have acquired maximum number of University ranks all over.** This has been made possible by joint efforts of the HOD, the faculty and students.

The Department conducts seminars in a technically sound environment and keeps improving its technical facilities. **The recently organized DRONTECH-09 was a well coordinated event** and saw amass participation from within the college as well as by students of other colleges. The Department has always proved itself '**The Best**' over the years and will continue with it. We hope that the Department will always come with flying colors in future too.

 **Geetanjali Bhola**
(Roll No. 8289)



The IT Department holds the "**key to success**" of not only firms but also of the college. It has on roll the maximum number of students and maintaining such a huge Department is a task in itself. "**Rome was not built in a day**" and it has taken years to make such a rappo. Our Department is like a family where the teachers, are our mentors who always give in that extra bit of theirs to bring the best out of us. Well furnished labs, net facilities, software of various languages, trained professionals are just few of the things that we boast of. The Department has always come out with flying colors when it comes to University results or placement. In sports, Techno-Fests, and cultural activities the Department has always made a mark. And its success speaks volumes for itself.


The interaction between the teachers and students helps them to interact beyond the lectures. The intellectual staff pushes for the overall personality development of each and every student. They encourage the creativity and imagination of the upcoming engineers and let them bloom to the fullest. The credit of our over-all excellence goes to our HOD, who shows immense faith in us and is always there to support us to perform better and better. The IT Department is the back bone of any college and we have proved it.

 **Aditi Thakran**
(Roll No. 8273)



Perfection is not the offspring of luck, it comes with repeated attempts because nothing worthwhile was ever accomplished without the willingness to start, the enthusiasm to continue and the determination to complete; thus, success is not an act and it is this positive spirit of perseverance, dedication and sincerity which is the common denominator among the staff and students of the CSE Department. Under the able leadership of the **HOD, Prof. Jitender Yadav**, a gifted visionary, an impeccable guide and a man of excellence, this Department has kept pace with the rapidly changing times and its teaching methodologies like a widespread laptop culture have evolved so as to incorporate the latest technology into the curriculum with an eye on enriching the knowledge of the students and turning them into technocrats of the finest order.

Actions speak louder than words and our Department is a concrete proof of this as is reflective in the number of University positions, commendable results, placements and awards bagged in sports and extra-curricular activities by its students. With the perfect blend of a well-trained faculty and talented pupils, the CSE Department is indeed a jewel in the crown of Dronacharya College of Engineering.

 **Sonali Chandola**
(Roll No. 8080)