NOVEMBER
2025

GL BAJAJ
Institute of Technology & Management
FIND YOUR SPARK
Approved by AICTE & Affiliated to AKTU

THE NEWSLETTER

DEPARTMENT OF CSE

FIND
YOUR
SPARK

CONTENT

About:
The legacy behind Excellence

GL Bajaj Institute of Technology and Management:
A Premier Institution in North India

GL Bajaj Institute of Technology and Management, Greater Noida, is one of the leading self-financed educational institutions in the Delhi-NCR region. Established under the esteemed Rajeev Memorial Academic Welfare Society (Registered under the Societies Registration Act, 1860), the institute is approved by the All India Council for Technical Education (AICTE), Ministry of Education, Government of India, and is affiliated with Dr. A.P.J. Abdul Kalam Technical University (AKTU), Lucknow.

GL Bajaj stands out not only for its academic rigor but also for its commitment to nurturing well-rounded individuals equipped with the skills and values required for a successful future. The institute consistently maintains one of the highest pass percentages among engineering and management colleges affiliated with AKTU in the Noida and Greater Noida region.

Over the past eight years, GL Bajaj has secured a distinguished position in AKTU university results and is widely recognized among the top institutions in North India.

Institutional & Departmental Ethos

Vision of the Institute

To be an institute of repute, providing globally competent and socially sensitive professionals

Mission of the Institute

- **To equip with the latest technologies to be globally competitive professionals.**
- **To inculcate qualities of leadership, professionalism, corporate understanding and executive competence.**
- **To imbibe and enhance human values, ethics and morals in our students.**

Department Vision

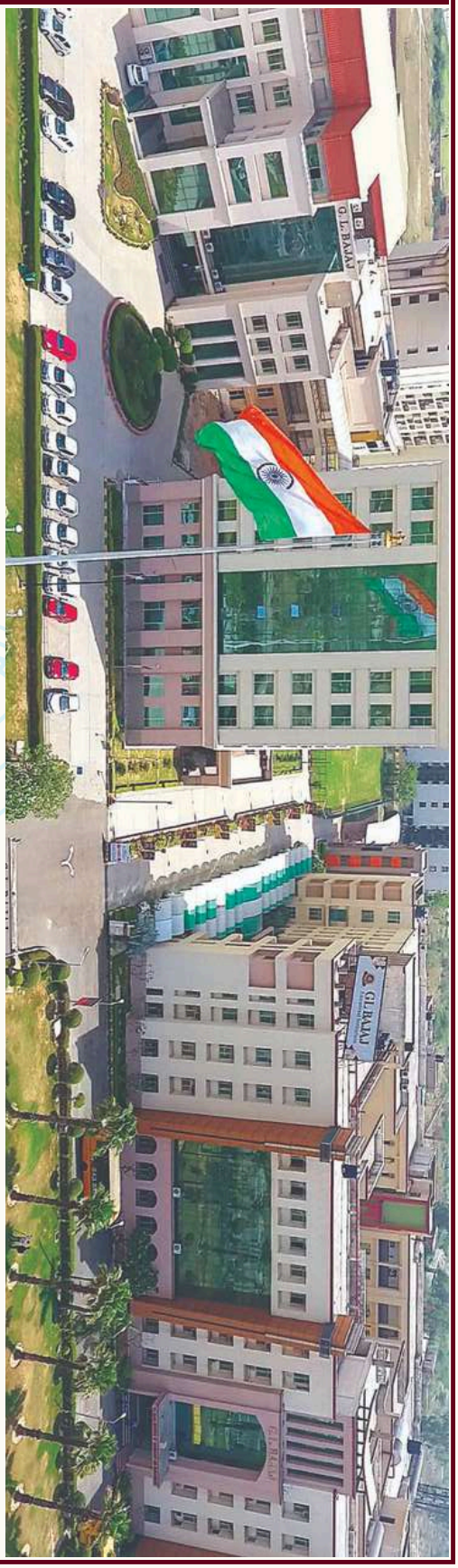
M1 : Developing a strong mathematical & computing skill set among the students.
M2 : Extending the role of computer science and engineering in diverse areas like Internet of Things (lot), Artificial Intelligence & Machine Learning and Data Analytics.
M3 : Imbibing the students with a deep understanding of professional ethics and high integrity to serve the Nation.
M4 : Providing an environment to the students for their growth both as individuals and as globally competent Computer Science professionals with encouragement for innovation & start-up culture.

Program Educational Objectives (PEOs)

PEO 1 : Graduate will work in the area of Application Software Development, Artificial Intelligence & Machine Learning, Data Analytics, and Internet of Things.
PEO 2 : Graduates will become successful software professionals with leadership and managerial quality in the modern software industry based on their strong skills on theoretical and practical foundation.
PEO 3 : Graduate will exhibit professional ethics and moral value with capability of working as an individual and as a team to contribute towards the need of industry and society

Program Specific Outcomes (PSOs)

PSO1 : Students will be able to use problem solving skills to develop efficient algorithmic solutions.
PSO2 : Students will be able to develop solutions for a given problem in the area of artificial intelligence, data analytics, Computer Vision and IOT through a conducive environment and infrastructure.



Visionary Voice

Dr. Preeti Bajaj
Director, GLBITM

"The goal of education is the advancement of knowledge and the dissemination of truth."

Message from the Director

Dear Students, Faculty, and Well-Wishers,
Welcome to GL Bajaj Institute of Technology and Management — where academic excellence meets holistic development. We are committed to shaping future technocrats and leaders through quality education, character building, and innovative thinking.
With state-of-the-art infrastructure, dedicated faculty, and a focus on both curriculum and co-curricular activities, GL Bajaj provides an ideal environment for learning and growth. Our efforts are geared toward creating professionals who are confident, competent, and ready for the global stage.
We continually evolve with emerging trends in technology and education, ensuring our students remain ahead of the curve. Regular seminars, workshops, and faculty development programs help us maintain a dynamic academic ecosystem.
Join us in our journey toward knowledge, innovation, and excellence.

Warm regards,
Dr. Preeti Bajaj
Director, GLBITM

From the HOD's Desk
Computer Science

Dr. Sansar Singh Chauhan
Head of the Department
Computer Science & Engineering

Warm greetings to all of you!

It gives me immense pleasure to present this edition of the Department of Computer Science & Engineering's newsletter. This platform not only celebrates the accomplishments of our department but also serves as a bridge that connects us all—students, faculty, alumni, and stakeholders—with a shared sense of pride and progress.

In today's fast-paced, technology-driven world, where the boundaries between nations and disciplines are dissolving rapidly, it becomes essential to stay ahead with knowledge, skill, and adaptability. With globalization and competition shaping our future, our department strives to keep pace with emerging trends in technology, science, and education.

Let us continue this journey together with curiosity in our minds and courage in our hearts.

Warm regards,

Dr. Sansar Singh Chauhan
Head of the Department
Computer Science & Engineering

"It's all about the mindset and hard work you put in."

Editorial Crew

Message from the Editorial Board Coordinator

It gives me immense pleasure to present the monthly Edition of the much-awaited CSE Department Newsletter. This newsletter serves as a platform to highlight the academic achievements, innovative initiatives, research contributions, and vibrant activities of our department.
With each edition, we aim to capture the spirit of progress and showcase the dedication of our faculty, students, and staff.

I extend my sincere gratitude to all contributors, editors, and coordinators who have worked diligently to bring this newsletter to life. I also encourage students and faculty to actively participate in future editions by sharing their achievements, ideas, and creative inputs.
Together, let us continue to build a culture of learning, innovation, and excellence.

Mr. Shikhar Pandey
Editorial Board Coordinator
Department of Computer Science & Engineering
GL Bajaj Institute of Technology and Management

Editorial Crew

SHUBHANJALI

PRIYA GOEL

NAINSI MOTIYAN

REHAN SHAMIM

MAHEK SINGHAL

SHRUTI DIXIT

VAIBHAV

Student Achievement

CSE Student Shines in Sansad 25 Debate and GD Competition->

The Department of Computer Science and Engineering proudly congratulates **Ms. Shruti Dixit, a second-year CSE student, for securing a remarkable win at the Sansad 25 Debate and Group Discussion Competition.** The event witnessed participation from 50+ students and served as a dynamic platform for discussions on national and international issues, emphasizing critical thinking, communication, and awareness of current affairs. The competition was structured across multiple rounds, beginning with two distinct categories—National and International—allowing participants to explore diverse perspectives.

The final round proved to be the most challenging, as the top four participants from the National category and the top four from the International category were combined and assigned an on-the-spot debate topic. This decisive stage tested participants current affairs knowldege. Ms. Dixit's composed approach, bold articulation, and structured reasoning distinguished her from her peers and led to her emergence as the winner.

Her achievement highlights exceptional skills in public speaking, knowledge application, teamwork awareness, leadership presence, and mental composure—qualities strongly emphasized through the objectives of Sansad 25.

Student Achievement

Dual Oracle Certifications in Cloud Computing & Generative AI

The Department of Computer Science & Engineering is delighted to recognize and celebrate the remarkable academic and professional achievement of **Ms. Neha Mishra(2401920100213) of second year**, who has **successfully earned two globally recognized certifications from Oracle University.** This accomplishment reflects her strong commitment to continuous learning and excellence in the rapidly advancing fields of Cloud Technology and Artificial Intelligence.

Ms. Neha Mishra has earned the following prestigious Oracle certifications: Oracle Certified Foundations Associate – OCI AI Foundations (October 30, 2025) and Oracle Certified Professional – OCI Generative AI Professional (November 14, 2025).

These certifications validate her strong expertise in cloud infrastructure, generative AI, intelligent automation, scalable solution design, and the practical application of advanced AI tools within Oracle's cloud ecosystem.

Student Achievement

Dual Oracle Certifications in Cloud Computing & Generative AI->

Ms. Mishra of second year consistent efforts toward skill enhancement and her focused approach to career development demonstrate **her readiness to thrive in today's AI-driven and technology-centric environment.** Her achievement not only enhances her professional profile but also brings significant pride to the department and the institution as a whole.

Such accomplishments serve as a source of motivation for fellow students, encouraging them to pursue certifications, industry-aligned learning, and innovation beyond the classroom.

The Department extends its heartiest congratulations to **Ms. Neha Mishra((2401920100213)** on this outstanding success and wishes her continued growth and excellence in her future endeavors as a promising technology professional and leader.

Student Achievement

Placement Highlight->

THALES | Rs. 8-9 Lac Per Annum

We are proud to congratulate **Shreya Singh** from Batch 2026 on securing a placement at Thales with an impressive package of ₹8–9 LPA

Aditya's dedication, technical skills, and perseverance have played a key role in achieving this remarkable milestone. His success reflects his consistent efforts and passion for excellence in the field of technology and innovation.

GL Bajaj Institute of Technology & Management continues to empower young minds like Aditya to transform aspirations into achievements and build a successful professional future.

Warm congratulations to **Akansha Pundi**r from Batch 2026 for getting placed at Thales with an outstanding package of ₹8–9 LPA

Akansha's achievement stands as a testament to her hard work, talent, and determination. Her journey highlights the spirit of innovation and commitment that GL Bajaj nurtures in its students.

GL Bajaj Institute of Technology & Management takes pride in her success and wishes her continued growth and excellence in her professional journey.

Student Achievement

Placement Highlight->

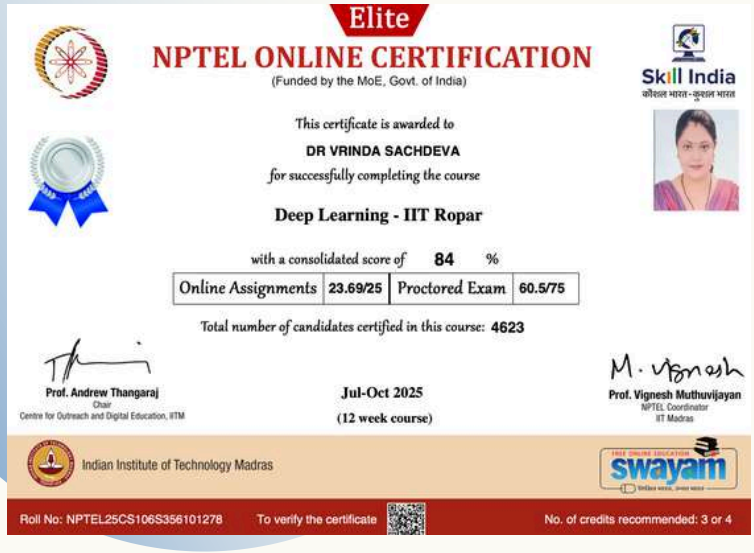
We are proud to congratulate **Aditya Singh** from Batch 2026 on securing a placement at Thales with an impressive package of ₹8–9 LPA..

Aditya's dedication, technical skills, and perseverance have played a key role in achieving this remarkable milestone. His success reflects his consistent efforts and passion for excellence in the field of technology and innovation.

GL Bajaj Institute of Technology & Management continues to empower young minds like Aditya to transform aspirations into achievements and build a successful professional future.

Faculty Achievement

NPTEL Certification->



The Department proudly congratulates **Dr. Vrinda Sachdeva** for successfully completing the **Deep Learning course conducted by IIT Ropar under the NPTEL initiative for the Jul–Oct 2025 session (12-week course).**

Dr. Vrinda secured an impressive consolidated score of 84%, reflecting her strong grasp of deep learning fundamentals and practical concepts.

This accomplishment highlights her understanding of neural network architectures, computational techniques, and key principles that form the core of modern AI applications.

This accomplishment highlights her understanding of neural network architectures, computational techniques, and key principles that form the core of modern AI applications.

The Department extends its appreciation to Dr. Vrinda Sachdeva for this distinguished accomplishment and applauds her dedication to academic excellence.

Faculty Achievement

Faculty Development Program on Research Papers, IPR & Project Proposal Writing ->

ACCREDITED WITH NAAC A+ IN 1ST CYCLE

GL BAJAJ Institute of Technology & Management
FIND YOUR SPARK
Approved by AICTE & Affiliated to AKTU

Ref. No. :- GLBITM/RDC/FDP/2025/138

-CERTIFICATE-
OF PARTICIPATION

6 DAYS FACULTY DEVELOPMENT PROGRAMME
on
"Research Papers, IPR and Project Proposal Writing"

This is to certify that Dr./Mr./Ms. **Dr vrinda sachdeva** of **G.L. Bajaj Institute of Technology and Management, Greater Noida** has Participated as **Participant** in the **6 Days FDP on "Research Papers, IPR and Project Proposal Writing"** held from **17th November 2025** to **22nd November 2025** organized by **Research & Development Cell at GL Bajaj Institute of Technology & Management, Greater Noida.**

Dean (R&D) & Convener - FDP

Faculty Development Program on Research Papers, IPR & Project Proposal Writing
The Department of Research and Development congratulates **Dr. Vrinda Sachdeva** for successfully participating in a **6-Day Faculty Development Programme on "Research Papers, IPR and Project Proposal Writing" organized by the Research & Development Cell, GL Bajaj Institute of Technology & Management, Greater Noida, from November 17–22, 2025.**

The FDP provided valuable knowledge and practical exposure on:

- Effective research paper writing techniques
- Understanding Intellectual Property Rights (IPR) and its role in academia
- Developing competitive project proposals for research funding and innovation
- The sessions were conducted by distinguished academic and industry experts, focusing on strengthening research methodology, promoting innovation, and enhancing publication quality within higher education institutions.
- Dr. Sachdeva's enthusiastic participation reflects her continuous commitment to academic excellence and contribution toward fostering a strong research culture at our institution.

We extend our best wishes to her for future achievements and impactful research endeavors.

Faculty Achievement

NPTEL Certification->

The Department proudly congratulates **Ms. Pragya** for successfully completing **the Programming in Java course conducted by IIT Kharagpur under the NPTEL initiative for the Jul–Oct 2025 session (12-week course).** Ms. Pragya secured a commendable consolidated score of 82%, demonstrating her strong understanding of Java programming fundamentals and practical implementation concepts. This accomplishment reflects her grasp of core Java principles, object-oriented programming, and essential problem-solving techniques required in modern software development.

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

PRAGYA

for successfully completing the course

Programming In Java

with a consolidated score of 82 %

Online Assignments	22.16/25	Proctored Exam	60/75

Total number of candidates certified in this course: 26183

Jul-Oct 2025

(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur

Indian Institute of Technology Kharagpur

FREE ONLINE EDUCATION
swayam

Faculty Recognition

Wipro Certified Faculty Program->

The Department proudly congratulates **Ms. Pragya** for successfully participating in **the Wipro Certified Faculty Program on Database Solutions Expert, conducted by TalentNext – Wipro Limited from 15th September 2025 to 3rd October 2025.**

During this intensive training program, she engaged with a broad spectrum of advanced database concepts. The coursework covered Basic SQL, Advanced SQL, PL/SQL, Advanced PL/SQL, Database Architecture, Database Tuning, and Database Administration, providing her with both theoretical depth and practical industry-oriented insights.

This program has enhanced her proficiency in essential database technologies and strengthened her ability to work with structured data, optimize database performance, and understand the architecture behind enterprise-level systems.
Her participation reflects a strong commitment to continuous learning and professional development.

The Department appreciates Ms. Pragya's dedication and congratulates her on this commendable achievement, acknowledging her ongoing efforts toward academic and technical excellence

Faculty Recognition

Wipro Certified Faculty Program->

The Department proudly congratulates **Dr. Payal Garg** on her successful participation in t**he Wipro Certified Faculty Program – Database Solutions Expert**, conducted by TalentNext, Wipro Limited, from 15 September 2025 to 3 October 2025.

This intensive and industry-oriented program provided in-depth exposure to advanced database technologies and practices. The training curriculum comprehensively covered Basic SQL, Advanced SQL, PL/SQL, Advanced PL/SQL, Database Architecture, Database Tuning, and Database Administration, equipping participants with both strong theoretical foundations and practical insights aligned with enterprise-level systems.


talentnext
wipro
Digital Skills Readiness Program
Wipro Certified Faculty
CERTIFICATE
AWARDED TO
Dr. Payal Garg
For successfully clearing the TalentNext certification assessment and is recognized as a mentor for project-based learning (PBL) in Database Solutions Expert
Thirunavukkarasu Palaniappan
Head – TalentNext
Wipro Limited
Ambitions Realized.
10-Nov-25

Through this program, Dr. Garg has further enhanced her proficiency in core database technologies, strengthened her capability to work with structured data, optimize database performance, and gain a deeper understanding of large-scale database architectures. Her achievement reflects a strong commitment to continuous learning, professional growth, and academic excellence.

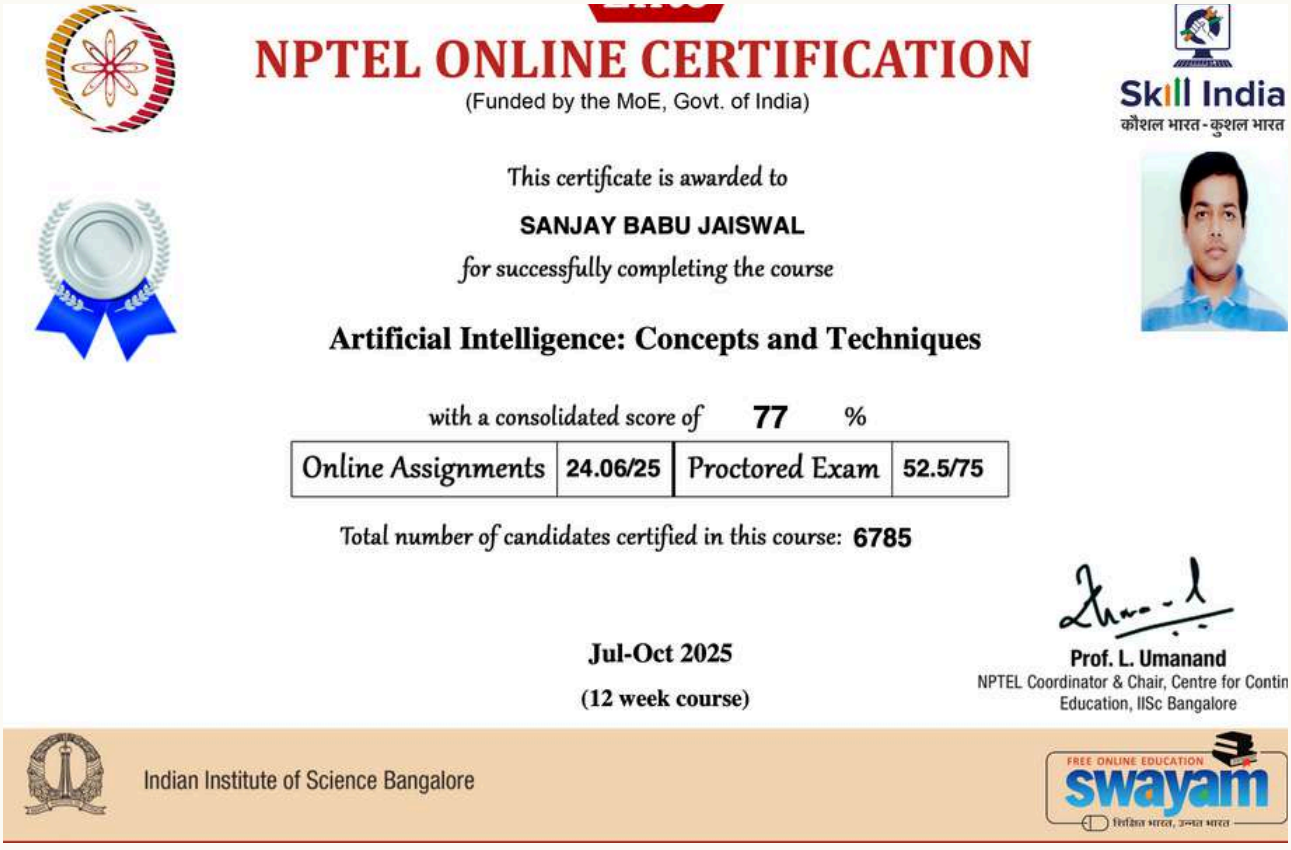
The Department appreciates Dr. Payal Garg's dedication and congratulates her on this commendable accomplishment, acknowledging her sustained efforts toward technical upskilling and academic enrichment.

Faculty Recognition

NPTEL Certification->

The Department proudly congratulates **Mr. Sanjay Babu Jaiswal** for successfully completing **the Artificial Intelligence: Concepts and Techniques course conducted by the Indian Institute of Science (IISc) Bangalore under the NPTEL initiative for the Jul–Oct 2025 session (12-week course).**

Mr. Sanjay secured a consolidated score of 77%, demonstrating his strong understanding of foundational AI concepts and analytical techniques. This accomplishment reflects his grasp of key artificial intelligence principles, including intelligent agent design, search strategies, knowledge representation, machine reasoning, and introductory machine learning frameworks.



NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत - कुशल भारत

This certificate is awarded to

SANJAY BABU JAISWAL

for successfully completing the course

Artificial Intelligence: Concepts and Techniques

with a consolidated score of 77 %

Online Assignments	24.06/25	Proctored Exam	52.5/75

Total number of candidates certified in this course: 6785

Jul-Oct 2025

(12 week course)

Prof. L. Umanand
NPTEL Coordinator & Chair, Centre for Contin
Education, IISc Bangalore

Indian Institute of Science Bangalore

FREE ONLINE EDUCATION swayam

Faculty Recognition

Certificate of Appreciation – Global AI Summit 2025->

The Department of Computer Science and Engineering extends its heartfelt congratulations to **Dr Pushpa** for receiving a **Certificate of Appreciation for her valued contribution as a Reviewer at the Global AI Summit 2025 – International Conference on Artificial Intelligence and Emerging Technology 2.0.**

The conference was organized by the School of Computer Science, Engineering and Technology, Bennett University, and held from 19th to 21st November 2025. The event was technically co-sponsored by the IEEE UP Section, bringing together experts, researchers, and academicians from across the globe to discuss advancements in AI and emerging technologies.

THE TIMES GROUP

BENNETT UNIVERSITY
THE TIMES GROUP

NAAC GRADE A+
ACCREDITED UNIVERSITY

CERTIFICATE OF APPRECIATION

This certificate is proudly presented to

PUSHPA

for his/her contribution as **REVIEWER** in **The Global AI Summit 2025, International Conference on Artificial Intelligence and Emerging Technology 2.0**, organized by **School of Computer Science, Engineering and Technology, Bennett University, India** from **19th – 21st November 2025,** Technically Co-Sponsored by IEEE UP Section. Your contribution to ensuring the quality of papers in the conference is highly appreciated.

Prof. (Dr.) Shailesh Tiwari
General Co-Chair, Global AI Summit 2025
Joint Dean, School of Computer Engineering & Technology, Bennett University

Prof. (Dr.) Abhay Bansal
General Chair, Global AI Summit 2025
Dean, School of Computer Engineering & Technology, Bennett University

Prof. (Dr.) Raj Singh
Co- Patron, Global AI Summit 2025
Vice Chancellor, Bennett University

Sponsored by NRF Xebia Shaping Tomorrow with AI Today IEEE

Faculty Recognition

Certificate of Appreciation – Global AI Summit 2025->

The Department of Computer Science and Engineering extends its heartfelt congratulations to **Mr. Shikhar Prateek Pandey** for receiving a Certificate of Appreciation for his valuable contribution as a Reviewer at the Global AI Summit 2025 – International Conference on Artificial Intelligence and Emerging Technology 2.0.

THE TIMES GROUP

BENNETT UNIVERSITY
THE TIMES GROUP

NAAC GRADE A+
ACCREDITED UNIVERSITY

CERTIFICATE OF APPRECIATION

This certificate is proudly presented to

SHIKHAR PRATEEK PANDEY

for his/her contribution as **REVIEWER** in **The Global AI Summit 2025, International Conference on Artificial Intelligence and Emerging Technology 2.0**, organized by **School of Computer Science, Engineering and Technology, Bennett University, India** from 19th – 21st November 2025, Technically Co-Sponsored by IEEE UP Section. Your contribution to ensuring the quality of papers in the conference is highly appreciated.

Prof. (Dr.) Shailesh Tiwari
General Co-Chair, Global AI Summit 2025
Joint Dean, School of Computer Engineering & Technology, Bennett University

Prof. (Dr.) Abhay Bansal
General Chair, Global AI Summit 2025
Dean, School of Computer Engineering & Technology, Bennett University

Prof. (Dr.) Raj Singh
Co- Patron, Global AI Summit 2025
Vice Chancellor, Bennett University

Sponsored by NRF Xebia IEEE

The conference was organized by the School of Computer Science, Engineering and Technology, Bennett University, India, and held from 19th to 21st November 2025.

Mr. Pandey's dedicated efforts in reviewing research papers significantly contributed to maintaining the academic quality and integrity of the conference. His contribution reflects a strong commitment to scholarly excellence and active participation in international research initiatives.

The Department proudly acknowledges his achievement and wishes him continued success in his professional and academic endeavors.

Faculty Development Program Participation

Faculty Development Program on Research Papers, IPR & Project Proposal Writing ->

The Department of Computer Science and Engineering extends hearty congratulations to Mr. **Shikhar Prateek Pandey** for successfully participating in the **AICTE Training and Learning (ATAL) Academy Faculty Development Program on "Next Gen AI and LLMs: Transforming Pedagogy and Research", organized by the National Institute of Technical Teachers' Training and Research (NITTTR), from November 10–15, 2025.**

ATAL/2025/1762165614

Skill India | ATAL | AICTE | NITTTR

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

It is certified that Mr. SHIKHAR PRATEEK PANDEY, Faculty members of the AICTE approved institutions of GL BAJAJ INSTITUTE OF TECHNOLOGY AND MANAGEMENT has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on Next Gen AI and LLMs: Transforming Pedagogy and Research at NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH from 10/11/2025 to 15/11/2025.

GANAPATHY S
Associate Professor Level (AICTE Institute), Coordinator
NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH

Dr. Sunil Luthra
Director & Bureau Head
Training and Learning Bureau, AICTE

The FDP provided rich insights into the evolving landscape of Artificial Intelligence, Large Language Models, and their pivotal role in transforming teaching methodologies and research excellence.

The sessions were delivered by distinguished experts and researchers in the field, empowering faculty members with hands-on exposure to AI-driven pedagogical innovations.

Mr. Pandey's proactive participation demonstrates his dedication to continuous learning and his commitment to adopting cutting-edge technologies that elevate both teaching standards and academic research at our institution.

Publications

Flexible Four-Port MIMO Antenna: Research Excellence by Dr. Shashank Awasthi->

The Department of Computer Science & Engineering is proud to announce that **Prof. (Dr.) Shashank Awasthi**, faculty member of the CSE Department, has **published a research paper in Scientific Reports, a highly reputed SCI/SCIE-indexed international journal published by Nature Publishing Group.**

The paper, titled "Flexible Four-Port MIMO Antenna Loaded with Frequency Selective Surface for On-Body Applications," presents an advanced design of a dual-band four-port MIMO antenna integrated with a frequency selective surface (FSS) to enhance gain and performance for on-body and wearable communication systems.

The research demonstrates improved bandwidth, high isolation, reduced specific absorption rate (SAR), and suitability for modern wireless applications including WLAN, UWB, V2X, satellite, and radar systems.

This achievement highlights Prof. (Dr.) Shashank Awasthi's significant contribution to high-impact research in wireless communication and antenna system design and brings recognition to the Department of Computer Science & Engineering.

The department congratulates him on this noteworthy SCI-indexed publication and wishes him continued success in his research endeavors.


www.nature.com/scientificreports

scientific reports

Check for updates

OPEN

Flexible four-port MIMO antenna loaded with frequency selective surface for on-body applications

Manish Sharma[1], Dinesh Kumar Singh[2], Kanhaiya Sharma[3], Shashank Awasthi[4], Rana Gill[5] & Tanweer Ali[6]

Publications

Advancing Secure Smart Healthcare: Research Excellence by Dr. Nikhil Sharma->

Pervasive and Mobile Computing 114 (2025) 102123

Contents lists available at ScienceDirect

Pervasive and Mobile Computing

journal homepage: www.elsevier.com/locate/pmc

XAI-driven multi-attention DeepCRNN for enhanced cyberattack detection in internet of medical things environments

Prashant Giridhar Shambharkar [a], Nikhil Sharma [a,b,*]

[a] Department of Computer Science & Engineering, Delhi Technological University, Delhi, India
[b] Department of Computer Science and Engineering, GL Bajaj Institute of Technology and Management, Greater Noida, Uttar Pradesh, India

Dr. Nikhil Sharma's research, published in **the reputed journal Pervasive and Mobile Computing (Elsevier), addresses the growing cybersecurity challenges in Internet of Medical Things (IoMT) environments.**

With the rapid adoption of interconnected medical devices, healthcare systems face increased vulnerability to cyberattacks that threaten data privacy and patient safety. To tackle these challenges, the study proposes MA-DeepCRNN, a hybrid deep learning framework that integrates Convolutional Neural Networks (CNNs), Bidirectional LSTMs, and a multi-attention mechanism for robust intrusion detection.

Publications

Advancing Secure Smart Healthcare: Research Excellence by Dr. Nikhil Sharma->

Cluster Computing (2025) 28:1029
https://doi.org/10.1007/s10586-025-05706-1

Blockchain-based framework for secure medical data sharing and disease diagnosis using optimized deep belief networks

Nikhil Sharma[1,2] · Prashant Giridhar Shambharkar[1]

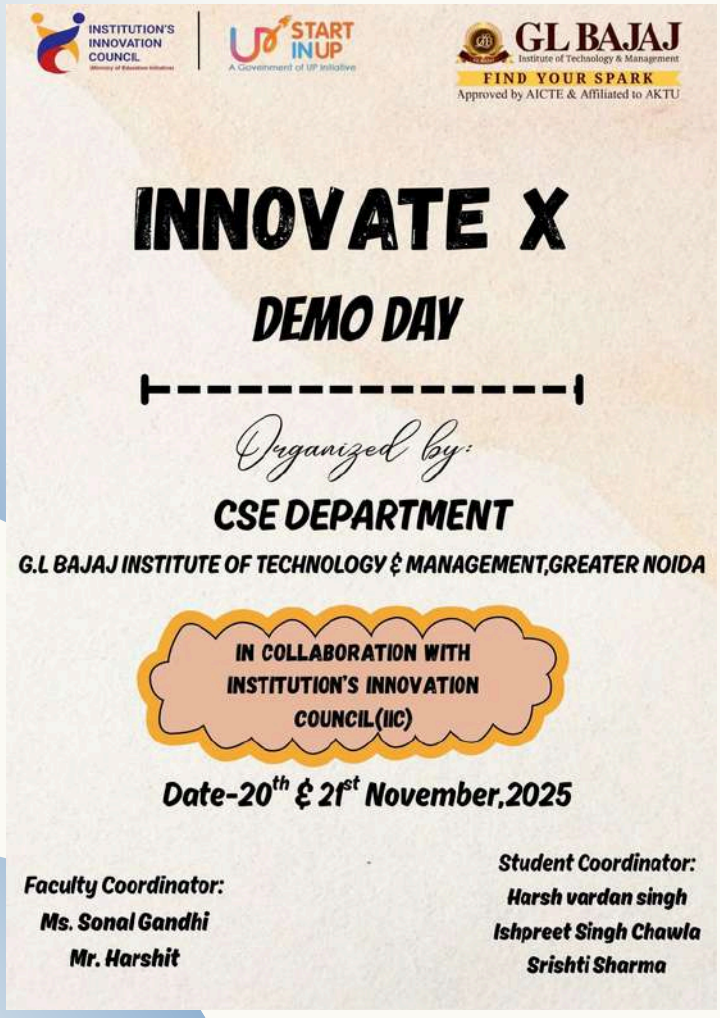
Received: 8 March 2025 / Revised: 30 June 2025 / Accepted: 3 August 2025 / Published online: 17 October 2025

Dr. Nikhil Sharma's research, published in **the reputed Cluster Computing (Springer) journal, presents a blockchain-based hybrid framework designed to address key challenges in secure medical data sharing and intelligent disease diagnosis within IoT-enabled smart healthcare systems.**

The study highlights the growing reliance on electronic health records (EHRs) and the associated risks of data breaches, privacy violations, and centralized system failures. To overcome these limitations, the proposed framework integrates Elliptic Curve Cryptography (ECC) optimized through a Simulated Annealing–Gradient-Based Optimizer (SA-GBO) along with SHA3-512 hashing, ensuring strong data confidentiality, integrity, and resistance to cyberattacks.

Events

Igniting Innovation: CSE Department Hosts Innovate X Demo Day 2025->



The Innovate X Demo Day 2025 was successfully organized on 20th and 21st November 2025 by the Institution's Innovation Council (IIC) in collaboration with the Department of Computer Science and Engineering, under the guidance of Faculty Coordinator Ms. Sonal Gandhi.

The primary objective of Innovate X Demo Day was to provide students with a real-world exposure to startup ecosystems and business revival strategies. Participants were challenged to analyze practical issues faced by startups and struggling businesses across various domains. By examining existing business models, market limitations, and operational challenges, students

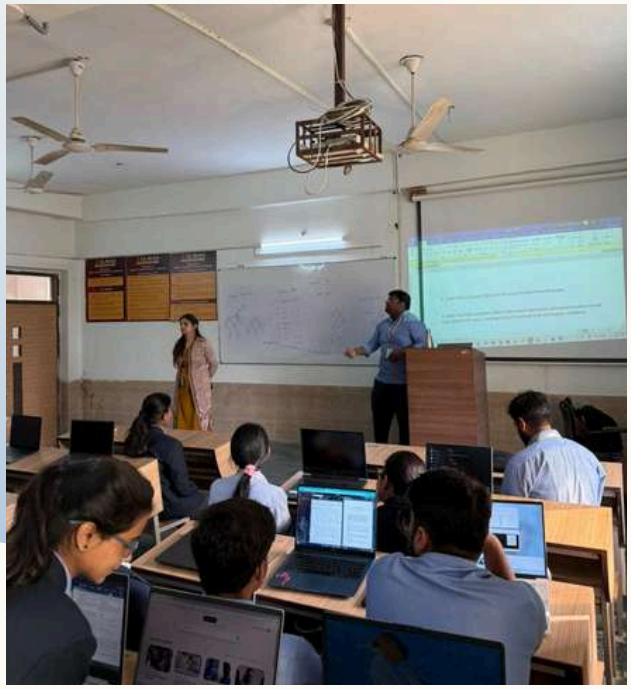
Agained valuable insights into how innovation and technology can be leveraged to overcome real-life constraints. **The event emphasized solution-oriented thinking, requiring participants to propose feasible, scalable, and technology-driven strategies rather than theoretical ideas**

Throughout the event, students demonstrated strong analytical skills, creativity, and strategic thinking while presenting their solutions. Many teams showcased innovative approaches involving digital transformation, automation, data-driven decision-making, and customer-centric business models. The presentations reflected a deep understanding of market trends, sustainability concerns, and competitive dynamics, highlighting the participants' ability to connect technical knowledge with entrepreneurial applications.

Events

Igniting Innovation: CSE Department Hosts Innovate X Demo Day 2025->

A major highlight of Innovate X Demo Day was the interactive question-and-answer session between the judges and participants. This segment played a crucial role in enhancing the overall learning experience. Judges actively questioned participants on the feasibility, scalability, and long-term impact of their proposed solutions. Students were encouraged to justify their ideas with clarity, logical reasoning, and confidence, fostering an environment of healthy intellectual exchange.



Overall, Innovate X Demo Day 2025 successfully fostered a culture of innovation, creativity, and entrepreneurial mindset among students. The event played a significant role in strengthening problem-solving capabilities and preparing students for future challenges in both professional and entrepreneurial domains.

The success of the event highlights the importance of platforms that encourage students to think critically, innovate responsibly, and apply technical knowledge to real-world challenges—skills essential for thriving in today's dynamic and competitive landscape

Events

Engaging Minds : CSE Department Hosts Sansad 25 Debate event->

The Department of Computer Science and Engineering successfully organized 'Sansad 25', a debate and group discussion event, at Auditorium 1, AB-1 Block, G.L. Bajaj Institute of Technology and Management. The event witnessed enthusiastic participation from over 50 students, creating a vibrant and intellectually stimulating academic environment. Sansad 25 aimed to provide students with a dynamic platform to express their views on important national and international issues through structured debates and discussions.

The competition was conducted in three engaging rounds. The first round featured one-on-one debates, allowing participants to present individual viewpoints and demonstrate strong argumentative skills. The second round introduced team-based debates, where groups spoke either for or against a given motion, fostering collaboration and strategic thinking.

The event was evaluated by Mr. Anvesh Chandela and Ms. Monika Sodhi, whose insightful feedback enriched the competition. Participants displayed confidence, clarity, and awareness, contributing to a respectful and engaging environment.

Alumni Meet

Alumni Meet 2025 –
A Heartwarming Reunion->

Name: **Richa Agrawal**
Batch: 2020 – 2024

Richa Agrawal is a proud alumna of the 2020–2024 batch and is currently working as an Application Engineer–1 at Flipkart, one of India's leading e-commerce companies. Based in Bangalore, she is actively involved in building and maintaining scalable applications, contributing to real-world, high-impact products used by millions of customers.

During her academic journey, Richa demonstrated strong technical aptitude, consistency, and a keen interest in software engineering, which helped her successfully transition into a professional role at Flipkart. Her work reflects a balance of problem-solving skills, adaptability, and a passion for continuous learning in the fast-evolving tech industry.

She remains closely connected to her alma mater and is enthusiastic about engaging with fellow alumni and juniors, sharing insights from her industry experience, and contributing to the alumni community.

Bytes & Breakthroughs

Breakthrough 3D Wiring Enables 10,000-Qubit Quantum Processors

Researchers have developed a 3D wiring architecture that allows 10,000 qubits to be controlled efficiently — solving one of quantum computing's biggest hardware challenges

Karnataka Plans National Quantum Materials Innovation Network

India's tech capital, Bengaluru, proposed a Quantum Materials Innovation Network (Q-MIN) to link research institutions, startups, and government labs for joint development in quantum computing, sensors, and communication systems.

New Cryptography Standards for the Quantum Era

As quantum computers grow, traditional encryption could fail. Researchers are developing quantum-secure cryptographic algorithms resistant to attacks from quantum systems — a field known as post-quantum cryptography.

Algorithm Discovery Enters a New Era

Tools like AlphaEvolve and other AI-assisted platforms are now being used to discover entirely new algorithms — improving performance in fields like optimization, sorting, and simulation.

Edge & Distributed Computing Revolution Continues

Modern research focuses on bringing computation closer to data sources — through edge devices and micro-data centers — cutting down latency and improving privacy in IoT systems.

Next-Gen Cloud Architectures Emerge

Tech giants and researchers are pushing multi-cloud and distributed architectures that balance workloads globally. New systems integrate cloud, edge, and 5G for seamless computing.

Blockchain Beyond Cryptocurrency

Blockchain research is expanding into secure supply chains, voting systems, decentralized identity, and data integrity verification.

Cybersecurity Gets "Zero-Trust" Overhaul

Post-quantum cryptography and zero-trust network models are reshaping how organizations handle access, authentication, and data encryption.

www.glbitm.org

GL BAJAJ

Institute of Technology & Management

FIND YOUR SPARK

Approved by AICTE & Affiliated to AKTU

Plot No. 2, Knowledge Park-III, Greater Noida - 201306

/glbajajitm