

BIT N BYTES: CSE INSIGHTS



<https://www.dpgitm.ac.in/>

Vol.1, No.1

“Exploring Boundless Horizons: Where Innovation Meets Technology - CSE Chronicles-2023”



**DPG Institute of Technology and Management,
Gurugram**

**(Approved by AICTE, HSTES & Affiliated to State Government
M.D. University, Rohtak)**

EXPLORE THE WORLD OF TECHNOLOGY AND INNOVATION

Computer Science is the foundation of modern technology.

Unleash Innovation:

B.Tech CSE offers a platform to explore and unleash your creativity. In this digital age, computer science is at the forefront of innovation, driving advancements in technology, artificial intelligence, and beyond. As a CSE student, you'll have the opportunity to be a part of innovative developments.

Endless Career Opportunities:

The demand for skilled computer science professionals is ever-growing. Whether you're passionate about software development, cybersecurity, data science, or emerging technologies like blockchain and machine learning, a B.Tech in CSE opens the door to a wide array of career opportunities across industries.

Problem-Solving Skills:

Computer Science is not just about coding; it's about solving real-world problems. B.Tech CSE equips you with analytical and problem-solving skills that are applicable in various scenarios, making you a valuable asset in any professional setting.

Global Impact:

In today's interconnected world, computer science plays a pivotal role in addressing global challenges. From developing solutions for climate change to enhancing healthcare through technology, B.Tech CSE provides a platform to contribute to positive change on a global scale.

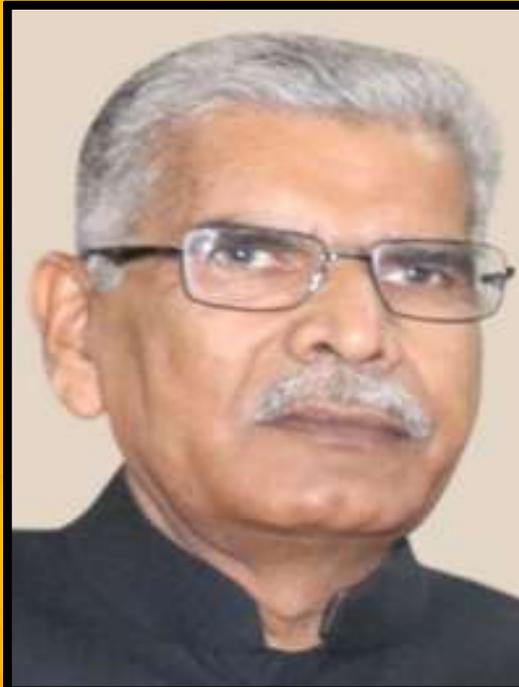
MESSAGE DESK



Dr. PREETI GAHLOT
Managing Director

I take this opportunity to congratulate the faculty and students on the launch of CSE departmental magazine "Bit and Bytes: CSE Insights"!

This achievement is a testament to the dedication, hard work, and creativity that the faculty and the students have invested in bringing this vision to life. The magazine not only showcases the exceptional talent within our CSE department but also serves as a platform to celebrate the innovative spirit and accomplishments of our faculty and students. I am confident that "Bit and Bytes" will become a valuable platform for sharing insights and fostering intellectual exchange. Well done!



Prof. Dr. R.C. KUHAD
Director

I am delighted that the Department of Computer Science & Engineering, DPG Institute of Technology & Management has decided to inaugurate its magazine "Bit N BYTE: CSE INSIGHTS" in January 2024. I extend my hearty congratulations to the faculty members, students, and other stakeholders of this initiative. I am sure this magazine will serve as a platform for sharing knowledge, fostering a sense of community, celebrating our achievements, and keeping connectivity. I am confident that it will not only contribute to our academic endeavors but also provide a glimpse into the innovative spirit that sharpens our students too. I take this opportunity to congratulate dedicated faculty & and student editors for this commendable beginning. I wish to advise everyone to work towards this magazine's success in the coming time.

MESSAGE DESK



MR. T.R. NARULA
REGISTRAR

Dear CSE Faculty and Students,

Congratulations on the successful launch of the “Bit n Bytes: CSE Insights”, CSE departmental magazine! Your collective efforts have given the CSE department a powerful voice, showcasing the brilliance, innovation, and dedication that define us.

This magazine is not just a publication; it's evidence of the transformative impact we can achieve together. Your commitment to excellence is not only admirable but also a source of inspiration for the entire institution. Well done, and let this be the first of many more to come!

Dear Faculty and Students,

Congratulations on the successful launch of the inaugural issue of our CSE departmental magazine! This milestone not only showcases the talent within our institution but also fosters a spirit of collaboration and innovation. I commend the efforts of Dr. Sarika Chaudhary (HOD CSE), Ms. Parveen Kumari (Assistant Professor, CSE), and student editors and look forward to future editions that will undoubtedly inspire and showcase the brilliance of our CSE department.



Dr. MUKESH YADAV
DEAN ACADEMICS



Dr. SARIKA CHAUDHARY
HOD CSE

Dear Colleagues and Students,

I extend heartfelt gratitude to our esteemed Management, Director Sir, and Registrar Sir for their unwavering support and motivation in bringing forth our CSE departmental magazine. Your vision and encouragement have propelled us toward this milestone.

Congratulations to the faculty and our talented students for their dedication and hard work in crafting our inaugural issue. Let this magazine be a tribute to our collective spirit of innovation and collaboration. Here's to many more inspiring editions ahead!

CONTENT

**CONTENT ON
PAGE NUMBER**

1

ABOUT CSE DEPARTMENT

2

VISION & MISSION

3-5

EVENTS ORGANIZED

6

MILESTONE'S ACHIEVED

7-8

STUDENT ACHIEVEMENTS

9-11

FACULTY ACHIEVEMENTS

12

BUILDING FUTURE LEADERS

13

CAREER DEVELOPMENT

ABOUT CSE DEPARTMENT

Welcome to the pulsating heart of technology, where dreams turn into code and ideas become reality. Since its inception in 2011 under the esteemed M.D. University Rohtak, our Department of Computer Science and Engineering proudly presents a mosaic of brilliance, creativity, and breakthroughs. Join us in celebrating a journey that transcends time, as we unfold the pages of our departmental magazine, echoing a decade of technological triumphs and future aspirations.



Career Opportunities: Endless possibilities await graduates in the dynamic field of Computer Science.

- Software Developer/Engineer
- Data Scientist
- Cybersecurity Analyst
- Artificial Intelligence (AI) Engineer
- Web Developer
- Database Administrator
- Cloud Computing Specialist
- Mobile App Developer
- IT Project Manager
- Robotics Engineer

DEPARTMENTAL VISION & MISSION

VISION

To become leaders in providing academic excellence with career development skills and nurturing the students to compete globally with the curriculum that imparts theoretical foundations and hands-on experience of Computer Science and Engineering and also build social and ethical values needed to make significant contributions to society.



MISSION

- To achieve Academic excellence through innovative learning practices.
- To collaborate with industries to give opportunities to students to develop their employability and entrepreneurial skills.
- To prepare students to adapt to the challenges of an ever-changing market needs.
- To enrich students with professional ethical values and high integrity to serve the society.

EVENTS ORGANIZED



WEB DESIGN COMPETITION: WEB WEAVERS

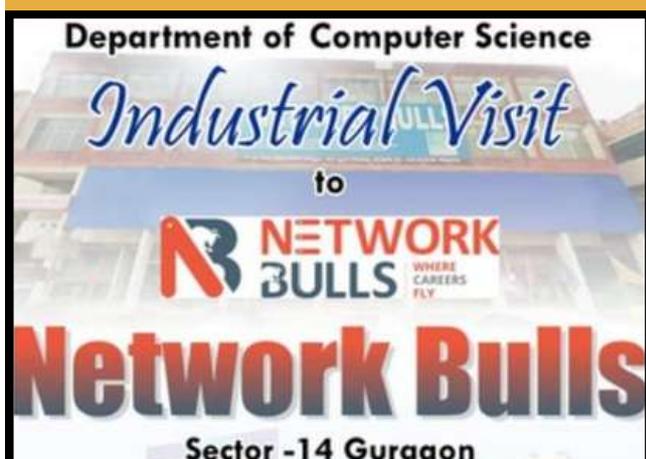
The website design competition was designed to train participants in critical thinking skills and to complete the work by the deadline. Participants improved their teamwork skills, gained connections with other designers, and developed prototyping skills, making them more adaptable to any problem-solving situation.

Overall, it was an engaging, informative, and highly relevant event for anyone interested in staying up-to-date with the latest advancements in the world of web development.

NATIONAL WOMEN'S DAY CELEBRATION

The members of Rashtriya Suraksha Samiti organized the event based on the theme "SURAKSHIT NARI, KISKI JIMMEDARI". Women's safety is a crucial concern in India and a lot of organizations started working on it after Nirbhaya's case. Women should adopt some self-defense tips and tricks so that it proves helpful during the worst scenarios for them. The primary and frontier tip for women is that if it seems even slightly unsafe it's better to get out of that place immediately. These tips are discussed with the girls so they can protect themselves from any difficult times.

A skit on "Rani Laxmi Bai" was enacted which conveyed the inspiring message to the girls.



INDUSTRIAL VISIT

An industrial visit to Network Bulls was organized for 2nd-year students. An industrial visit is a field trip or excursion to a manufacturing or production facility, usually as part of a student's education in a technical education program. The purpose was to observe and learn about real-world applications of the concepts and techniques being taught in the classroom.

EVENTS ORGANIZED

ORIENTATION DAY: AARAMBH 2023

An orientation program-AARAMBH-2023, organized to welcome the new batches in the first year at the DPGITM Campus on 23-25th August 2023.

The event was inaugurated by Mr. Surender Gahlot (Gen. Secretary), Prof. R.C. Kuhad (Director), Mr. T.R. Narula (Registrar), and Dr. Mukesh Yadav (Professor & Dean Academics).



Fresher's Party: Navaagat 2023

We had a blast at Navaagat, the freshers party of DPGITM, held on 28th October 2023. It was a day of fun, music, and dance, where we welcomed the new batch of students and celebrated their arrival. Navaagat means "newcomer" in Sanskrit, and we hope that our new friends feel the warmth and excitement of being part of the DPGITM family.

EVENTS ORGANIZED

INNOVATION TRIBUTE: CELEBRATING Dr. APJ ABDUL KALAM'S LEGACY

A poster-making competition entitled: "Space and Beyond Exploring the Universe of Innovation" was organized on 16th October 2023 on the occasion of "National Innovation Day". The competition aimed to inspire a deeper understanding of space-related concepts, stimulate scientific inquiry, and encourage imaginative thinking to unlock the limitless potential of the cosmos. The celebration served as a fitting tribute to Dr. APJ Abdul Kalam and the values he stood for. It was a day filled with patriotic fervor and a commitment to innovation for a brighter future.



UNDERSTANDING DIGITAL LOGIC: HANDS-ON MULTISIM LIVE SIMULATOR

The workshop offered hands-on experience, enabling students to practically engage with digital logic concepts. With Multisim Live Simulator, participants engaged in activities that reinforced their understanding of logic gates, circuits, and their applications. The hands-on approach aimed to make complex concepts more accessible and tangible for the participants.



UNLEASH YOUR INNER POTENTIAL BE THE BEST VERSION OF YOURSELF

The mentoring event, "Unleash Your Inner Potential: Be the Best Version of Yourself," held at DPG Institute of Technology and Management on November 21, 2023, was an enlightening and transformative experience for the participants. The event was organized by the Institution Innovation Council in collaboration with Dr. Priyanka Verma, a renowned counselor and psychologist.



MILESTONE'S ACHIEVED

MOU signed with Employability.life. Employability.Life brings experience to education, delivering Agile project experiences inside the campuses and with industry partners. Its unique Experiential Microcredentials (XPMC) framework combines doing and learning, preparing learners for the challenges and opportunities of the contemporary workplaces.

डीपीजी आईटीएम संस्थान में 'भविष्य में शिक्षा' पर कार्यशाला का आयोजन



हयुमन इंडिया/यूरो ग्रुप प्रा. लि. डीपीजी इंजीनियरिंग विद्यालय में शिक्षा' विषय पर कार्यशाला का आयोजन 25 नवंबर को हुआ है। डीपीजी आईटीएम कॉलेज और एम्प्लॉयबिलिटी लाइफ एम्प्लॉयबिलिटी लाइफ प्रा. लि. के बीच एक समझौता हुआ है जिसके तहत 25 नवंबर 2023 को इस समझौते पर हस्ताक्षर हुए। एम्प्लॉयबिलिटी लाइफ एक नई शिक्षा के एक वैश्विक नेटवर्क है, उनके सीटिओ मनीश शोखा ने इस पर हस्ताक्षर किये हैं।

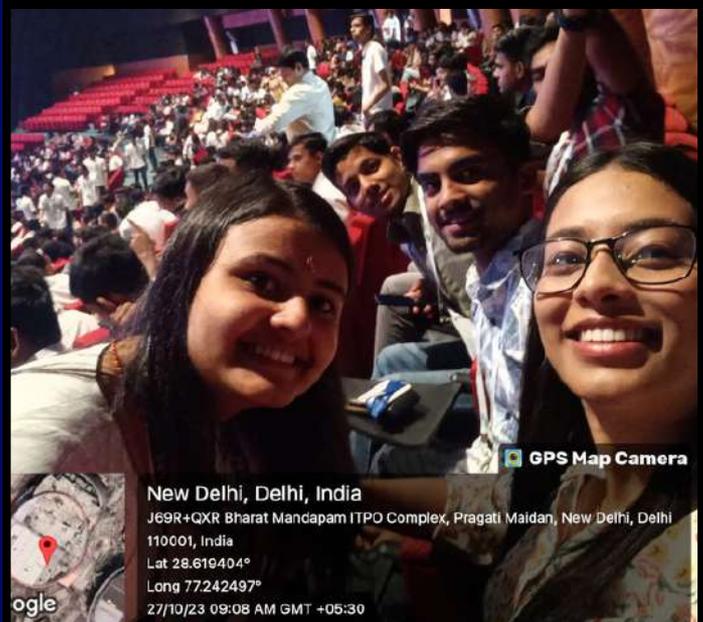
सौर्य कंपनी से राजादास गुप्ता एवं डीपीजी आईटीएम की एमडी डॉ. म. राहसोत ने हस्ताक्षर किये हैं। गैरलाभकारी के द्वारा इस संस्थान एक कार्यशाला का आयोजन इसी नवंबर को किया जा रहा है। इस संस्थान में भारत, सतलज एवं

इस प्रकार है: प्रौद्योगिकीय परिवर्तन, डिजिटल अर्थव्यवस्था, भूमंडलीकरण के नए चमूने इत्यादि। इन सब के द्वारा कार्यस्थल की प्रतिक्रिया में किस प्रकार परिवर्तन लाना जा सकता है? उच्च शिक्षण संस्थान के साथ मिलकर कैसे नई नई मांग उत्पन्न की जा सकती है? इन पर चर्चा होगी।



One day workshop conducted on 23rd November 2023 by employability.life on "Future of Education".

Students of the CSE department attended the Indian Mobile Congress (IMC) 2023, an event organized by the Cellular Association of India (COAI) India, themed 'Global Digital Innovation', from 27-29 October 2023 at Pragati Maidan, New Delhi. The event was inaugurated by the Hon'ble Prime Minister of India.



STUDENT ACHIEVEMENTS



The Department of Computer Science and Engineering has a vibrant ecosystem of meritorious students, competent faculty, and high-end infrastructure to create a conducive academic and research environment. This facilitates the nurturing of students for holistic development. Our students actively participate in various activities/competitions and have won several accolades. Their achievements make us proud.



M.Tech CSE student Vandana D/O Sh. Bhisham Chander Topped M.D. University in Batch 2021.

15 students of CSE, semester 5th have been selected for the XPMC project entitled "Cyber Security With malware Analysis".

12 students selected for Java training by ANUDIP FOUNDATION, NGO, India.

IBM introduced a new course called "Industrial Artificial Intelligence with Cloud Computing" and offered 160 hours of training on IBM SKILLS to final-year CSE students. A total of 18 students have been selected for this program.



- Rakhi Sharma: The book chapter entitled: "Unveiling Emotions: Analyzing Human Sentiments Through Speech Signals", has been accepted for publication in the book "Distributed Computing and Intelligent Data Analysis" by Apple Academic Press (WoS, Scopus).
- Chetna Sharma: The book chapter entitled: "Advancements in PCOS Diagnosis: Machine Learning and Deep Learning Approaches ", has been accepted for publication in the book "Distributed Computing and Intelligent Data Analysis" by Apple Academic Press (WoS, Scopus).
- Raghav Bokare: The book chapter entitled: "Enhancing Security with Face Mask Detection: A Machine Learning Approach ", has been accepted for publication in the book "Distributed Computing and Intelligent Data Analysis" by Apple Academic Press (WoS, Scopus).

STUDENT ACHIEVEMENTS



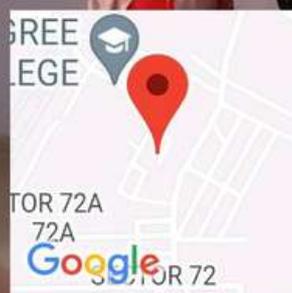
IMAGICA- PAINTING COMPETITION (NEW TECHNOLOGY & INNOVA)

Ms. Soniya, CSE 5th semester, scored second position in the IMAGICA-PAINTING competition.



Mr. Ambikesh Pandey, CSE 5th semester, scored 1st position in Table Tennis on the annual sports day.

Ms. Nishu and Ms. Akansha, B.tech CSE 3rd semester secured 1st position in the poster-making competition held on National Innovation Day.



Gurugram Haryana India

Near Hero Honda, Behind Marble Mall
34, (DELHI, NCR, Sector 72A, Sector 72B)

Lat: 28.42 | Long: 77.02
16/10/2023 2:28 pm, IST
Mon, 16 Oct

FACULTY ACHIEVEMENTS



Dr. Mukesh Yadav
Professor & Dean
Academics

Publications:

Patent

- Server Rack, Application Number:387577-001(11/08/2023)

Research Paper(SCI A)

- K. Chouhan, M. Yadav, R. K. Rout, K. S. Sahoo, N. Jhanjhi, et al., "Sentiment analysis with tweets behavior in Twitter streaming API," Computer Systems Science and Engineering, vol. 45, no.2, pp. 1113-1128, 2023.



Dr. Sarika Chaudhary
Associate Professor &
HOD CSE

Publications:

Patent

- System and method for food quality assessment and improvement using machine learning, application no.: 202311068486. (27/10/2023)

Research Paper

- "Classification Based Interactive Model for Crop Yield Prediction: Punjab State" 11th International Conference on System Modelling and Advancement in Research Trends (SMART), India, pp:678-682.

Book Chapter

- S. Chaudhary, S.Mongia, S. Sharma (2023). "Artificial Intelligence in Healthcare: Issues, Applications and future", Concepts of artificial intelligence and its application in modern healthcare.

- Chaired a technical session in the 5th IEEE International Conference on Advances in Computing, Communication Control and Networking (ICAC3N-2023), held on 15th and 16th December 2023.
- Technical Program Committee member (TPC), 6th International Conference on Information Systems and Management Science (ISMS) 2023, held on 23-24 December 2023, IIT Bhilai.

FACULTY ACHIEVEMENTS



Ms. Parveen Kumari
Assistant Professor

- Attended AICTE Recognized Faculty Development Program on Cyber Crime and Forensic Tools Conducted by the Computer Science and Engineering Department from 08/05/2023 to 12/05/2023 (One Week) at NITTTR, Chandigarh.
- Attended a One-week Online National Research Methodology Workshop from 05/06/2023 to 10/06/2023 organized by Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore.
- Attended One-Week Online National Faculty Development Program/Certificate Program on "MOOCs and e-Content Development" organized by Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, Ministry of Education, Government of India held from 29th April to 05th May 2023.

- Attended Faculty Development Program on "Advancement of Artificial Intelligence in Cyber Security" organized by Ajay Kumar Garg Engineering, Ghaziabad from 19-23 June 2023.

Publications: Research Paper/ Book Chapter

- Prasad, J., Hari, P. B., & Kumari, P. "Enhancing Security in Wireless Sensor Networks With Key Management Techniques", Journal of Computer Science Engineering and Software Testing (e-ISSN: 2581-6969), Vol. 9 No. 2, 2023, pp 5-16.
- Rathee, V., Vadhera, R. and Kumari, P., " Comparison of Machine Learning Models to Predict Heart Attack: A Review", Mathematical Statistician and Engineering Applications, volume 20, no. 1, 2023, pp.1265-1273.
- Kadian, R., Rohilla, A., & Kumari, P. "Scalability and Applicability of IoT-WSN-Based Energy Efficiency Protocols: Extending the Lifespan of Large-Scale Networks", International Journal of Recent Research Aspects, Vol. 10, Issue 1, p8-14. 7p, 2023.
- Saigal, M., & Kumari, P. "Wireless Sensors in General Anesthesia-An Update", IJFMR-International Journal For Multidisciplinary Research, Vol.5, issue 4, 2023.
- Presented a paper titled "Smart Energy Guardians: Neural Network Empowered Routing in Wireless Sensor Networks for IoT" at the International Conference on Smart Technologies for Smart Nation (SmartTechCon 2023) held at Amity Global Institute, Singapore on 18-19th August 2023.
- Presented a paper entitled "Sentiment Analysis on online social networking data for the Identification of depression using several AI Techniques: A Literature Review" during the 2nd International Conference on Communication, Security and Artificial Intelligence (ICCSAI-2023), Technically Co-Sponsored by IEEE UP Section held on 23-25th November 2023, organized by Galgotias University, Greater Noida, India.
- Dr. P. K. S. Dr. Priyanka Kumari, "National education policy 2020," National Education Policy 2020, <https://notionpress.com/read/national-education-policy-2020-1378883?> (accessed Aug. 10, 2023). Book Chapter Name "Transforming Education Through Digitization & ICT Optimization"

FACULTY ACHIEVEMENTS



Ms. Archana Rohilla
Assistant Professor

- Kadian, R., Rohilla, A., & Kumari, P. "Scalability and Applicability of IoT-WSN-Based Energy Efficiency Protocols: Extending the Lifespan of Large-Scale Networks", International Journal of Recent Research Aspects, Vol. 10, Issue 1, p8-14. 7p,2023
- Participated in the AICTE Recognized Faculty Development Programme on Cyber Crime and Forensic Tools Conducted by the Computer Science and Engineering Department from 08/05/2023 to 12/05/2023 (One Week) at NITTTR, Chandigarh.



Ms. Smriti Dwivedi
Assistant Professor

- Attended AICTE Recognized Faculty Development Program on Cyber Crime and Forensic Tools Conducted by the Computer Science and Engineering Department from 08/05/2023 to 12/05/2023 (One Week) at NITTTR, Chandigarh.
- Attended One-Week Online National Faculty Development Program/ Certificate Program on "MOOCs and e-Content Development" organized by Guru Angad Dev Teaching Learning Centre, a Centre under PMMMNMTT, Ministry of Education, Government of India held from 29th April to 05th May, 2023.

BUILDING FUTURE LEADERS

Leadership Development Programme

Specialized programs such as Cyber Security Training by Tata Strive, ROBOTICS, IOT & Drone Workshop to develop leadership and teamwork skills, grooming our students to become future leaders in their fields.



Entrepreneurial Mindset

Our curriculum and initiatives foster an entrepreneurial mindset, encouraging students to think creatively, take risks, and innovate.

CAREER DEVELOPMENT AT ITS BEST



Active Career Development Cell

Our dedicated Career Development cell offers guidance and resource to help you discover your path and prepare for a successful future.

Industry Connections

We have established strong ties with leading industries, providing you with valuable networking opportunities and internships to enhance your career prospects.

Expert Workshops

Attend interactive workshops conducted by industry experts to gain insights into the latest trends and professional skills.

And many more....

Our Placement/Training Partners

BYTES OF EMOTION.....

I'm so pumped about the upcoming release of our CSE departmental magazine's first issue. It's like our collective efforts and passion are finally getting a tangible form. This magazine is a reflection of the amazing journey we've had together, and I'm sure it's going to be a fantastic showcase of our talents!



Jayant
Btech,CSE,3rd sem



Yash bisht
Btech,CSE,3rd sem

I'm excited to see how collective creativity and dedication have translated into words and visuals. It's like a snapshot of our growth and achievements in the CSE department. Let's all take a moment to appreciate the hard work and brilliance that's gone into making this magazine a reality!

It's amazing how our department is a melting pot of ideas, and this magazine is our canvas to showcase them. I hope it sparks inspiration and curiosity in the minds of our fellow students. Kudos to everyone who contributed, and here's to the first of many more issues!



Anjali yadav
Btech,CSE,6th sem



Kamal yadav
Btech,CSE,3rd sem

The first issue is like a time capsule for our CSE journey. Nostalgia hits hard as we flip through the pages, seeing the achievements, the events organized, and the growth we've experienced. It's a proof to the incredible community we've built.

As we eagerly await the release, let's appreciate the open pages that will soon be filled with the collective wisdom of our department. It's a platform for sharing information and insights. I'm grateful for the opportunity to contribute and be part of this amazing journey.



Ayush jaiswal
Btech,CSE,6th sem

OUR EDITORIAL TEAM



Dr. Sarika Chaudhary
Associate Professor
&
HOD CSE



Ms. Parveen Kumari
Assistant Professor
CSE



Mr. Ankit
Chaturvedy



Mr. Ayush
Jaiswal



Ms. Shreya
Dharwal



Mr. Devender
Singh

(Batch 2022-26) (Batch 2021-25) (Batch 2021-25) (Batch 2021-25)

DPG Institute of Technology and Management,
Gurugram

(Approved by AICTE, HSTES & Affiliated to State Government
M.D. University, Rohtak)