Sep'18 Edition

CSE BYTES
A CSE NEWSLETTER

**DEPARTMENT OF COMPUTER
SCIENCE & ENGINEERING**

About
JECRC FOUNDATION

An individual's freedom lies in the way he is taught to express his thoughts, and this expression essentially comes from education. Established over a decade ago, JECRC Foundation has been providing quality education to its students, setting rationale in their minds for the transformation of technology, and ideologies of the world at large.
Perceived as the unparalleled educational group, JECRC Foundation is continuously ascending the steps of glory by establishing premier institutes in the field of engineering, management and pure & applied sciences:

Jaipur Engineering College & Research Centre (JECRC)
JECRC UDML College of Engineering (JECRC UDML)
JECRC University

Every year, more than 5000 students entrust JECRC Foundation with the responsibility of shaping their minds for a better future. Commanding the priority list of best engineering colleges in Jaipur, it has become the preferred choice of students from all across India, showing keen interest in admissions through various mediums of JEE and REAP.
Development of a unique and creative approach to life and education is the prime focus of JECRC Foundation.

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Director's Desk

Mr. Arpit Agrawal
Director, JECRC

Education is the one that drives humanity to achieve new and impossible feats every day. Without having a seed of thought sown in one's mind, one cannot reap the fruits of innovation. JECRC Foundation has been serving this purpose of motivating and making students excel at what they want to pursue. We at JECRC aim at making the campus a full-fledged learning experience for the students, so that no skill they have is left unexplored.

As this newsletter is again making its rounds, I gladly bring it to the notice of each member of the college to this tough job the CSE Department is undertaking. Keeping everyone updated with the happenings in the department is a great initiative to connect with one and all. Seeing both students and faculty members put enormous work behind this humongous task, I feel grateful for such a great team.

Becoming the central hub of all intellectual activities and innovative discussions for young minds, JECRC welcomes all the future innovators and creators to be a part of it. I wish good luck to students for all they aspire to become!

Principal's Desk

Prof.(Dr.) V.K. Chandna
Principal, JECRC

Engineers are the wealth of the nation and their excellence in all the disciplines is the present requirement of the country, for sustained economic expansion to compete globally. It gives me immense pleasure to share that JECRC is contributing to the growth of the nation by providing outcome based education to their students and nurturing them to compete at a global level.

The CSE Department and technical staff members are committed to furnish professional as well as research driven project based learning to the students, and accordingly the teaching-learning process is tuned so as to fulfill their career growth in the prevalent emerging technology. Different programs have resulted in overall growth and penetration of students in varied dimensions, be it research, innovation, entrepreneurs, educationist or even as sports person and bureaucrats etc.

With the support of qualified, dedicated and hardworking faculty of the CSE Department, the institute has achieved enviable ranking in a short span. I have no doubts that with this pace, the institute will unremittingly march ahead of other eminent institutes at the national level.

HoD's Desk

Dr. Bhavna Sharma
Head of Department CSE, JECRC

Being a part of a reputed organization like JECRC gives me immense pride, where students as well as faculty members are dedicated towards growth and a bright future. The faculty members are measuring the progress and competencies of students as they go through a course in each semester in which they are being assessed against pre-defined targets. Students, under the guidance of experienced faculty members, are giving their utmost to reach the zenith of success.

The CSE department is showing remarkable growth in terms of education as well as futuristic projects. Our students have represented the college at various platforms and increased the glory of our college. Students actively participate in Hackathons and TedX- held at different levels and other co curricular activities. There are budding entrepreneurs, researchers, programmers and developers that without a doubt, our institution will reach the heights of triumph in the upcoming few years.

Vision & Mission of JECRC

Vision

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

Mission

• Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.

• Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.

• Offer opportunities for interaction between academia and industry.

• Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Vision & Mission of Department of CSE

Vision

To become renowned Centre of excellence in computer science and engineering and make competent engineers & professionals with high ethical values prepared for lifelong learning.

Mission

M1. To impart outcome based education for emerging technologies in the field of computer science and engineering.

M2. To provide opportunities for interaction between academia and industry.

M3. To provide platform for lifelong learning by accepting the change in technologies.

M4. To develop aptitude of fulfilling social responsibilities.

Program Outcomes

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. **Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Educational Objectives

1. To provide students with the fundamentals of Engineering Sciences with more emphasis in Computer Science & Engineering by way of analyzing and exploiting engineering challenges.

2. To train students with good scientific and engineering knowledge so as to comprehend, analyze, design, and create novel products and solutions for the real life problems.

3. To inculcate professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, entrepreneurial thinking and an ability to relate engineering issues with social issues.

4. To provide students with an academic environment aware of excellence, leadership, written ethical codes and guidelines, and the self-motivated life-long learning needed for a successful professional career.

5. To prepare students to excel in Industry and Higher education by Educating Students along with High moral values and Knowledge.

Program Specific Outcomes

1. Ability to interpret and analyze network specific and cyber security issues in real world environment.

2. Ability to design and develop Mobile and Web-based applications under realistic constraints.

Industrial Visit

An Industrial cum SmartCity ExpoIndia visit for computer science and engineering students was organized during 26th September to 28th September 2018. The students of third year interacted with the stakeholders of various multinational companies. The event held at JECC Sitapura Industrial Area Jaipur. An international conference was also conducted where smart city experts and representatives across the globe gathered to discuss the solutions for the challenges that today's cities are facing in terms of efficiency, urban planning, and social and economic development in the global era.

It was the showcase of innovation for the space of Smart Cities globally. The focus was on the imperative need to empower cities and therefore to empower the people. It was a good business platform for an exceptional discussion for everyone who is working to tackle urban challenges and willing to generate opportunities for action.

Teacher's Day Celebration

It is very rightly said by our former president late Dr. A.P.J. Abdul Kalam sir that teaching is a very noble profession that shapes the character, caliber, and future of an individual. To show respect and love towards the faculty members of Department of CSE, students of respective classes celebrated Teacher's Day on 5th Sept 2018 with full enthusiasm. Students welcomed the teachers by the traditional Tilak Ceremony. Various cultural activities were organized by the students like dances, songs, stand up comedy, mimicry, enactments, technical games like Blindfold C, fun games like Pictionary along with cake cutting ceremony for their teachers. The students presented token of gratitude to their faculty members during the celebration. The event ended by Vote of Thanks and some valuable words by the respected faculty members.

Engineer's Day Celebration

Engineer's Day was celebrated in the CSE Department of JECRC Foundation, Jaipur on September 15, 2018 with full enthusiasm and zeal. About 50 students participated in the Technical events organized by the students of III year. Technical events like Let's Puzzle the C, Stars etc. were organized for the students. Let's Puzzle the C had a C program on the cardboard which was broken down into pieces to create a puzzle. Participants in 2 member teams had to merge the pieces to complete the program within maximum three minutes time. Similarly technical event Stars provided random C program of stars pattern to participants. The participants had to decide the output of particular input from the code provided. All the activities on Engineer's Day planned and organized in such a way that students enjoyed the environment of the day.

इंजीनियर्स डे पर हुई विभिन्न एक्टिविटीज

जयपुर ♦ जेईसीआरसी इंजीनियरिंग कॉलेज में शनिवार को इंजीनियर्स डे के मौके पर स्टूडेंट्स ने विभिन्न ब्रांचों की अलग-अलग एक्टिविटीज में भाग लिया। इस दौरान इलेक्ट्रॉनिक्स विभाग के रोबोटिक क्लब के स्टूडेंट्स ने एक्सपर्ट वैभव जैन से रोबोटिक्स प्रोसेस ऑटोमेशन टेक्नोलॉजी के बारे में जाना। क्लब इंचार्ज विकास शर्मा ने बताया कि रोबोटिक्स प्रोसेस ऑटोमेशन एक बहुत ही प्रचलित और अत्याधुनिक तकनीक हैं। वहीं मैकेनिकल विभाग में भी 3-डी प्रिंटिंग मशीन विषय पर गेस्ट लेक्चर हुआ, इस दौरान राजीव भार्गव ने प्रोटो टाइप मॉडल्स की जानकारी दी। वहीं स्टूडेंट्स ने पोस्टर मेकिंग कॉम्पीटिशन में भी अपनी प्रतिभा दिखाई। कॉलेज के प्रिंसिपल प्रो. विनय कुमार चांदना, कम्प्यूटर सांइस के विजय सिंह राठौड़, मैकेनिकल विभाग से प्रो.डॉ.एम पी सिंह, फर्स्ट ईयर डीन प्रो. यू.के.पारीक, डिप्टी डीन प्रो.डॉ. रेखा मित्तल ने स्टूडेंट्स को प्रोत्साहित किया।

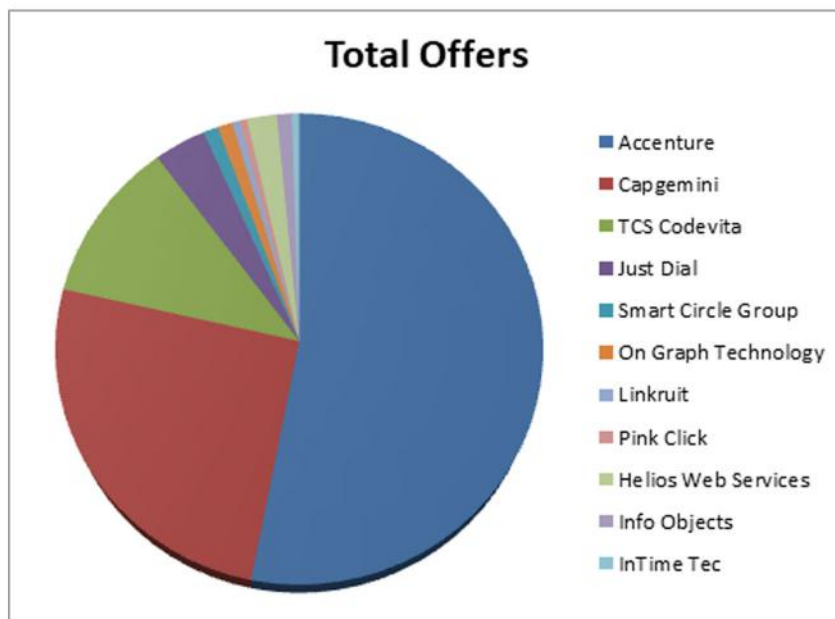पत्रिका Mon, 17 September 2018
epaper.patrika.com/c/32264313


```c
# include <stdio.h>
# include <stdlib.h>
void printRepeating (int arr[],
int size)
{
    int i, j;
    printf ("Repeating elements are");
    for (i=0; i< size ; i++)
        for (j =i+1; j <size; j++)
            if (arr[i] == arr[j])
                printf ("%d ", arr[i]);
}
int main ()
{
    int arr[]={4,2,4,5,2,3,1};
    int arr_size = sizeof(arr)/sizeof(arr[0]);
    printRepeating (arr, arr_size);
    getchar ();
    return 0;
}
```

Placement Cell

The placement cell has once again maintained the placement statistics for the students of Batch 2015-2019. Many IT giants such as Capgemini, Accenture, TCS and many other renowned companies have recruited our students successfully. The placement cell provided rigorous trainings which include Mock Interviews, Group Discussions, Communication Skills, Workshop etc. to help the students to prepare for campus placements.

Continuing with the legacy of placements, total 196 placement offers are available with the students till now (unique placements being 159) out of 233 eligible candidates from Department of CSE. Besides the top recruitments, TCS Ninja has shortlisted 90 students for the final round of interview. The placement cell is still active to place the remaining students to achieve 100% placement statistics

Total Offers

- Accenture
- Capgemini
- TCS Codevita
- Just Dial
- Smart Circle Group
- On Graph Technology
- Linkruit
- Pink Click
- Helios Web Services
- Info Objects
- InTime Tec

Interview Experience

Capgemini came to our college to conduct an on-campus drive for recruitment for analysts. This was my first interview experience with Capgemini in on campus drive in our college. The whole process had 4 rounds namely Aptitude and Essay, Technical Multiple Choice Quizzes, Technical Interview and HR Interview. After clearing first two rounds, I entered the technical interview which was divided into multiple panels. After entering the room and greeting the interviewer, I was asked to share my resume. The first half of the interview was focused on general questions. The interviewer went through my resume and asked me to introduce myself.

The interviewer asked me about my contributions in the project and then made me to write a program to print pattern in matrix with some specifications which I explained briefly. Then some technical questions related to languages C and C++ along with sorting algorithms were asked which I explained with best of my efforts. Further few HR questions such as about dream company, why should they hire etc. This round further proceeds with HR interview which focused on discussions on company's policies like ready for bond, flexibility, ready for night shifts etc. So be positive and confident while answering the questions and have faith in yourself.
Rest is all destiny!!
Vaishnavi
CSE (IV Year)

JECRC MUN:
A battle of diplomacy at JECRC

Striving and acing the aim of JECRC Foundation to present a platform for all-round development of students, JECRC Intra MUN was conducted to bring out the best of diplomats. Witnessing a massive participation of over 300 students, the first ever JECRC Intra MUN had a bar that was set too high, but wasn't a hurdle for the talented lot. The delegates were enthusiastic about putting forth their opinions on the agendas of the various committees and had deep insights about the happenings of India and the world.

JECRC MUN was inaugurated by Shri P.K. Tiwari, Senior Advisor, JECRC in presence of esteemed alumni. They have always been the strongest pillars and continue to support it to take it to greater heights. JECRC Intra MUN simulated 4 committees, namely, Lok Sabha, UNGA-DISEC, UN-HRC, and All India Political Parties Meet. Having highly debatable agendas, the four committees struggled to reach a conclusion, which was achieved by the well-versed delegates under the guidance of the Executive Board members. It was a journey, rather than a competition, in which the delegates gained a whole new outlook on the issues of the world and country.

In the closing ceremony, the best delegates were awarded and congratulated for their efforts and excellence. Executive Board members were felicitated by the Secretary General with immense gratitude. Shri P.K. Tiwari commended the work of the Organizing committee members and appreciated them. The JECRC MUN's success reflected the expanse which JECRCians excel at!

Women Connect Cell: Self Defense Training

A self defense training program was organised by the Women Connect Cell of JECRC from 17th September to 20th September 2018 in the Central Lawn, JECRC. On 17th September 2018, Self-Defense Training program started by the floral welcome of DCP Jaipur and his four trainers by Prof. (Dr.) V. K. Chandna, Principal, JECRC and Prof. (Dr.) Seema Pandey, Chairperson, Women Connect Cell, JECRC. All the female faculty members and girl students accompanied by the event coordinators and student volunteers of Women Connect Cell and around 100 people were in attendance. Trainers taught about the techniques and skills of self-defense to the participants which helped them to built up self confidence and also empower them to fight for themselves and for others also.

The participants learnt self-defense with great enthusiasm during the sessions. A valedictory function on 20th September 2018 at auditorium marked the successful completion of the training program. Ms. Tejaswani Gautam, IPS DCP, HQ Commissionerate, Jaipur was the chief guest of the event accompanied by four police trainers, Shri P. K. Tiwari, Senior Advisor, JECRC and Prof. (Dr.) A. Williamson, Registrar, JECRC. The event begins with lamp lightening and floral welcome of guests. Ms. Tejaswani interacted with audience and shared her experience of IPS training and some incidents of her life to encourage and empower women. The participants of self defense training program were awarded certificates by chief guest and Prof. (Dr.) Seema Pandey. The event was concluded by vote of thanks by Dr. Barkha Shrivastava and token of remembrances were presented to guests and the trainers.

Surgical Strike Day

On the day India marked two years of the surgical strike against terror launch pads in Pakistan-occupied Kashmir, referring to the September 18 killing of BSF soldiers, gun-loaded hands, veiled faces, armed body, that's how they enter. But what they do, is much more horrifying than it seems. The world burns in their rage and people bleed due to their envy. A yellow-black sky and the red earth is all they leave behind. The massacre which they create is all for a cause. What they do is always and only for the country.

The year of 2016 was a year which would be remembered for its historic decisions of the surgical strike by the Indian government which swayed the world. The events leading to surgical strike can be dated back to September 18th, 2016 when four militants attacked Indian army at Uri-base in Jammu and Kashmir. The Day is known as "Parakrama parv". This day denotes the patriotism, velour and courage of our great Indian soldiers.

Since then every part of our society supports this day in their own ways as:

NCC organized parades and enthusiastic works to encourage patriotic feeling. Some colleges and universities organized meeting of students with ex-service men. Multimedia Exhibitions were organized around India Gate, Delhi. RTU has also taken initiative to encourage enthusiastic and patriotic feeling within institutes of their affiliated colleges. The students of Department of Computer Science and Engineering, JECRC Foundation also supported this day by writing letters and cards for armed forces and has taken pledge to support Surgical Strike Day.

Pledge

I as a vigilant citizen of India, solemnly swear that I will support and defend our country against all enemies of country and foreign forces that I shall bear the true faith and allegiance to the same, I shall always try to be worthy of it. I with these sort of action, whole heartedly support government on every step. I always brace the true warriors of Indian forces.

JAI HIND

THANK A SOLDIER!

Today We Are Living Freely Because Many Sacrificed Their lives For The Sake Of Our Country
SALUTE TO THE GREAT SOULS!

Pratham Jain ,JECRC Foundation

Faculty Achievements

4th World Summit on Accreditation

Achieving accreditation is the strongest driving force behind one's pursuit of knowledge. To bring all such seekers of the pinnacle of wisdom assembled under one roof, the 4th WOSA was organized in New Delhi from September 7th-9th, 2018. Conducted on the theme "Challenges and opportunities in outcome based accreditation", the summit is inaugurated by HRD minister Shri Prakash Javadekar. In this Summit ideas and opinions was delivered by some very distinguished speakers in the field of accreditation. Prof.(Dr.) V.K. Chandna, Principal JECRC Foundation and Dr. Bhavna Sharma, HoD, Dept. of Computer Science and Engineering attended this three-day summit on behalf of the institution.

Covering a wide range of sub-themes, the summit aimed at making accreditation more achievable through practical knowledge and industrial exposure. The importance of accreditation has not been latent, and thus improvement is what we strive for at large. These themes were discussed and debated, and viewpoints of key speakers viz. Prof. Anil Sahasrabudhe (chairman AICTE), Prof. Jung Soo Kim (Former Sr. Vice-President, ABEEK Korea), Dr. Lincoln Wood (National Manager Accreditation, NMAC Australia), and many such esteemed personalities with a vision for accreditation.

Aiming at bringing the diverse ideas regarding the infusion of quality with accreditation, the summit was lined up with a number of plenary and technical sessions. All the incredible ideas discussed would be enforced bringing quality and more validity to the accreditation of JECRC Foundation.

Faculty Achievements

Web and Computational Summit 2018, Bangkok

Chitra Khandelwal, Senior Research Fellow, Spiritual Research Cell, JECRC represented JECRC Foundation during The Computational and Web Intelligence Summit, 2018, Bangkok, Thailand on September 14th-15th, 2018 . She presented research paper titled "Analysis of impact of meditation on body composition parameters using bio-electrical impedance method". Her research studies show that meditators have a lower Visceral Fat level as compared to the non-meditators and also meditators have low risk of lifestyle related disorders. The intellectuals from India and abroad gathered for sharing scientific acumen achieved in their respective areas.

Student Achievements

Session on Git and GitHub by CodeDocs

A session on Git and GitHub was organised by CodeDocs on September 12, 2018. CodeDocs is Free and Open-Source (FOSS) coding community of JECRC that conducts various activities like hackathons, sessions on latest technologies and initiatives like pair and learn and competitive coding. One of the most crucial problems faced by developers is how to manage the different versions of their project. The Git helps in the same and is called a Version Control Systems (VCS). Aditya Agarwal, third year student (CSE), from Team CodeDocs took a session to give the basic knowledge to these tools. Students learned basic terminology related to Git and got their hands on with some Git commands. They also worked on a live project. After that, they learned how to make code Open Sourced using GitHub. This session opened many doors like open source contribution and working in collaboration for students.

Participation in RTU Hackathon 2018

Team Xenon from JECRC participated in RTU Hackathon 1.0 held at Arya Old Campus, Jaipur. The students Kaustabh Khandelwal, Keshav Asopa, Lakshay Wadhwa, Suraj Kumar and Abhijeet Aher from third year worked on 'Rent Prediction' problem and solve it within the allotted time of 24 hours with best of their efforts. It gave them a platform to interact with fellow students, mentors & professionals from different organizations in India.

Behind CSE BYTES

Dr. Bhavna Sharma
Advisor

Ms. Manju Vyas
Technical Advisor

Ms. Priyanka Mitra
Editor in Chief

Ms. Girija Lavania
Managing Editor

Chirayu Bansal
Designer

Jayesh Joshi
Designer

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Akshita Bharadwaj
Content Writer