CSE SCOOP

A CSE MAGAZINE

CSE

DEPARTMENT OF COMPUTER
SCIENCE & ENGINEERING

CONTENTS

Inside

DIRECTOR'S DESK

Mind always searches for new doors and paths to travel, and unless the correct education guides it onto it, the purpose of an educationist fails. JECRC has been serving this higher purpose at every step they traverse with the students. We at JECRC facilitate the students with a mind-bending environment necessary for them to develop every attribute of their personality.

This newsletter by the CSE Program is an initiative to aid the people in gathering information about happenings of the department. This noteworthy attempt to notify about the progress of the college and various events being conducted by the department is much appraised. The teachers are putting their best foot forward to inhabit the inquisitiveness and curiosity among the students.

Along with this, I congratulate the faculty members on their untiring efforts to make JECRC at par with other institutes of acclaim. A sense of pride and joy runs through me seeing every staff member, and the students, taking up new challenges and exploring new fields pushing forward their own limits.

I welcome all keen and curious minds to be a part of JECRC and experience a fete of exquisite learning methodologies and opportunities to bring alive all the aspirations.
Good luck!

Mr. Arpit Agarwal
Director, JECRC

PRNCIPAL'S DESK

Technical education is seeing new reforms every once in a while, and that is rightly, the need of the hour. To bring these reforms in practice, and to offer engineering students a new vision of creation, JECRC was established eighteen years ago. With this departmental magazine, CSE Department has progressed further in making eve ryone aware of our goals and their successful achievement.

Computer Science & Engineering department is endowed with the best of faculty and staff members, deeply committed to skill based learning, and making students keen about advancements in the field. This program has procured great growth and continues to bring laurels to JECRC, making us proud by excellent results. Every field, be it research, entrepreneurship, industry, or a job; success in every dimension is achieved by the students. The faculty never fails to push students to achieve their dreams and offers guidance to turn their dreams to reality.

All career-oriented and curious queries are welcome by them, which guarantee an exponential growth to the young minds. I wish for the institute and department to progress further with an ever increasing pace, and staunch support by the endeavors of all. Let us make JECRC a synonym for knowledge. Best wishes!

Dr. V.K. Chandna
Principal, JECRC

HoD'S DESK

Vision and 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 and Mission of Department of Computer Science & Engineering

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 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.

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.

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; viz. :

Jaipur Engineering College & Research Centre (JECRC)

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.

CONFERENCE

National Conference on Contemporary Issues in Computer Technology (NCICT-2019)

Department of Computer Science & Engineering, JECRC organized a one day National Conference on Contemporary Issues in Computer Technology (NCICT-2019) on March 16th, 2019. It aims at bringing together students, scholars, researchers, academicians and industry persons to deliberate on the contemporary issues concern to computer world and research aspects of emerging technologies and applications.

The chief guest and keynote speaker of the conference was Mr. Ripu Daman, Director of Natural Group and Conserve Info-tech. He delivered his speech on Digital Banking, Security issues and authentications. More than 90 papers on different platforms presented in various parallel sessions. NCICT -2019 organized with a vision to address various issues in technology and to promote the development of smart resolution in future.

Dr. Bhavna Sharma, Head of Department, welcomed the chief guest with floral bouquet. Prof. (Dr.) Vijay Singh Rathore enlightened the delegates of the conference. Dr. Sanjay Gaur, Convener, NCICT presented memento to chief guest and presented vote of thanks. The event is organized successfully by Dr. Nilam Choudhary, Organizing Secretary, NCICT.

Industrial Visit

Jaipur Metro Rail Corporation

Experience and exposure play very important roles in building proficient engineers for the society, and acting on this fact, CSE Department organized an industrial visit to Jaipur Metro Rail Corporation as a part of the fifteen day Industrial Training program for third semester students on July 9th-10th, 2018 and July 12th, 2018. They were acquainted with the various technologies that drive the Jaipur Metro.

The staff at JMRC introduced various sections of the corporation and a brief about every part of the organization that works in collaboration to make it a successful ride every time. The visit ended with a ride in the metro from Mansarovar Metro Station to Chandpole Metro Station helping them get an insight about the working at the station.

The organized manner of their working encouraged students to explore and inherit. By seeing the constant efforts being put by the engineers and other staff members, the students felt an urge to appreciate them and work harder for their endeavors.

Training

Cyber Security Training by Cyberops Infosec

An opportunity to expand the field of expertise of students of JECRC Foundation was presented to them by collaboration with Cyberops Infosec Limited, which is a leading cyber security organization. A basic course for ethical hacking and cyber security was designed which covered all the introductory topics that were primary in order to make the students' curiosity arise about the themes.

The duration of course was 45 days which began in the month of August and continued till October. The expert trainers from Cyberops guided the students about rules of ethical hacking and taught various methodologies and vulnerabilities. This course proved to be a strong foundation for students who wish to build a career in the field of penetration testing.

A special session regarding cyber crime analysis was delivered by Mr. Mukesh Choudhary, CEO and founder of Cyberops Infosec. This session proved to be highly beneficial for students explaining to them the gravity which these cases of cyber crime are investigated with. The whole course aimed at making students well aware about the basics and fundamentals, and introduced them with various vulnerabilities, networking, virtualization, cryptography, network security, android application security, and a lot more that is required to become proficient in the field of cyber security.

A massive participation of 47 students from the CSE department was observed and certification was provided to the students at the end of it.
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Swachata Drive in JECRC

JECRC Foundation organized cleanliness drive under Swatchh Bharat Swasth Bharat Abhiyan program on Oct 2nd, 2018 to create awareness among students about cleanliness and its benefits.
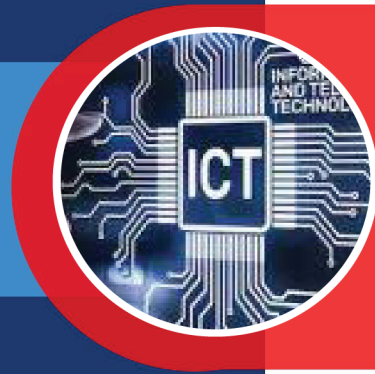
The Principal, JECRC along with faculty members and students of CSE Department participated in cleaning the college campus and putting trash in its proper place. Thereafter speeches addressing the importance of cleanliness and sanitation were delivered by Principle, JECRC. He also highlighted the vision of Hon'ble Prime Minister of India about Swachh

Bharat Mission and explained about Mahatma Gandhiji's dream of clean India. In the end all took pledge of keeping home, locality and city clean to transform the face of our country forever.
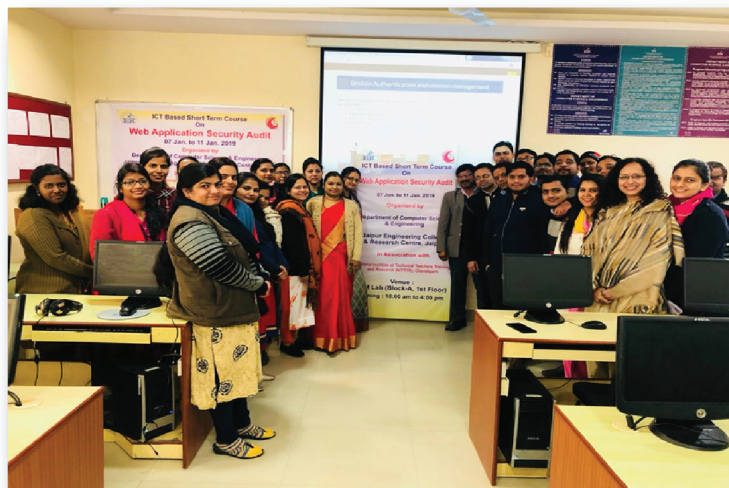
ICT Based Short Term Course

Web Application Security Audit

The ICT Based Short Term Course (STC) on "Web Application Security Audit" in association with NITTTR, Chandigarh conducted in the Department of Computer Science & Engineering during Jan 7th, 2019-Jan 11th, 2019. Ms. Manju Vyas, Dy. HoD, Department of Computer Science & Engineering inaugurated the event.

The short term course introduced website security and OWASP application security risk along with different types of cyber threats and challenges to law enforcement agencies. The participants deployed sandbox for website security during hands on session.

The speakers also discussed SQL injection, web penetration testing using open source tool, cross-site scripting: XSS, cyber laws, cryptography, session hijacking and best practices for secured programming for web application during the course. Mr. Kanishk Jain and Mr. Ashish Ameria coordinated the event and 60 faculty members attended the course with enthusiasm.
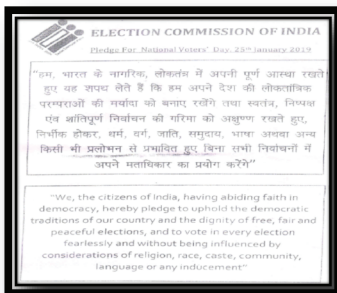
Celebrations

Celebration of Rashtriya Matdata Diwas

Department of Computer Science and Engineering, JECRC Foundation participated in celebration of Rashtriya Matdata Diwas on Jan. 25th, 2019.

Students and faculty members of the department celebrated the day with zeal and took pledge for the same.

Celebration of Teacher's Day

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.

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.

Celebration of Engineer's Day

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.

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 were planned and organized in such a way that students enjoyed the environment they are in.

Seminar on Road Safety

Road safety

A seminar on Road Safety conducted at JECRC Foundation in association with CARS (COMMUNITY ACTION FOR ROAD SAFETY) on March 5th, 2019.

The guest of honor, Sh. Anand Verdhan Shukla (Retd. IGP), Sh. Vinod Haritwal (Secretary, CARS) and Raj Kumar Sharma ji inaugurated the seminar. Sh. P. K. Tiwari ji, (Senior Advisor JECRC), Sh. M. L. Sharma ji (Vice-Chairman JECRC) Sh. O. P. Jain ji (Director, Social Initiatives) Prof (Dr.) V. K. Chandna (Principal, JECRC), Dr. Williamson (Registrar, JECRC) welcomed guest of honor. Sh. Anand Verdhan Shukla (Retd. IGP) along with his team made the students and the faculty members created awareness about the road safety measures.

The seminar ended with a vote of thanks by Dr. Barkha Srivastava.

Workshops

Workshop by Code Planet Technologies

A two day workshop on Python conducted by Code Planet Technologies, Jaipur in the IBM Lab of Department of Computer Science & Engineering during Jan. 21st, 2019 – Jan. 22nd, 2019.

Mr. Parth Darak, Founder & Director and Mr. Chandrapal Singh Deora, Co-Founder, Director & Training Head of Code Planet Technologies, Jaipur delivered contents on Python and compared existing technologies such as C, C++ and Java with Python. 62 students along with faculty members participated in the event to gain the knowledge of upcoming technology.

The speakers also discussed the significance of OCJP and SCJP and the emerging requirements of companies.

Workshop on Digital Marketing

A two day workshop on Digital Marketing conducted in the Department of Computer Science & Engineering during Feb 14th, 2019 - Feb 15th, 2019 at IBM Lab.

The workshop for students provides practical exposure of SEO/SMM/SMO. The expert, Mr. Abhay Ranjan has experience in the field of Google Analytics, SEO, SMO, Content Marketing etc.

Mr. Kanishk Jain and Mr. Ashish Ameria coordinated the event and 112 students attended the workshop with enthusiasm.

Workshop on VMware

An interactive technical workshop based on VMware - Operationalise your world was held at Hotel Marriott on July 13th, 2018 by Intel where faculty members of the Department Dr. Nilam Choudhary and Ms. Geetika Gautam along with students Namandeep Singh, Yukti Goswami, and Somil Khandelwal of 3rd year participated.

The interactive sessions of workshop emphasizes on the basic concepts of VMware defining VMware as an integrated offering that brings together VMware's industry-leading vSphere hypervisor and VMware vRealise Suites Mukti-vendor hybrid cloud management platform.

Entrepreneurship Awareness Camp

JECRC was a proud host of the Entrepreneurship Awareness Camp held on February 12th, 2019.It was jointly organized by JECRC-RTBI and Laghu Udyog Bharti with the aim to aware students of the current business eco-system along with the opportunities that are present in front of them and also the ones that are not in plain sight.

The event was graced with the presence of dignitaries like Prof. (Dr.) V. K. Chandna, Principal, JECRC, Sh. Mahendra Mishra, Gen. Secretary, LUB, NE Raj, Sh. Mahendra Khurana, Gen. Secretary, LUB, Sh. Girish Gupta, Sh. O.P Agarwal(Member, LUB), Sh. Sampat Toshniwal (Nat. Secy. LUB), Sh. O.P Mittal (National Org. Secretary, LUB) and Sh. Mukesh Agarwal, CEO JECRC-RTBI.The event was inaugurated with Vande Matram.

The speakers spoke on entrepreneurship and the challenges that a startup face through its journey. The best orator of the ceremony was Ms. Anju Singh.The ceremony ended with vote of thanks followed by National Anthem.

SOCIAL FACE of JECRC

Nashayein
The Life Saviours

Soch
kuch kar dikhane ki...

Zarurat

Suhasini
save the smile of girl child....

Aashayein
The Life Saviours

"The real definition of patriotism lies not only in being a soldier at war but by accomplishing our responsibilities as a loyal citizen."

With these enchanting words Retd. Captain G.R. Choudhary Sir inspired and appreciated our self-less SDP donors and girl blood donors in the Felicitation Ceremony organized by Aashayein -The Life Saviours on February 22, 2019 at the JECRC Foundation.

The aura was enthralled with the auspicious presence of IAS, Dr. Naveen Jain, Secretary, Skill, Labour and Employment Department and Retd. Capt. G. R. Choudhary, Indian Army, Sh. O.P. Agrawal, Chairman, JECRC Foundation, Sh. Amit Agrawal, Director, JECRC Foundation, Sh. Arpit Agrawal, Director, JECRC Foundation, Prof.(Dr.) V. K. Chandna, Principal, JECRC Foundation, Sh. Kuldeep Sharma, Faculty Coordinator, Aashayein-The Life Saviours as our guest of honour.

A total of 260 young and gracious SDP donors were honoured who wholeheartedly contributed towards bequeathing the gift of life. Along with it, 120 female blood donors were also dignified with certificates as they came out in the form of real life saviours by breaking the stereotypical beliefs. Our beneficiaries shared their profound emotions and created a heartwarming ambience in the auditorium with their prized words.

It was well quoted by Dr. Naveen Jain Sir, "We shouldn't expect change to occur while being in our comforters, we need to be the change we want to see in the society."

With an emotion to carry the same thoughts forward, every soul enlightened with the commit-ment of serving humanity, saving more lives and making more such endeavours.

Soch
Kuch kar Dikhane ki

The journey for the event Vastra Samman started 2 weeks ago, couldn't have had a better conclusion. The event, VASTRA SAMMAN conducted on Oct 26th, 2018, was a mesmerizing experience for every member of team Soch who collected a staggering 3023 units of clothes and essentials.

The count was still on the rise even minutes before, the team of volunteers left for RUHS college for the event. All such contributions and every single donation helped in making VASTRA SAMMAN 2018, a monumental success.

Suhasini

An Initiative to Save the Smile of the Girl Child

"Equality cannot be defined until it is achieved." Promoting this line of thought, Team Suhasini organized a celebration on the occasion of International Day of Girl Child on the theme "Empowering Female Population" on Oct. 11th, 2018

The event began with the lamp lighting ceremony performed by the guest speakers along with JECRC Foundation dignitaries. The guest speakers for the event were Smt. Nitasha Chordia (chairperson FICCI Flo Ladies Organization), Smt. Sumeeti Mittal (Founder Pratham shiksha and Pratham Software), and Poorvi Mittal (Co-Founder PadBank Jaipur).

The guest speakers discussed at length about the prevailing discrimination and why it should be ended. The potential solutions and the common reasons why it still exists in the society were discussed.
Along with these motivational talks, performances depicting the pain of girls were showed. Children from Suhasini's village family, from Badi ka Baas and Goner, showcased their talents. The children were felicitated with some goodies to boost their morale.
The celebration ended on a high spirited note urging everyone to never let any girl child's dream go unfulfilled and take a step towards ending discrimination.

JECRC MUN 2019

Diplomacy At It's Zenith

JECRC MUN has been celebrating the voices of diplomacy since 2012, and the eighth edition of the conference was conducted on 30th – 31st March, 2019. The inaugural ceremony took place on 30th March under the auspicious presence of Dr. Jawahar Surisetti and Ms. Hari Chandana Dasari as the chief guests. The dais was shared by Director Shri Arpit Agarwal sir, Prof. (Dr.) V.K. Chandna, Principal, JECRC, Shri P.K. Tiwari- Senior Advisor, Ms. Manu Sharma – Secretary General along with the chief guests. The ceremony began with lamp lighting, and was followed by addresses from the chief guests. In conclusion, the conference on JECRC MUN was declared open by the Secretary General.

Seven committees deliberating issues of national and international importance including the International Press were simulated which presented the opportunity to bring out the political thoughts of participants. The conference conducted four sessions where delegates across the country participated and worked under Executive Board members to present potential solutions to problems being discussed.

JECRC MUN 2019

Diplomacy At It's Zenith

On Day 1, the Rules of Procedure were discussed and GSL was conducted. After the two sessions of Day 1, a Socials Night was organized at Hotel Grand Maple in which the delegates enjoyed thoroughly. On Day 2 of the conference, the deliberations became more serious and sincere and the focus shifted on coming to a conclusion. The Executive Board members directed them and marked the delegates' performances.
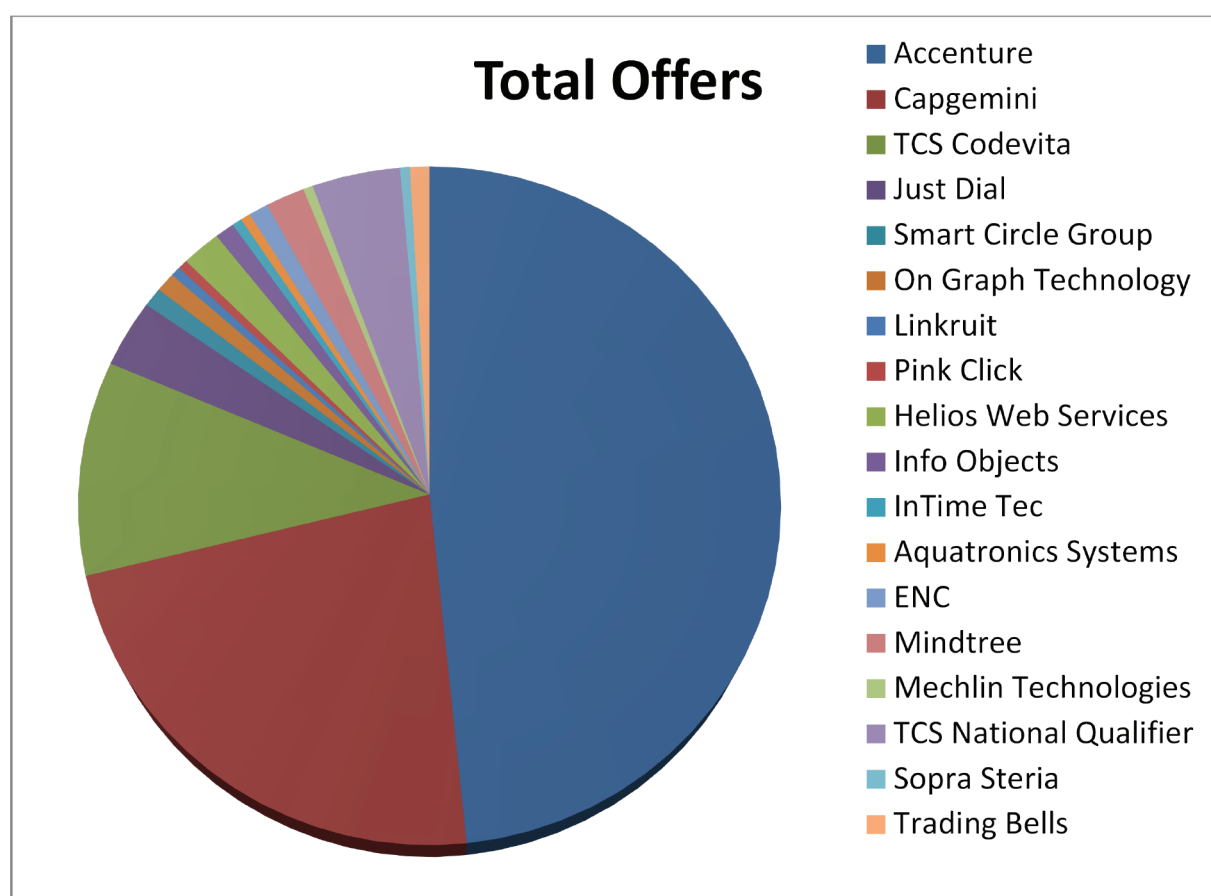
The conference ended successfully with the Valedictory Ceremony where the outstanding performers were awarded. The Best Delegate and High Commendation of each committee were awarded with cash rewards. Special and honorable mentions were also made to boost delegates' confidence. The Executive Board was felicitated for their contribution. The Organizing Committee, Conference Staff and the Secretariat were also felicitated for their outstanding work in the organization of the event. Shri PK Tiwari Sir presided as the chief guest during the ceremony.

JECRC MUN 2019 succeeded at their aim of making MUN a widespread phenomenon and making the youth aware of the political situations around the country and the world.

PLACEMENT CELL 2019

JECRC has once again set the road for the students of Batch 2015-2019 by placing them in many IT giants such as Capgemini, Accenture, TCS, Sopra Steria and many other renowned companies. The placement cell helped the students to prepare for campus placements by providing rigorous trainings. A whopping 216 placements offer are available with the students of Department of Computer Science and Engineering till now out of 233 eligible candidates (unique placements being 173). The placement season is still active to place the remaining students.

Total Offers

- Accenture
- Capgemini
- TCS Codevita
- Just Dial
- Smart Circle Group
- On Graph Technology
- Linkruit
- Pink Click
- Helios Web Services
- Info Objects
- InTime Tec
- Aquatronics Systems
- ENC
- Mindtree
- Mechlin Technologies
- TCS National Qualifier
- Sopra Steria
- Trading Bells

Renaissance 19

Athalon

Sports teaches you character, it teaches you to play by the rules, it teaches you to know what it feels like to win and lose, it teaches you about life. To inculcate these qualities, JECRC organized annual sports meet –Athlon 2019 from March 5th –9th, 2019. The games were held after the college hours.
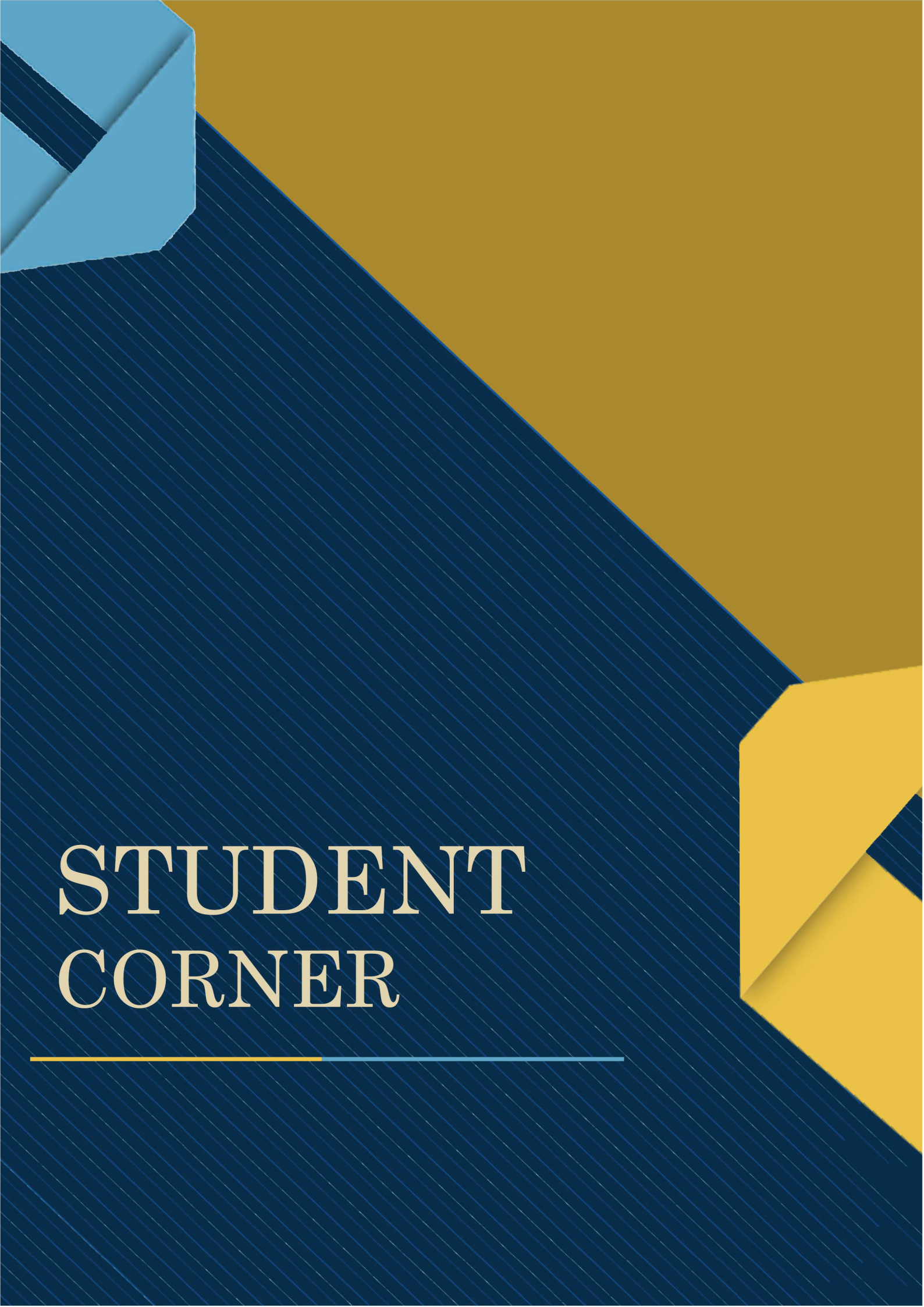
Students participated with full zeal in a total of 16 games. Athlon'19 wrapped up with a prize distribution ceremony by the dignitaries of JECRC, Sh. Arpit Agrawal, Director, JECRC, Prof. (Dr.) Vinay Chandna, Principal, JECRC, Sh. M. L. Sharma, Vice Chairman, JECRC. The event ended with the words of inspiration by the dignitaries paving a way for new aspirations and pushing the normal limits of what is achievable!

RENAISSANCE 19

In Renaissance 2019, the annual Techno-Cultural fest of JECRC College, Department of Computer Science & Engineering organized various events during March 16th-19th, 2019 to bring out the best of abilities of students. These were in form of various quizzes, coding competitions and hardware assembling challenges. A platform for students to showcase their technical skills was created.

STUDENT
CORNER

Subito

This event conducted on March 19th, 2019 focused on web and android development in which team participation was required. This required both front end and back end designing and brought out the creativity of students. It focused on enhancing the development skills of students.

Hardware Assembling

In computer, both software and hardware hold equal importance. To make the students friendly with the working of CPU, Hardware Assembling was organized on March 17th, 2019. Students took part in teams of two, and had to assemble a dismantled CPU under a time of 5 minutes. The fastest one which assembled the CPU correctly and made it bootable was rewarded. The winners were Harsh Vijay and Himani Jain. Consolation prizes were also distributed.

Procode

This was organized on Hackerrank to promote competitive programming on March 17th, 2019. It continued for 2-3 hours where the students had to code solutions to given problems under a time frame. Along with coding skills, fundamentals of mathematics, data structures and algorithms, time and space complexities were also tested. Any language could be chosen and full internet access was allowed, making the students ready for future coding challenges.

Blind Code

Organized first time in the history of Renaissance, Blind Code was introduced with an amazing concept on March 16th, 2019. The participants had to code the solution to a given problem with the monitors turned off, without making any syntactical error. It checked the confidence, concentration and expertise of the students in their coding skills. This new event witnessed great participation of all coding enthusiasts.

Just C

Just C was conducted on March 18th, 2019 as a coding and quizzing competition where the students flaunted their C language skills. It consisted of two rounds. The first one was a Quiz in which students were asked questions that required prompt answers. The first round eliminated some students and the qualified participants played the second round which involved coding. Some real-life problems were focused in this. This event saw massive participation from students of all years and branches.

FACULTY CORNER