



THE TECH WRAP

Volume 7 | Issue 3 | July-September, 2024



School of Engineering & Technology Chitkara University, Himachal Pradesh

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The Tech Wrap, Volume 7 Issue 3 (July-September 2024)

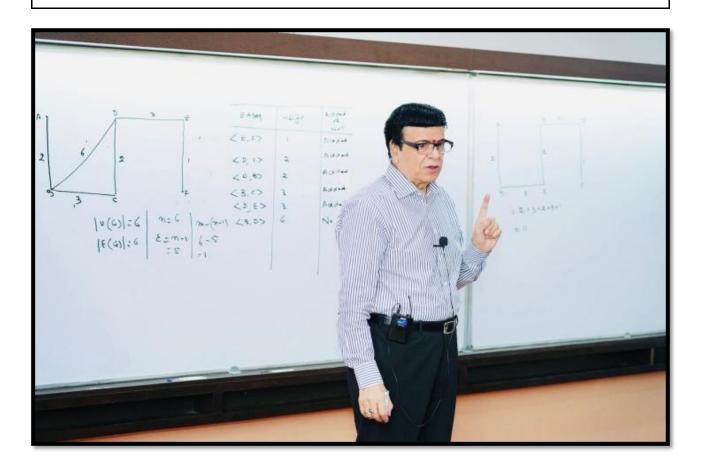




Session on Discrete Mathematics by Hon'ble Chancellor Sir

"Teaching is more than imparting knowledge; it is inspiring change. Learning is more than absorbing facts; it is acquiring understanding."—William Arthur Ward

A series of special mathematics classes were led by our Honorable Chancellor Sir Dr. Ashok. K. Chitkara. The sessions aimed to enhance mathematical skills among students and promote a deeper understanding of mathematical concepts. It was a culmination of enthusiasm, engagement, and profound learning. This special session, designed to enhance the academic and personal growth of the students, saw unprecedented levels of participation and motivation among the students. Throughout the sessions, the students displayed remarkable enthusiasm. This vibrant participation was a testament to the Chancellor Sir's ability to connect with the students on a personal level. His encouragement and supportive demeanor made the students feel valued and confident in expressing their ideas. The interactive format of the session, combined with the Chancellor Sir's engaging teaching style, ensured that each student was personally involved. Sir's emphasis on real-world applications and critical thinking resonated deeply with the students, making the sessions both informative and inspiring.















Chancellor Lecture Series Talk: NEP 2020

"The future of our nation rests on the quality of education we provide today."

Chancellor Lecture Series Talk: NEP 2020-Undertaking Transformative Initiatives, the sixth session under this series by Dr. Ajay Sharma was centered on the highly pertinent topic: NEP 2020 -Undertaking Transformative Initiatives.

The session commenced with a brief introduction to NEP 2020, presented by highlighting its vision to promote holistic and inclusive education across the university. Sir emphasized the need for a comprehensive overhaul of the education system, and how NEP 2020 is addressing long-standing challenges.

The primary objectives of the session were to educate participants about the key provisions of the National Education Policy (NEP) 2020, discuss transformative initiatives aimed at enhancing the quality of education, identify challenges associated with the implementation of NEP 2020 while exploring potential solutions, and foster collaboration among stakeholders to promote effective strategies for educational reform.















Chancellor Lecture Series Talk: Key Measures of Success

"Success does not come from what you do occasionally; it comes from what you do consistently." – Marie Forleo.

The fifth session under the Chancellor Lecture Series Talk, Edition 2024 focused on the much relevant topic- Key measures of success. Dr. Meenu Khurana, Pro Vice-Chancellor, Chitkara University, Himachal Pradesh focused on elucidating the key measures of success, providing participants with practical strategies and ways to enhance their personal and professional growth. The session emphasized the importance of crafting a personalized definition of success, understanding the different levels of success, and preparing SMART goals.

Additionally, Dr. Khurana shared inspiring stories to illustrate the importance of the right attitude and passion in achieving success. She encouraged the participants to reflect on what success means to them individually, rather than relying on external standards or conventional measures, and also understand the concept of micro and macro-level success.

The session aimed to empower faculty members with the techniques and motivation to define their own paths to success and pursue their goals with renewed enthusiasm.









TECHNICAL EVENTS



Beyond Coding: Becoming a Well-Rounder Tech Innovator

The Chitkara Alumni Association Network (CAAN), in collaboration with IIC, organized a motivational session entitled "Beyond Coding: Becoming a Well-Rounded Tech Innovator" for BE CSE students. The session was conducted by Mr. Sahil David, an esteemed alumnus of the CSE batch of 2010 from Chitkara University, Himachal Pradesh. He is a Senior Software Engineer in AI/ML at GSK, London.

The motivational session was truly enlightening for aspiring tech innovators. The speaker's emphasis on the importance of soft skills, interdisciplinary knowledge, and continuous learning resonated well with the audience. The practical examples and personal anecdotes shared highlighted the significance of adaptability and holistic development in the tech industry. Attendees appreciated the interactive Q&A session, which provided valuable advice and actionable steps to enhance their career trajectories.







Innovation & Intellectual Property: Driving Research Forward

Office of Patent Facilitation, Licensing & Consultancy (OPFLC) organized a two-day workshop titled "Innovation & Intellectual Property: Driving Research Forward" under IIC's auspices. The goal of the workshop was to investigate how innovation and intellectual property (IP) interact to advance research in a range of fields. The main aim of the workshop was to clarify the function of intellectual property rights in promoting creativity. to talk about IP protection and management best practices. Encourage the participants to construct a prototype for a concept and to see if a concept has been done before.

By highlighting the strategic significance of intellectual property rights, the workshop "Innovation & Intellectual Property: Driving Research Forward" effectively met its goals.







Innovative Cyber Security Strategies for the Modern Tech Industry

The Department of Computer Applications in collaboration with NSS and IIC organized a session entitled "Innovative Cyber Security Strategies for the Modern Tech Industry" for students. The speaker for the session was Mr. Gulshan Matta, Network Administrator, OIT, Chitkara University, Himachal Pradesh.

The session was highly informative and engaging. It provided valuable insights into the latest advancements in cyber security and highlighted practical approaches for safeguarding digital assets in today's rapidly evolving tech landscape. The speaker presented complex concepts in an accessible manner, facilitating a deeper understanding among attendees. Interactive discussions and real-world case studies enriched the learning experience, making the session not only educational but also highly relevant to current industry challenges. Overall, it was a wellorganized and impactful event that equipped students with essential strategies to enhance their cybersecurity frameworks.







Innovation with ReactJS: Building Dynamic UIs from Scratch

Google Developer Student Club (GDSC) at Chitkara University, in collaboration with the Institution's Innovation Council and the IEEE Student Branch, hosted a tech talk titled "Innovation with ReactJS: Building Dynamic UIs from Scratch". Mr. Muneer Puri, a Senior Software Engineer at Asambhav, Noida, shared his extensive expertise on React technology and its industry applications. Participants were introduced to ReactJS through live demonstrations of creating dynamic and responsive user interfaces from scratch. The session also explored current industry trends, job opportunities, and the future scope of ReactJS. The talk organized by Dr. Osho Sharma, faculty coordinator at GDSC, provided participants with an exceptional opportunity to enhance their knowledge and gain practical insights from an industry expert.







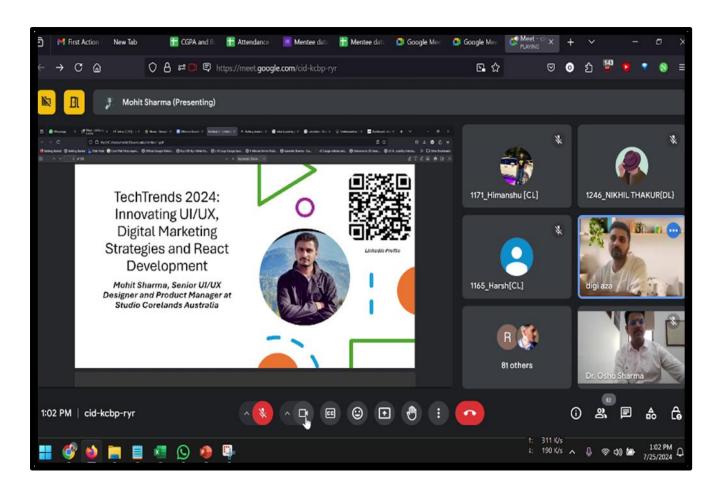
TechTrends 2024: Innovating UI/UX, Digital Marketing Strategies, and React Development

The Google Developer Student Club (GDSC) in collaboration with ACM and the IEEE Student Branch, under the aegis of Institution's Innovation Council, hosted an online workshop titled TechTrends 2024: Innovating UI/UX, Digital Marketing Strategies and React Development .

Mr. Mohit Sharma, a Senior UI Designer and Product Manager at Studio Corelands, Australia, shared his extensive expertise in UI/UX development, Digital Marketing using WordPress, React technology, and its industry applications.

The session organized by Dr. Osho Sharma, faculty coordinator of GDSC, focused on current industry trends, job opportunities, and the future scope of Digital Marketing strategies.







Global Industry Insights: Enhancing Your Profile through Innovation

The Department of Computer Applications in collaboration with IIC and Office of International Affairs (OIA) organized a session entitled " Global Industry Insights: Enhancing Your Profile through Innovation". The speaker for the session was Dr. Shubham Sharma, Senior Manager, Office of International Affairs, Chitkara University, Himachal Pradesh.

The session was highly informative, highlighting global career opportunities for individuals with engineering education. The speaker provided practical advice and cutting-edge techniques for improving professional profiles, students found the material to be especially pertinent to profile creation. The thought-provoking talks and useful examples gave attendees a thorough understanding of how to use innovation to advance their careers. After leaving, the participants were inspired to use these insights to create better, more competitive profiles in the international market.













Innovate & Inspire: Empowering Youth through Entrepreneurship & Innovation

The "Innovate & Inspire" event was organized by CEED in collaboration with SOET. The event featured Mr. Gourav Mahajan, Director of CEED, discussing entrepreneurship and business creation. Highlights included a student-led discussion, success stories from CEED startup founders, and a guided tour by Incubation Manager Ms. Abha Sharma on funding and registration. Employment support from the H.P. Government was also announced. The event aimed to empower aspiring young entrepreneurs.







Workplace Etiquettes (Session II -Communication Etiquettes)

"Etiquette is the lubricating oil of an organization. It ensures that the wheels move smoothly and without friction."

In today's digital age, mobile phones have become an indispensable part of our lives, including in the workplace. However, the ubiquitous presence of these devices necessitates a thoughtful approach to their usage, particularly in professional settings. A workshop conducted by Mr. Viney Khurana, Director, Chitkara University Professional Development Centre (CUPDC) under the series - Workplace Etiquettes (Session II -Communication Etiquettes) addressed these very concerns, focusing on three key areas: general phone usage at the workplace, phone usage in meetings, and messaging etiquette. The workshop highlighted the importance of maintaining a balance between accessibility and professionalism. Mr. Khurana highlighted that while phones can enhance productivity by enabling quick communication and access to information, their misuse can lead to distractions and a decrease in work efficiency. The workshop underscored the importance of maintaining professionalism and clarity in all written communications like maintaining Professional Tone, Responding on Time, and Maintaining workplace boundaries. The workshop on communication etiquette provided valuable insights into the nuanced aspects of phone usage in the workplace. By adhering to the guidelines discussed, employees can foster a more focused, respectful, and efficient work environment. Implementing these practices not only enhances individual productivity but also contributes to a more cohesive and professional workplace culture.







 $5^{\text{th}} - 9^{\text{th}}$ August, 2024



5 Days Hands-on Workshop on Prototyping IOT Solutions with Arduino: Concept to Creation

With the focus on Upskilling students beyond the classroom, Dr. Monika Parmar and Dr. Harpreet Kaur from the School of Engineering and Technology, Chitkara University, took the initiative to conduct a 5-day hands-on workshop, "Prototyping IoT Solutions with Arduino: Concept to Creation". The workshop was designed to provide students with a comprehensive understanding of IoT technologies and hands-on experience in building Internet of Things (IoT) prototypes using Arduino.

The three main phases of the workshop were: Phase 1: Sensor Synergy: Smart Sensing with Arduino, where students engaged in hands-on sessions to interface various sensors, including temperature, humidity, gas sensor, color sensor, IR sensor, ultrasonic sensor Bluetooth module, and motion sensors with Arduino and Node MCU ESP8266 Wi-Fi module.

Phase 2: Bot Builders: Create your own bot, where the students take their sensor knowledge to the next level by integrating it into dynamic, mobile robotic cars.

Phase 3: Chat Coders: Build your own Messaging app, where students covered IoT communication protocols and built their own chat applications using the MQTT protocol (MQTT broker and MQTT subscribers).

Throughout the workshop, students were actively engaged and the enthusiasm was truly commendable.







Competing Through Innovation: The Intersection of Research & IPR

In today's rapidly evolving technological landscape, innovation is a critical driver of competitive advantage. Recognizing this, the Department of Computer Applications in collaboration with IIC, Chitkara University, organized an insightful workshop titled Competing Through Innovation: The Intersection of Research & IPR. The Resource persons for the workshop were Dr. Shivendu Prashar, Assistant Dean (PhD Program), Assistant Director (IIC), Chitkara University, Himachal Pradesh, and Dr. Sandhya Sharma, Assistant Dean, Innovation & Consultancy Cell, Chitkara University.

This event aimed to explore the vital role that intellectual property rights (IPR) play in fostering and protecting innovation in the tech industry. The Workshop highlighted how IPR can incentivize innovation by offering legal protections that encourage investment in research and development. Without such protections, the risks associated with innovation—such as potential infringement and loss of competitive advantage—could deter investment and hinder progress. The event provided a comprehensive overview of how intellectual property rights are integral to the innovation ecosystem. By understanding and leveraging IPR, researchers and developers can enhance their competitive edge, safeguard their creations, and contribute to a thriving technological future. The insights shared during this workshop underscore the importance of integrating research and intellectual property strategies to drive innovation and achieve longterm success. Three students namely Rahul Samanta, Kartik Thakur, Manishi Sharma were awarded gifts for sharing innovative ideas.







Expert Talk on Recent Innovations in Machine Learning

ACM student chapter under the aegis of IIC organized an expert talk on Recent Innovations in Machine Learning

Dr. Munish Kumar, Assoc. Prof., Department of Computational Sciences, Maharaja Ranjit Singh Punjab Technical University, demonstrated the necessity and research directions in handwritten digital recognition, cattle face recognition, recommender system (web example), newborn recognition, and disease predictions.

This hybrid session co-hosted by internal expert Dr. Dileep Kumar, focused deeply on elaborating the complete framework starting from image acquisition, pre-processing, enhancement, feature extraction, model deployment, parameters tuning, and prediction/ recognition. The session fulfilled its objective of provoking curiosity about ML among students.







Innovate your career: Creating new opportunities in Data Analytics and Data

IEEE Student Branch at Chitkara University, in collaboration with GDSC, hosted a highly engaging expert talk titled "Innovate Your Career: Creating New Opportunities in Data Analytics and Data Science".

Mr. Ashwin Goyal, an IIT Ropar alumnus currently with Coding Ninjas, with a rich background in data science and analytics captivated the audience with his in-depth knowledge and real-world experience.

A major focus of the session was on the growing career opportunities in the fields of data science and analytics. Mr. Goyal emphasized the importance of mastering key tools and technologies, including Tableau, R, SQL, Python, and Machine Learning (ML). His insights underscored the significance of these skills in staying competitive and relevant in the rapidly evolving job market.







22nd-23rd August, 2024

Tech-Driven Innovation: Transforming the Game Development Landscape

A two-day hands-on workshop titled "Tech-Driven Innovation: Transforming the Game Development Landscape" remotely led by Vaibhav Rakheja, a seasoned gameplay programmer at Ubisoft, Quebec, Canada, an alumnus of CSE, batch 2012 and offline mentored by inhouse faculty Mr. Karthick B, was a unique initiative by ACM Student Chapter at Chitkara University, in collaboration with CAAN. The workshop was organized under the guidance of Dr. Rani Kumari, ACM faculty mentor, supported by Ms. Shivani Gautam.

The workshop focused on practical abilities in Unity, Blender, and other game creation technologies, giving students an immersive learning experience. The chance to work directly on game development projects while utilizing the newest methods and resources available to the business was unmatched for participants







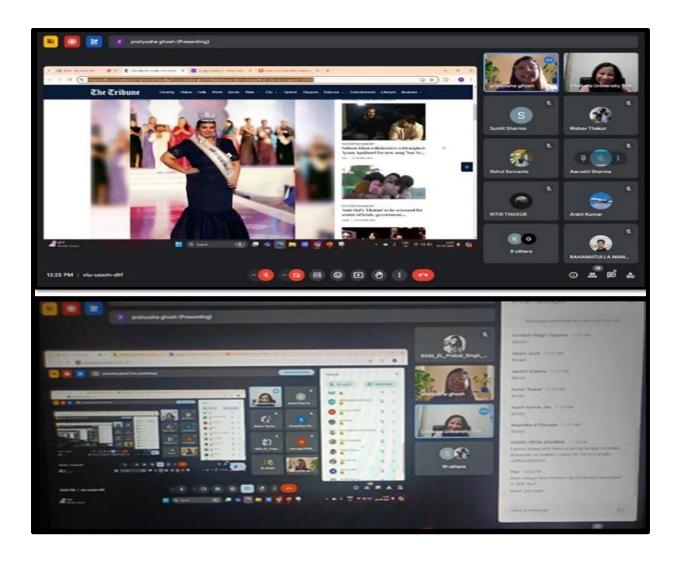


Driving Innovation: Insights from a path in operation & process excellence

Chitkara Alumni Association Network (CAAN), in collaboration with IIC and ACM Student Chapter, organized a motivational session entitled "Driving Innovation: Insights from a Path in Operations and Process Excellence" for Engineering and BCA students. The speaker for the session was Ms. Pratyusha Ghosh, an alumnus of ECE, Batch of 2010, Chitkara University, Himachal Pradesh. She is currently serving as a Senior Process Excellence Manager at Swiggy, Bengaluru.

The speaker effectively used examples from leading companies like Swiggy and Amazon to illustrate how innovation can transform operations and process excellence, particularly in the e-commerce and catalog management space. The discussion on optimizing catalog processes and driving efficiency in complex operations was especially insightful, providing practical strategies that can be applied to our own work. Overall, it was a valuable session that offered real-world insights and actionable takeaways.







One Year From Now - Industry Insight of Hiring

"The art of communication is the language of leadership." – James Humes.

In present competitive job market, employers are looking for candidates who can communicate effectively, collaborate smoothly, and adapt to new challenges. To sensitize budding aspirants about these skills, a two-day workshop was organized focused on themes like effective communication by a candidate is the backbone of any selection criterion; how candidates can influence & persuade the hiring in their favor; how the ability to present ideas confidently can significantly impact decision making; taking risks in communication, either through public speaking or initiating difficult conversations, fosters innovation and establishes leadership.

The speaker of the event Mr. Bhalla discussed how the workforce evolves, and how the ability to collaborate, communicate, and lead effectively will set individuals apart, making the mastery of soft skills a key investment in one's career.



Mr. Bhalla appreciated Chitkara University for taking pains in trying to instill such skills in its students. He also lauded CUPDC for its working behind the scenes in bringing this vision of employability to all practices. Organizers thank Mr. Viney Khurana for making this possible, Dr. Meenu Khurana, Dr. Nitin Verma, Dr. Ashutosh, Ms. Ravita, Dr. Nagesh, and Dr. Utpal for encouraging their students to attend the workshop, and take the maximum benefit of it and Ms. Akanksha for organizing the whole event. Kudos to the experts of Languafina who have been working incessantly in upskilling the students.













Innovate with Hacking to Earn Ethically

The Department of Computer Science and Engineering, in collaboration with the ACM Student Chapter, organized a workshop titled "Innovate with hacking to earn Ethically".

The session was led by industry experts Harsh Kumar (Application Security Engineer) and Harinder Singh (Endpoint Security Engineer), who provided valuable insights into ethical hacking and cyber security.

The workshop covered essential aspects of ethical hacking, including bug bounty, freelance opportunities, and the importance of innovation in the field. It offered participants a real-world perspective on cyber security, beginning with an overview of cyber security fundamentals and networking basics to help attendees grasp key concepts.

Through interactive discussions, participants learned how to apply ethical practices to tackle security challenges, empowering them with the knowledge and tools to explore career opportunities in this growing industry. The event fostered a culture of ethical responsibility and forward-thinking, inspiring the next generation of cybersecurity innovators. The workshop was organized under the guidance of Dr. Vidhu Baggan and Dr. Rani Kumari.









IEEE SSH- 2024: The Hackathon

Chitkara University under the aegis of IEEE Region 10 (Asia Pacific and Japan), IEEE India Council, IEEE Hongkong Section, IEEE Delhi Section, and in collaboration with KIET hosted the IEEE Region 10 Hackathon on Sustainable Solution for Humanity (SSH)-2024, the most esteemed international hackathon.

Sponsored by leading organizations including Code Tantra, and Amcat, the event brought together a vibrant community of innovators and tech enthusiasts to provide sustainable solutions to problems categorized in 8 tracks viz education, AR/VR, environment, generative AI, green energy, healthcare, open innovation, and blockchain.

Hon'ble Vice Chancellor Dr. Rajnish Sharma, Secretary IEEE Delhi Section, addressed the participants at the gala online inaugural followed by addresses of Prof. Lance Fung, Director IEEE R10, Dr. Deepak Mathur, Vice President IEEE MGA, Dr. Debabrata Das, Chair IEEE India Council, Dr. Preeti Bajaj, IEEE Chair Adhoc on Outreach and retention.













09th -10th September, 2024

SIH 2024- Internal Hackathon

Chitkara University organized an Internal Hackathon at the University level as preliminary round -1 of the Smart India Hackathon (#SIH2024) followed by round-2, under the aegis of IIC, Ministry of Education, Govt of India in collaboration with Center of Excellence for Sustainability.

58 teams, comprising 348 students (from the School of Engineering and College of Nursing) showcased their talent in solving the problems of industries, NGOs, and Government departments (including States and Central), published on the SIH portal.

Problem statements on which students worked were related to smart education, traffic management systems, contract farming, mining management, Air quality indexing, Travel and Tourism, Cultural heritage, Health care, etc.

15 shortlisted teams were mentored by faculty experts for a week out of which 13 teams have been nominated for their participation in SIH 2024. Through this event, Dr. Arun Lal Srivastav and Dr. Shivendu Prashar, event coordinators, along with a panel of Esteemed Experts evaluated all the teams to represent the University at the prestigious Smart India Hackathon 2024.











09th -10th September, 2024

Worldly Wisdom: Vol. 3

"With every story shared, we deepen our understanding and enrich the collective wisdom of our community."The Office of International Affairs at Chitkara University, Himachal Pradesh, recently hosted "Worldly Wisdom" Vol. 3, an enriching platform where faculty and staff illuminated their global experiences.

Prof. Dr. Rajnish Sharma, Vice Chancellor, represented our institution at The Asia Universities Summit 2024 in Kuala Lumpur, Malaysia, from 29th April to 1st May 2024, alongside Honourable Pro-Chancellor Ma'am, Dr. Madhu Chitkara, and esteemed senior colleagues. At THE Awards Asia 2024, Chitkara University was proudly shortlisted among eight finalists for the coveted Research Project of the Year: STEM award. Honorable Pro-Chancellor ma'am further distinguished herself by participating in the Presidential Panel for the Country Pavilions Showcase, spotlighting India and the Philippines.

During the Global Summer Program, Dr. Monika Parmar, Dr. Abhishek Thakur, Dr. Dileep Kumar Sharma, and Dr. Gaurav Garg traveled to Puebla City, Mexico, from 18th June to 12th July 2024, where they imparted knowledge to international students. Their collaboration with distinguished professors led to the signing of MoUs and the initiation of joint research projects, paving the way for future collaborations and inviting professors to join our upcoming



Global Week.

Dr. Vibha Ayri attended an international conference on radiation applications in Spain, presenting her research paper at the University of Granada, Spain from 10th to 12th June 2024.Funded jointly by SERB and Chitkara University, this visit unveiled potential avenues for collaborative research, funding, and scholarly publications.







Engineers' Day - A Celebration of Innovation and Excellence

The Chitkara University ACM Student Chapter celebrated Engineers' Day, paying tribute to the legendary Sir M. Visvesvaraya. The day celebrated the contributions of engineers to society and inspired students to pursue careers in engineering. The event aimed to highlight the critical role engineers play in addressing global challenges while encouraging creativity and collaboration among students.

The event was packed with excitement and learning, featuring inspiring talks, hands-on challenges, and interactive activities. Students participated in a fun quiz and a creative balloon challenge, where they teamed up to craft unique balloon designs. The event also featured giveaways and a theme-based quiz, with the top 3 participants winning exclusive prizes. It was a wonderful opportunity for students and faculty to come together, fostering innovation and celebrating engineering achievements.











Deeksharambh 2024 - Student Induction Program

The Deeksharambh 2024 Student Induction Program welcomed first-year students to the academic community. The initiative was designed to facilitate a smooth transition into university life, providing a comprehensive overview of what students could expect during their academic journey. The program included engaging activities, workshops, and informational sessions aimed at helping students acclimate to their new environment Key components of the program featured introductions to faculty members, campus resources, and academic expectations. Interactive sessions covered essential topics such as time management, effective study techniques, and mental health awareness, equipping students with tools to thrive both academically and personally. Additionally, peer mentoring sessions paired newcomers with senior students, fostering a supportive network for sharing experiences and advice. Cultural activities, including performances and team-building exercises, helped to create a sense of community and encouraged students to connect. Overall, Deeksharambh 2024 successfully promoted a welcoming atmosphere, inspiring first-year students to actively participate in university life and build lasting connections with their peers and mentors. The positive feedback received highlighted the program's effectiveness in easing the transition to university and enhancing student engagement from the outset. The enthusiastic participation of the 680 students from the Invincible batch of 2024 reflected their eagerness to embrace opportunities for academic and personal excellence













STUDENTS' ACHIEVEMENTS



2nd-3rd September, 2024

HackIndia- 2024: A Web3 Hackathon Adventure

Chitkara University ACM Student Chapter hosted HackIndia-2024, India's largest and most esteemed Web3 hackathon. Sponsored by leading organizations including CSharpCorner, Alchemy, Ample, Lotus, and RAIR, the event brought together a vibrant community of innovators and tech enthusiasts. The hackathon was enriched by mentoring from experts in the field. Sahil Aujla, Developer Relations from Alchemy, Canada, and Stephen Simon, RD, CSharpCorner (India and Asia Pacific), shared their insights and expertise, adding immense value to the event.

In a lively and dynamic environment, participants gave their all to innovative Web3 projects over the course of 48 intense hours. They furiously competed for monetary awards and were ecstatic to get interesting items like HackIndia pens, t-shirts, and certificates. The top three winners, who will move on to the next round at the Radisson Blue Hotel in Delhi, were thrilled to receive prizes of ₹9,000, ₹7,000, and ₹5,000, respectively.

HackIndia-2024 proved to be an incredible learning experience where 80+ teams and 300+ attendees forged lasting connections, exchanged innovative ideas, and had a fantastic time, cherishing lifelong memories and making new friends.









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Students' Participation in University Events

A Cleanliness Drive was organized by the NSS team in Collaboration of Centre of Excellence of Sustainability for C.S.E students at adopted Village Kallujandha. The main objective of this event was to enhance environmental awareness and encourage community engagement in waste management. 12th September, 2024



Cleanliness Drive by NSS at Village Kallujandha



On the occasion of World Ozone Day, the NSS Unit of Chitkara University, Himachal Pradesh, organized a pledge and declamation event on 16th September, 2024 to raise awareness about the importance of ozone layer protection. Students from the Computer Science and Engineering department seized the opportunity to participate in the event.



16thSeptember, 2024

World Ozone Day Celebration







Mission LiFE Awareness Programme Chitkara University in Himachal Pradesh hosted the Mission LiFE Awareness Programme in collaboration with TERI EIACP, focusing on waste management practices and attracting approximately 250 students from all the different streams.



25th September, 2024



"If you want to be happy for a year, plant a garden; if you want to be happy for life, plant a tree." The Tree Plantation Drive "Plat4Mother" was organized by the Centre of Excellence for Sustainability with the collaboration of the NSS unit by the UGC Notification to create a greener and more sustainable environment for students, staff, and the community. Students from the Computer Science and Engineering department took part in the event and made their contributions. 17th September, 2024

World Cleanup Day, 2024







"Cleanliness is next to Godliness"- Mahatma Gandhi.

A successful cleanliness drive on the occasion of World Cleanup Day was conducted at Chitkara University. The event was organized by the Centre of Excellence for Sustainability with the Green Clean Ambassador Club, Chitkara University Himachal Pradesh in collaboration with NSS volunteers, NYKS (Nehru Yuva Kendra Sangathan) and Let's Do It India Foundation. 20th September, 2024

World Cleanup Day, 2024





SPORTS



National Sports Day, 2024: Cross-Country	On National Sports Day, Chitkara University Himachal Pradesh, organized a cross-country event, celebrating the spirit of sportsmanship and fitness. Students from the C.S.E department participated with enthusiasm, showcasing their athletic prowess. The event started early at 6:00 am with a challenging route that tested the stamina and endurance of the participants.	29 th August, 2024
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Kabaddi tournament: Le- Panga	The Hostel Committee Club hosted an exciting two-day Kabaddi tournament, "Le-Panga," at Chitkara University in September, uniting students from various hostels in a spirited celebration of teamwork and sportsmanship.	28 th -29 th September, 2024

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FACULTY ACHIEVEMENTS

2nd September, 2024

Dr. Arun Lal Shrivastav Ranked Top 2% of scientists worldwide by Stanford University and Elsevier

In a remarkable recognition of academic excellence, Dr. Arun Lal Srivastav, an Associate Professor at Chitkara University, was honored by Dr. Madhu Chitkara, the Pro-Chancellor of the university. He was acknowledged for being ranked among the Top 2% of scientists worldwide, as detailed in a prestigious report by Stanford University and Elsevier. This esteemed recognition underscores Dr. Srivastav's significant contributions to his field and highlights Chitkara University's commitment to fostering research and innovation. His achievement not only showcases his dedication and hard work but also serves as an inspiration for both students and faculty to pursue excellence in their academic endeavors.





Recognition Award from TiE Chandigarh

Chitkara University, Himachal Pradesh has been recognized by TiE Chandigarh for its significant contributions to fostering and nurturing the entrepreneurial ecosystem in the region. This honor highlights the university's pivotal role in driving innovation and cultivating entrepreneurial talent, bridging the gap between academia and industry. By equipping students with essential real-world skills and leadership capabilities, Chitkara University is actively shaping the future of the region, producing dynamic, industry-ready entrepreneurs and leaders who are poised to make a lasting impact. This recognition not only celebrates the university's achievements but also emphasizes its commitment to empowering the next generation of innovators.



Dr. Anshu Sharma and Dr. Vibha Ayri received appreciation for organizing One-week online FDP from 18th to 24th September 2024 on "Data Analytics: Theory to Applications" under the aegis of Academic and Administrative Development Centre - Association of Indian Universities, Chitkara University, Himachal Pradesh.





SPRINGER NATURE





25th September, 2024

RESEARCH & PUBLICATIONS

International Conference on Computing, Analytics, and Networks (ICAN 2024)

The 4th edition of the International Conference on Computing, Analytics, and Networks (ICAN 2024) was collaboratively organized by Chitkara University, Punjab, and Chitkara University, Himachal Pradesh. Conducted in a hybrid format at Chitkara University, Punjab, the conference successfully united professionals, researchers, and industry experts to discuss the latest advancements in computing, analytics, and networking.

Participants were treated to engaging keynote speeches, insightful paper presentations, and interactive workshops, all of which provided excellent opportunities for knowledge exchange and collaborative networking. The success of the event was made possible by the dedication and efforts of a committed team of reviewers, session chairs, and committee members, whose hard work ensured a smooth and enriching experience for all attendees. This conference not only showcased cutting-edge research but also strengthened the connections between academia and industry, setting the stage for future innovations in the field.

Honorable VC Sir Dr. Rajnish expressed his gratitude to the team members—Dr. Pradeepta Sarangi, Dr. Ramamani Tripathi, Dr. Ashutosh Dubey, Dr. Utpal Shrivastav, Dr. Hakam Singh, Dr. Nagesh, Dr. Kapil Sharma, Dr. Osho Sharma, Dr. Abhishek, Dr. Shanker, and Mr. Neeraj—for their invaluable time, effort, and dedication. Their contributions were crucial not only to the success of the individual sessions but also to the overall achievement of ICAN 2024. Dr. Rajnish acknowledged that such teamwork and commitment are what make conferences like ICAN possible, fostering a spirit of collaboration that drives innovation and knowledge sharing in the field. The collective efforts of this remarkable team have set a high standard for future events.









PUBLICATIONS

S. No.			Name Of The Journal / Conference
1	Shivani Gautam,Dr. Rajesh Bhatia,Dr. Shaily Jain	Developing an Effective Focused Crawler to Retrieve Data of Indian-Origin Scientists and Utilizing Text Classification for Comparative Analysis	IJECE
2	Hakam Singh, Enhancing clustering performance: an analysis of Ashutosh Kumar the clustering based on arithmetic optimization Dubey algorithm		International Journal of Advanced Technology and Engineering Exploration
3	Rinku, Ashutosh Kumar Dubey, Sushil Kumar Narang, Neha Kishore		SSRG International Journal of Electronics and Communication Engineering
4	Manoj Kumar Mishra, Chetan Sharma, Shamneesh Sharma, Sunil Kumar, Arun Lal Srivastav	Exploring Antecedents, Consequences, Research Constituents and Future Directions of Circular Economy: A Predictive Analysis in the Preview of Text Mining	Journal of the Knowledge Economy
5	Ramamani Tripathy, Rudra Kalyan Nayak, Hakam Singh, Nilamadhab Mishra	A Spectral Clustering Approach for Prediction of Helical Motif from Human Cholesterol	4th International Conference on Smart Data Intelligence (ICSMDI-2024)



6	Arun Lal Srivastav, Lata Ran, Prakriti Sharda1, Akansha Patel, Naveen Patel, Vinod Kumar Chaudhary	Sustainable biochar adsorbents for dye removal from water: present state of art and future directions	Adsorption
7	Ravita Chahar, Ashutosh Kumar Dubey	Machine Learning-based Sentiment Analysis: A Comprehensive Review	International Conference on Cognitive Robotics and Intelligent Systems
8	Payal Kaushal, Meenu Khurana, K R Ramkumar	Comparative analysis of reactive routing protocols for vehicular ad-hoc network communications	Bulletin of Electrical Engineering and Informatics
9	Ravita Chahar, Ashutosh Kumar Dubey, Sushil Kumar Narang	A Comparative Analysis of Machine Learning Algorithms with Bagging and Boosting for Mental Health Assessment	SSRG International Journal of Electronics and Communication Engineering



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10	Dileep Kumar Sharma, Jainy Sachdeva, Chirag Kamal Ahuja, Abhinav Singh	A Novel Hybrid Multimodal Medical Image Fusion Scheme Based on Non-subsampled Shearlet Transform	Circuits, Systems, and Signal Processing
11	Shahbaz Afzal, Abhishek Thakur, and Pankaj Singh	Optimization of Cloud Migration Parameters using Novel Linear Programming Technique	4 th International Conference on Electrical and Electronics Engineering (ICEEE)
12	Promila Devi , Gian C. Rana , Sita Ram Sharma , Sanjeev Kumar	Instability Analysis Study of the Jeffrey Nanofluid Flow through a Brinkman-Darcy Porous Medium	Iraqi Journal of Science
13	Abhishek Thakur, Shamneesh Sharma, Tushar Sharma	Design of Semantic Segmentation Algorithm to Classify Forged - Pixels	12th IEEE International Conference on Communication Systems and Network Technologies
14	Abhishek Thakur, Rajeev Ranjan	Evaluate the Performance of Deep CNN Algorithm based on Parameters and Various Geometrical Attacks.	Wireless Personal Communications



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15	Anni Maria, Rajnish Sharma, K K Mishra	Growth of electronic devices to circumvent the upcoming challenges from Artificial Intelligence	2023 First International Conference on Advances in Electrical, Electronics and Computational Intelligence (ICAEECI)
16	K K Mishra, Sonia Chahar, Rajnish Sharma	An extensive investigation of structural, electronic, and optical properties of inorganic perovskite Ca3AsCl3 for photovoltaic and optoelectronic applications: A first-principles approach using Quantum ATK tool	Solid State Communications
17	NishaRana, DineshEffect of Electromagnetic Field on Vibrations of Nonlocal Elastic Cylinders with Double PorosityNantu SarkarNantu Sarkar		Journal of Vibration Engineering & Technologies
18	Sidhant Sharma, Pradeepta Kumar Sarangi, Bhisham Sharma, Girija Bhusan Subudhi	Implementation Analysis of Ransomware and Unmanned Aerial Vehicle Attacks: Mitigation Methods and UAV Security Recommendations	
19	Pradeepta Kumar Sarangi, Bhisham Sharma, Lekha Rani, Monica Dutta	Satellite Image Classification using Convolutional Neural Network	
20	Gaurav Mehta, Shaily Jain, Prasenjit Das, Vikas Tripathi	Machine Learning Approach for Malware Detection and Classification using Bio-Inspired Algorithms	International Conference On Evolutionary Algorithms And Soft Computing Techniques
21	Promila Devi , Sanjeev Kumar and Sita Ram Sharma	Double Diffusive Convection in a Rotating Compressible Walter (model) Viscoelastic Fluid Saturating a Porous Medium	



	Paper Presentation in Conferences				
S. No.	Name	Organized By/ Title	Dated	Name of Conference	
1	Tapas Sharna	SRM in association with National Chung Cheng University, Taiwan	4 th -6 th September, 2024	International Conference on Precision Bio-Medicine and Sustainable Smart City Development	
2	Prof. Ashok Kumar	IEEE, MP Section, "The Art of the Stroke: Machine Learning Insights into Cricket Shot Execution with Convolutional Neural Networks And SVM"	12 th -14 th July, 2024	2nd World Conference on Communication & Computing (WCONF - 2024)	
3	Prof. Ashok Kumar	IEEE, MP Section, Forgery Fighters: The CNN-SVM Edge in Currency Security	12 th -14 th July, 2024	2nd World Conference on Communication & Computing (WCONF - 2024)	





PATENTS

Patents Granted

Sr No.	Title	Inventor	Application No	Granted date	Design /Utility
1	Cleaning Glove For Vacuum Cleaner	Dileep Kumar Sharma, Abhilasha Sharma, Rani Kumari	403522-001	24-07-2024	Design
2	Pencil-Stand With Sharpener And Eraser	Hakam Singh, Kapil Sharma, Ramama Tripathy	403523-001	02-09-2024	Design

Patents Filed

S. No.	Title	Inventor	Filing Date	Application No	Design /Utility
1	Portable turban pin straightener box	Harpreet Kaur, Gurjot SIngh	31-07- 2024	202411058224	Utility
2	SmartSole: Footwear with Integrated Bluetooth Pump System for Enhanced Connectivity and Feedback	Arshdeep Rana, Divij Sharma, Navneet Kaur	31-07- 2024	202411058218	Utility
3	Smart scanning technology for image authentication	Navneet Kaur, Monika Parmar	31-08- 2024	202411066039	Utility
4	AI- Enabled Intelligent Food Warmer	Rinku, Ashu Taneja	30-09- 2024	202411075610	Utility
5	System For Elevating Agriculture Through Intelligent Water Management	Divij Sharma, Muskaan Kakkar, Arshdeep rana, Navneet Kaur	30-09- 2024	202411074084	Utility
6	Safer Automatic LPG Gas Cylinder On/Off System	Shivendu Prashar, Koushik Adak	30-09- 2024	202411074076	Utility
7	TEMPERATURE REGULATING PLATES	Tapas Sharma	30-09- 2024	202411074059	Utility
8	Artificial Mother's	Rajnish	30-09-	432318-001	Design



	Mammary Apparatus For Laboratory Rat/Mice	Srivastava, Osho Sharma	2024		
9	Reconfigurable Disposable Plate	Kapil Sharma, Hakam Singh, Pradeepta Sarangi	30-09- 2024	432321-001	Design

FACULTY DEVELOPMENT PROGRAMS







18th -24th September, 2024

Data Analytics: Theory to Applications

One-week online FDP on "Data Analytics: Theory to Applications" organized by the Academic and Administrative Development Centre at Chitkara University, (AIU-CUHP-AADC) under the aegis of Association of Indian Universities and in collaboration with IQAC-Chitkara University, Himachal Pradesh concluded with resounding success benefiting 92 participants from five countries (USA, Dubai, Saudi Arabia, India, and Abu Dhabi) through experts from four countries (Bangladesh, Columbia, India, and Abu Dhabi) shared their knowledge.

The various sessions organised to cover the breadth and depth of Data Analytics in the FDP were by Dr. Alberto Camargo Azcuenaga, Aden University, Columbia, on Data cleaning-Data visualization.Dr. Meenu Khurana, Chitkara University, HP on Data wrangling skills.

Dr. Neetu Mittal, Amity University, Noida delivered on Data visualization.Mr. Jayant Jha, Presight.ai, Abu Dhabi on the ABC of Data analytics.Dr. Deepali Salwan, Dono consulting on Data insights: Generative AI for transformative analytics.Mr. Devang Sareen, Upgrad, on Exploratory data analysis, using Tableau.Dr. Minaxi Dassi, Chitkara University HP, on Graphical analysis using Origin.Mr. Aman, UpGrad, delivered on Data preprocessing. Dr. Mohammad Hossain Mollah, School of Engineering, Technology and Sciences Independent University, Bangladesh on Data analysis in research through R/SPSS.Dr. Ashwin Goel, HRS Group delivered on Exploratory data analysis using R.Dr. Vikas Khullar, Chitkara University, Pb, on Data visualization, Data reporting using Python and Data in research.

The FDP was highly interactive and amongst all Ms. Tanushree Thappa, PhD. Scholar, Graphics Era University, was certified to be the most active participant in the FDP. Excellent feedback was received from participants.

The efforts of the organizing committee, including Dr. Pradeepta, Dr. Abhishek, Dr. Kapil, Dr. Monika, Dr. Vibha, Dr. Anshu, Dr. Ramamani, and Dr. Vijay, are certainly worth mentioning. Their dedication and hard work were instrumental in the successful execution of the event, ensuring a rewarding experience for all participants.

A special acknowledgment goes to Dr. Rajnish Sharma, the Hon'ble Vice Chancellor,



The Tech Wrap, Volume 7 Issue 3 (July-September 2024)

whose leadership facilitated the establishment of the AADC Centre a year ago. Under his guidance, the centre has successfully organized six international Faculty Development Programs (FDPs) since its inception.



Sl No.	Name	Name of FDP	Dates	Certifying Organization
1	Dr. Anshu Sharma			AIU, Chitkara University, HP
		Data Analytics: Theory to	18 th to 24 th September, 2024	CHITKARA UNIVERSITY HIMACHAL PRADESH
2	Dr. Vibha Ayri	Applications	Septemeet, 2021	OT INDIANCIAL CARGE
3	Ms.Abhilasha Sharma			San Entr



4	Dr.Vijay Kumar Sinha			
5	Dr.Gaurav Garg			
6	Dr.Praveen Kanth			
7	Dr.Ramamani Tripathi			Institution's Innovation Council, MHRD
8	Dr.Dileep Kumar Sharma	IIC Innovation Ambassador Training Program	Jan-Sep 2024	
9	Dr.Navneet Kaur	(Basic and Advanced level)		COUNCIL (Ministry of Education Initiative)
10	Dr.Abhishek Thakur			GOVERNMENT OF INDIA
11	Dr.Shahbaz Afzal			
12	Dr.Latika Kakkar			
13	Dr.Harpreet Kaur			
14	Ms.Shivani Gautam			
15	Dr.Shankar Aggrawal			
16	Dr. Vibha Ayri			



17	Dr.An
	Kuma

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UNIVERSITY LEVEL ACTIVITIES & HIGHLIGHTS





12th August, 2024

National Librarians Day

"The more that you read, the more things you will know. The more that you learn the more places you'll go."

National Librarians Day was celebrated at Tagore Library. This day holds special significance as it celebrates the birth anniversary of Padma Shri Dr. S R Ranganathan, the father of library science in India. Readers' Rendezvous-A mini-book exhibition was organized at Tagore Library to celebrate this special occasion. The exhibition displayed an impressive collection of books on various subjects, highlighting the diversity and richness of the Library's resources. Books authored by Hon'ble Chancellor Sir were displayed in the exhibition.

We extend our heartfelt gratitude to our Chancellor, Sir Dr. Ashok K. Chitkara, for his presence at the event. Sir's insightful remarks and commitment to the value of libraries were truly inspiring and encouraging. The exhibition witnessed many students and faculty participating and engaging with the books on display, further strengthening our community's bond with the library.











78th Independence Day

Chitkara University, Himachal Pradesh, celebrated the 78th Independence Day with vibrant enthusiasm and patriotic fervor, embodying the vision of "Viksit Bharat @ 2047." The ceremony began with Dr. Rajnish Sharma, Vice Chancellor, hoisting the national flag and leading the salute alongside Dr. Ajay Sharma, Registrar, Prof. Meenu Khurana, Pro-Vice Chancellor, and other distinguished faculty and staff members.

The event was marked by the release of pigeons, symbolizing freedom, and a disciplined march past by NCC Cadets and Security Guards, who paid homage to the National Flag. A special ceremony honored the exceptional NCC Cadets for their significant contributions.

Following the formal proceedings, a tree plantation drive was conducted, reflecting a commitment to environmental sustainability. The cultural program that followed was lively and deeply engaging, performances by NCC Cadets and students from various clubs captivated the audience, with one moving performance by the NCC Cadets highlighting the life and sacrifices of soldiers, leaving many in tears.

In his closing address, Dr. Rajnish Sharma extended heartfelt Independence Day wishes, fostering a strong sense of pride and national unity among the attendees. The celebration at Chitkara University was a powerful blend of academic dedication and profound national pride, showcasing the university's commitment to nurturing both intellect and patriotism.







Chitkara University representation at the prestigious IEEE R10 Conference TENSYMP-2024

Chitkara University, HP was the academic collaborator for the prestigious TENSYMP Conference. Hon'ble Pro-Chancellor, Dr. Madhu Chitkara, and Dr Rajnish Sharma Vice Chancellor, Chitkara University, Himachal Pradesh, participated in the IEEE R10 conference TENSYMP inaugural hosted at Welcome Hotel, New Delhi on 27th September 2024.

Pro Chancellor Ma'am was the Guest of Honor during the inaugural ceremony and shared the stage with - Dr. V K Narayanan, ISRO, Prof. Lance Fung, Director, IEEE R10, Mr. Deepak Mathur, VP, IEEE MGA, Dr. Anand Srivastava, VC, NSUT, New Delhi, Dr. Subrata Mulhopadhyay, IEEE Delhi section and General Co-Chair for TENSYMP2024, Dr. A Q Ansari, Chair, IEEE Delhi section, Dr. Prerna Gaur, IEEE Delhi section and General Chair, TENSYMP2024.





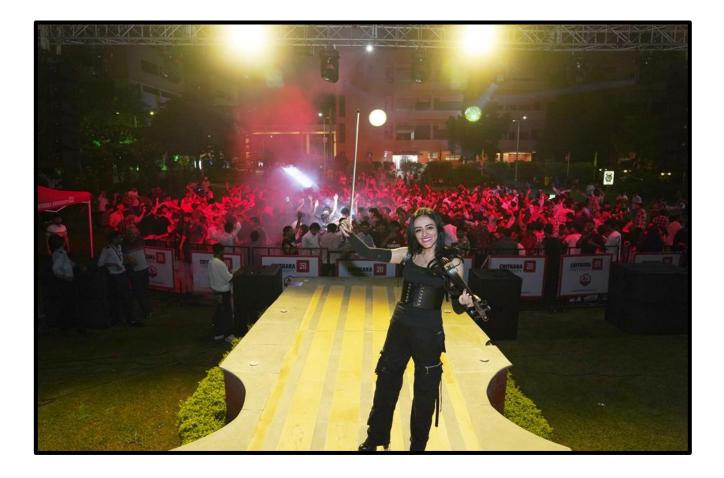
CELEBRATIONS



Music Fiesta

"Without music, life is a journey through a desert." - Pat Conroy. Students and faculty of the School of Engineering and Technology enjoyed and participated wholeheartedly in the festivities organized on the University premises. Chitkara University came alive with the vibrant "Music Fiesta" featuring the renowned DJ Lamiss Amya. The event was a resounding success, drawing students into an electrifying atmosphere that showcased the university's exceptional organizational skills. Accompanied by DJ Shandy, Amya delivered captivating beats that kept the crowd energized and engaged throughout.







The GRATUS 2024: Fresher's Event

"Believe in yourself and all that you are. Know that there is something inside you that is greater than any obstacle".

The GRATUS 2024, a fresher's event at Chitkara University, was a vibrant and dynamic celebration, marked by a blend of traditional and contemporary performances. The evening began with a warm and inspiring welcome, followed by the graceful Ganesh Vandana, setting a positive tone for the festivities.

The event showcased the talents of 24 contestants, each of whom demonstrated their skills through a ramp walk, various performances, and an engaging Q&A session. Highlights of the evening included a spirited Bhangra performance, a visually stunning Western-fusion dance, and a captivating musical performance, all of which contributed to a lively and entertaining atmosphere.















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