



Dronacharya College of Engineering

ISSUE

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COMPUTER SCIENCE DEPARTMENT

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From Editor's Desk :

"Bread must be shared now and evermore..."

Life is a gift of God and making it better is in our hands. It will be more attractive, if we fill it with excitement, variance and stimulation.

Our endeavors at **DCE** always reflect reality and proceed with pragmatism, fraternity, equality and liberty as the cherished goals. Here, human concerns are universal and this is established emphatically by our **Hon'ble Chairman**.

He always encourages and supports us to turn this materialistic earth into a beautiful world where peace reigns supreme and hunger finds no shelter. He is ready to serve the Society and nation through developing technical education and making all facilities available to a common learner.

Dronacharya College of Engineering stays abreast of new development in technologies and learning systems so as to give the **Dronacharyans** the skills and attributes they need to succeed in a global work environment. We strive to produce world - class engineers who are prepared for the future, ready for the changing needs of the workplace and professional success.

We, at **DCE**, make our students consistent and competent in temper, action, opinion and thinking. I am happy about the successive batches of students who have passed from DCE. We are proud of their intellect, caliber and character. Their pursuit of excellence is committed to national harmony and goodwill.



Editor, (Dr. Sunil K. Mishra)



From HOD's Desk :

We trust in making our candidates "More Employable" additional to tendering better Subject Knowledge. That's the reason, why we claim to "Create EMPLOYEES, than students in par with excellence."



Dronacharya College of Engineering has been imparting quality technical education since 1998 and nurturing professionals equipped with knowledge, skills and the right attitude to meet and lead the challenges of industry and academia. It has a team of elevated faculty members engaged in quality research, teaching and corporate training programs. In terms of infrastructure, Department has best Equipped labs and our students are exposed to variety of hardware and software platforms. Fully Networked campus and High speed Internet and WI-FI connectivity gives our faculty members and students an edge over their counterparts.

Our association with **IBM, HCL, MICROSOFT** and many other Technological Big-Wigs has created a niche towards global exposure for students. Our placement is touching new heights with inclusion of TPP (Talent Planning Program). Department regularly organizes conferences/seminars and extra-curricular activities to see over all development in our students. We, at DCE, also provide our students and faculty members a platform to interact with their peers from across the country. The department has very close interaction with industry and their inputs are taken into consideration to give value additions to our programs. **IBM Center of Excellence Research and Development wing has been set up in the department to teach and train the students in latest technologies beyond the realm of traditional course curriculum.**

I am extremely gratified to corporate world for the trust and confidence shown in our students in past and hope for the same in the future. I seize the opportunity to thank to our **Hon'ble Chairman, Dr. Satish Yadav, Prof. (Dr.) B. M. K. Prasad, Principal, Prof. (Dr.) Onkar Singh, Dean Academics** for their inspiration, motivation and never ending fortitude and grit to achieve a common goal.

**The mediocre teacher tells. The good teacher explains.
The superior teacher demonstrates. The great teacher "inspires".**

Head of Department CSE (Prof. (Dr.) S. V. Nair)

Events:

TPP (Talent Planning Process)

We have started a **rare unique initiative** that is "**TALENT PLANNING PROCESS**" to further elevate the placement procedures. The current scenario alleges that a number of companies go for campus placement to get bracing talent and smart workers but generally end up compromising with incompatible candidates. Our talent planning process will incorporate organizational based training, skill based training and employee based training. The training is done within Department itself. These will help us to reduce the gap between the requirements of the industry and curriculum.

IBM (International Business Machines)

IBM is a multinational computer, technology and IT consulting corporation headquartered in Armonk, North Castle, New York, United States. The company has scientists, engineers, consultants, and sales professionals in over 200 countries with almost 400, 000 employees. We feel proud to be one among 30 best colleges for TGMC programme across the country.

Dronacharya College of Engineering has successfully completed one year of association with the industry giant IBM with more than hundred professional certifications obtained by the students.

On behalf of the College, **Dr. S. V. Nair, HOD (CSE)** attended the ceremony held at Bangalore on **12th May 2010**. **He was honoured with the trophy and certificate from IBM.** Indeed, it is a great achievement of the college.



HOD (CSE) Prof. (Dr.) S. V. Nair receiving award from Dr. P. Gopal, Director, India Software Labs, IBM

IEEE & CSI Students Branch

IEEE (Institute of Electrical and Electronics Engineers) is the world's largest professional association inspires a global community to innovate for a better tomorrow through its highly cited publications, conferences, technology standards, professional and educational activities.



Prof. P. Thrimurthy President of CSI and Hon'ble Chairman Dr. Satish Yadav addressing the delegates



President of CSI releasing (MOU) for opening new CSI Student Chapter with Our Chairman

The CSI (Computer Society of India), established in 1965 and headquartered in Mumbai is the oldest and largest society of IT professionals in India. The Society is committed to advancement through the use of Information Technology in all domains of life. It has a member base of over 30,000 that includes top business leaders, computer professionals, academicians, researchers, students and users. The Society has 61 Chapters and 76 Student Branches spread across the country. Computer Society of India is one of the largest societies in the field of IT in India and organizes a large number of activities from time to time.

CSI student's branch at DCE makes students more professional to cater to the needs of the industry. **There was heartening response from students to join the society. In a landmark initiative by the CSE Department, the college established a CSI (Computer Society of India) student branch which was inaugurated by Prof. P. Thrimurthy, President of CSI in a grand function on 24th April 2010.** The event was attended by the entire managing committee of the Delhi region CSI Chapter. The proceedings for the establishment of IEEE student's branch at DCE have also begun.



Dr. Satish Yadav giving the memento to Prof. P. Thrimurthy

Farewell Function 2010

Dronacharya College of Engineering organized the **Farewell function of the 9th batch students on 24th April 2010.** In this event the junior students had organized the array of cultural events, dance performances songs, drama etc.

The event was inaugurated by the Chief Guest Prof. (Dr.) P. Trimurti, Chairman of Computer Society of India. He appreciated the caliber of Dronacharyans for holding merit positions in the M.D. University, Rohtak and getting placed at different MNCs.

On this auspicious occasion, Hon'ble Chairman distributed **the cash price of Rs- 25000/- to the meritorious students who secured merit position in the University examination.** He supported the economically weaker students by providing education free of cost. He also distributed the cash award of **Rs 100000/- for the Best Department and Rs. 51000/-for the Best Faculty.**

On the same occasion Principal wished the final year students a great success in their life and future.

We are proud of every Dronacharyan who carry our tradition "Gurukul with Modernity" across the globe.



Our Chairman, Dr. Satish Yadav, welcoming Prof. P. Thrimurthy, President of CSI at Farewell Function 2010



Mr. Sachin Gupta receiving the best faculty award of CSE department and the memento from Prof. (Dr.) P. Trimurti

Research Journals (Vol-II) :

The second issue of Dronacharya Research Journal (**ISSN NO: 0975-3389**) is under publication. This has inculcated the atmosphere of research and development in the department resulting in new initiatives. In addition to this, the faculty members, our students have also contributed their research papers in this journal. Some of the following papers are selected for the research journal volume-II.

- ❑ Implementing "SYN" Based Port Scanning in Windows Environment
- ❑ Implementation of functional reputation based data aggregation in wireless sensor network
- ❑ Optimizing Financial Trading Systems by Integrating Computer based Modeling in "Virtual Reality Environment"
- ❑ Approach of Six Sigma In Lean Industry
- ❑ New Advanced Internet Mining Techniques

Campus Placement :

We do not leave any stone unturned in assisting the students for their career and placement. We conduct PDPs, Mock Interviews, Aptitude test, GDs etc for better placement. In this semester following are the bright stars of CSE department who are placed in various companies like **Rave Technologies, 3a Mobile, IT Global Software, Inter Globe Technologies, Think Future Technologies, etc.**

Student Name	Company
1 Rohit Mankotia	3 a Mobile
2 Sumit Gupta	3 a Mobile
3 Anshul Goel	3 a Mobile
4 Muskan Narang	3 a Mobile
5 Ravinder Kumar	OATI
6 Kirti Dankar	Bhagatdeep Software P.Ltd.
7 Varun Bhanot	Inter Globe Technologies
8 Sudeep Kumar	IT Global Software
9 Aparna Sharma	IT Global Software
10 Richa	IT Global Software
11 Nisrita	IT Global Software
12 Khushboo Puri	IT Global Software
13 Anjana M.	IT Global Software
14 Sheetal	IT Global Software
15 Ankit	IT Global Software
16 Hina Nigam	IT Global Software
17 Damini Khurana	Think Future Technologies
18 Aarti Narang	Think Future Technologies
19 Juli Gupta	Think Future Technologies
20 Varun Bhanot	Think Future Technologies

Live Project Under Taken by Students

Wi-Fi Controlled Land Rover

The Wi-fi Land Rover project has been designed for remote surveillance; it follows a very simple concept of camera mounted on a moving vehicle which sends back live video feed using wi-fi, and being controlled by a host computer using the same. The Wi-fi feature gives us limited wireless range within which we can maneuver the land recover using a basic laptop with Wi-fi capability. This project takes one step further by controlling the host computer application by a remote computer anywhere on the internet. The video stream comes through the camera to laptop and then to the remote computer through the internet, the commands for controlling the rover are issued similarly from the remote computer.

Project Guide

Dr. Jitender Kumar

Team

Amit Jain **Roll No.** 9008

Ankur **Roll No.** 9013

Devashish **Roll No.** 9025

Honeypot Intrusion Detection System

A honeypot is a computer system intended to attract or lure attackers to it. A honeypot serves to distract attackers from the real targets as a decoy as well as a means to track and monitor attacks to learn from them in order to develop better protection for the real systems. When it is attacked it records all the details of the attack while containing it and preventing it from damaging any other systems. A Honeypot is valuable as a surveillance and early-warning tool. A honeypot that masquerades as an open proxy to monitor and record those using the system is a sugarcane. Honeypot should have no production value, and hence should not see any legitimate traffic or activity. Whatever they capture can then be surmised as malicious or unauthorized.

Project Guide

Dr. Jitender Kumar

Team

Nisha **Roll No.** 9053

Nishrita **Roll No.** 9054

Perna **Roll No.** 9060

Vehicle Parking System

This project presents an approach to vehicle parking management system. A proposed method is designed to perform recognition and identification of any kind of license plates under restricted environmental conditions.

The main assumption of this method is the ability of recognition of a license plate which can be found in an individual picture. The proposed software solution is discussed together with results obtained on a benchmark data set of license plate pictures. In this software example of correct and incorrect results are also presented as well as possible practical applications of proposed method.

Project Guide

Mrs. Nidhi Srivastav

Team

Shilpa **Roll No.** 9073

Shivanshi **Roll No.** 9074

Swati **Roll No.** 9082

Neural Networks Handwriting Recognition

A back-propagation neural network with one hidden layer was used to create an adaptive character recognition system. The system was trained and evaluated with printed text, as well as several different forms of handwriting provided by both male and female participants. Experiments tested (a) The effect of set size on recognition accuracy with printed text and (b) The effect of handwriting style on recognition accuracy.

Results showed reduced accuracy in recognizing printed text when differentiating between more than 12 characters. The handwriting style of the subjects had varying and drastic effects on recognition accuracy which illuminated some of the problems with the system character encoding.

Project Guide

✦ Mr. Sachin Gupta

Team

✦ Anjana **Roll No. 9011**

✦ Aparna **Roll No. 9016**

✦ Aarti Yadav **Roll No. 9017**

✦ Bhavneet **Roll No. 9019**

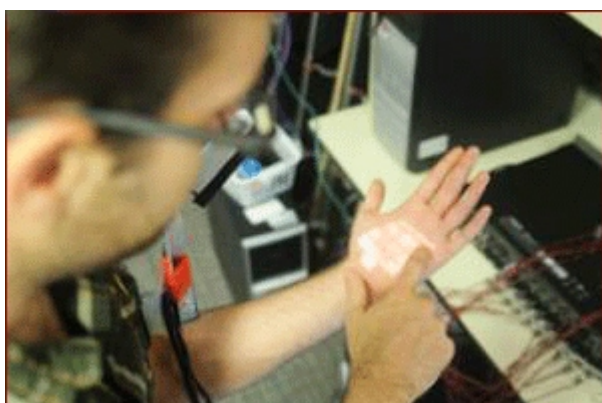
Technology Focus :

"Skin as Input for Mobile Devices"

A combination of simple bio-acoustic sensors and some sophisticated machine learning programs makes possible for people to use their fingers or forearms -- potentially, any part of their bodies -- as touch pads to control smart phones or other mobile devices. The technology, called Skin-put, was developed by Chris Harrison, in Carnegie Mellon University's Human-Computer Interaction Institute (HCII). "Now, we can use our own skin -- the body's largest organ -- as an input device," Harrison said "It's kind of crazy to think we could summon interfaces onto our bodies, but it turns out to make a lot of sense. Our skin is always with us, and makes the ultimate interactive touch surface." In this technique, acoustic sensors are attached to the upper arm.



These sensors capture sound generated by such actions as flicking or tapping fingers together, or tapping the forearm. This sound is not transmitted through the air, but by transverse waves through the skin and by longitudinal, or compressive, waves through the bones. The tap of each fingertip, a tap to one of five locations on the arm, or a tap to one of 10 locations on the forearm produces a unique acoustic signature that machine learning programs could learn to identify.



These computer programs, which improve with experience, were able to determine the signature of each type of tap by analyzing 186 different features of the acoustic signals, including frequencies and amplitude. In a trial involving 20 subjects, the system was able to classify the inputs with 88 percent accuracy overall. Accuracy depended in part on proximity of the sensors to the input; forearm taps could be identified with 96 percent accuracy when sensors were attached below the elbow, 88 percent accuracy when the sensors were above the elbow. Finger flicks could be identified with 97 percent accuracy. The prototype armband includes both the sensor array and a small projector that can superimpose colored buttons onto the wearer's forearm, which can be used to navigate through menus of commands.

- Garima Sharma

Student's Viewpoint :

It has been an honor for me to study in a college like Dronacharya College of Engineering that's known to be a record setter and history maker and it stands apart in discipline and academics. The credit goes to all the teachers who are highly qualified and well versed in their subject. They have always been supportive, arouse curiosity in the subject as well as help students to carry clear head. The college not only works for excellence in academics but also the overall development of the students. **Acceptance of our proposal by IEEE and CSI** is an example to this. The college is growing remarkably. Recently big firms like Microsoft and Adobe were invited to our college to hold seminars. I am proud to be a part of an exemplary institute like this which motivates its students to seek excellence for a bright future.



Ritika Puri (Roll No: 10086)

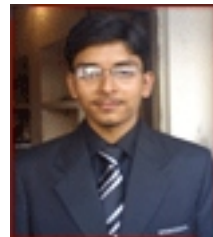
CSE department is the most distinctive department, centre of excellence for teaching skills, maintenance of hard core discipline and imparting state for the art education. Since its inception, the department has always been recognized throughout for providing an outstanding learning environment for the students to flourish in. It seeks to establish traditions which will foster the creativity and growth of excellence. The department has the proud privilege of having the blend of exceptionally qualified, dedicated and scholastic faculty. With unique use of highly innovative technology and enduring relationships with various industries, they are in a position to mould the students for the demanding and rigorous challenges of this highly competitive world.



Aditi Bansal (Roll No: 10005)

It gives me an immense pleasure to share some of my views about Computer Science Department of Dronacharya College of Engineering. CSE department is well known for its discipline and meritorious students. The faculty members are competent and highly qualified and enhance the basic concept of a student related to any topic.

"I'm proud to be a student of this esteemed department of the college."



Shailendra Shukla (Roll No: 11110)

Our college Dronacharya College of Engineering, Gurgaon is dedicated to developing intellectual curiosity and personal growth of each individual.

"Great things happen when men and mountain meet...."-William Blake.

The saying holds true for our Department of **Computer Science & Engineering**. It has given us impetus to meet futuristic global standards, to instil high pattern of discipline and character building and to be technically strong. For this faculty has introduced various student benefit programmes like TPP, first of its kind, CSI and IEEE.



It makes me feel proud to be a student of the CSE department of Dronacharya College of Engineering, Gurgaon.

Isha Sharma (Roll No: 11046)