



Sangnak Samvaad - Uppatrika

"Computer Conversation – Bridging Technology and Thoughts!"

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Department of Computer Applications

Jaypee Institute of Information Technology, Noida
(Deemed to be University under Section 3 of UGC Act 1956)

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Editorial Team

Greetings,

It is with immense pride and excitement that we present to you the inaugural issue of Sangnak Samvaad, the official newsletter of the Department of Computer Applications, IIIT Noida. The name, which translates to "Computer Conversation" in Sanskrit, embodies the essence of technology—an ongoing dialogue between humans and machines, and a bridge that connects ideas, innovations, and progress in the ever-evolving world of computing.

This newsletter serves as a platform to highlight the achievements of our students, faculty, and researchers. Whether it is a new academic milestone, a breakthrough in research, or a significant event or seminar, this space will showcase the collective energy of our department.

This edition would not have been possible without the continuous support of our Pro-Chancellor, Vice-Chancellor, and Head of the Department. Additionally, we extend our gratitude to our esteemed faculty members, dedicated students, and valued colleagues, whose invaluable ideas and insights continue to inspire and enrich the essence of this newsletter.

As we launch this newsletter, we are reminded of the immense potential that lies within every individual in our department. It is through your contributions—whether in the form of articles, research, or feedback—that this publication will continue to grow and evolve. We encourage you to actively participate and be part of this exciting journey. Together, we can build a platform that reflects the passion and brilliance that define the Department of Computer Applications.

In closing, we leave you with this thought: the world of computing is a conversation—a dynamic, evolving exchange. Sangnak Samvaad hopes to be the voice that brings us together, encourages dialogue, and celebrates the milestones we achieve together in the world of technology.

We hope you enjoy reading the first issue and look forward to your continued engagement.

Warm Regards,
The Editorial Team
Department of Computer Applications

Messages



I convey my appreciation to the Department of Computer Applications on the launch of **Sangnak Samvaad: Computer Conversation Bridging Technology and Thoughts**, the department's very first newsletter.

More than just a newsletter, it is a reflection of the department's vibrancy—a space where students and faculty can exchange ideas, showcase their achievements, and engage in thought-provoking discussions that fuel academic and professional growth.

I wish, may this newsletter become the voice of the department and sparks curiosity, nurtures creativity, and fosters a culture of continuous learning. I am eager to see this initiative flourish in the coming years. My best wishes and appreciation to the entire team behind this initiative.

With best wishes,

Prof S.C. Saxena
Pro Chancellor

Messages

It is with great pleasure and pride that I extend my heartfelt congratulations to the Department of Computer Applications on the launch of **Sangnak Samvaad: Computer Conversation Bridging Technology and Thoughts**, the department's inaugural newsletter. This initiative represents a significant milestone, showcasing the dedication, enthusiasm, and progressive vision of both students and faculty members.



In today's fast-evolving technological landscape, a body of knowledge like Sangnak Samvad is not just valuable but essential. This newsletter will provide a space for exchanging knowledge, celebrating accomplishments, and fostering a dynamic culture of learning and collaboration. I am confident that this newsletter will not only keep students and faculty members informed about the latest advancements in computing and technology but will also serve as a source of inspiration, motivating them to explore new ideas and push the frontiers of innovation.

This newsletter is much more than a compilation of useful information; it is a voice that echoes the aspirations, achievements, and intellectual spirit of the department. It stands as a testament to the remarkable work taking place within the department—whether in research, innovative projects, industry partnerships, or creative problem-solving. I firmly believe that **Sangnak Samvaad** will evolve into a vibrant platform that sparks curiosity, fosters meaningful dialogue, and leaves a lasting impact on the academic community.

This is just the beginning of an exciting journey, and I eagerly look forward to seeing this initiative thrive with many more volumes and editions in the future. My best wishes to the entire team behind this endeavor—may your passion and commitment continue to drive excellence, inspire minds, and create a lasting legacy of knowledge and progress!

Prof B.R. Mehta
Vice Chancellor

Messages

It is a moment of immense pride and joy for the Department of Computer Applications as we unveil the first edition of our very first newsletter, **Sangnak Samvaad: Computer Conversation Bridging Technology and Thoughts**. This initiative marks the beginning of a new chapter for our department, providing a platform to showcase ideas, innovations, and achievements while fostering a culture of learning and collaboration.



In today's fast-paced digital world, staying connected and informed is more important than ever. **Sangnak Samvaad** aims to serve as a bridge between technology and thought, bringing together students, faculty, academia and industry insights in one space. This newsletter will highlight research advancements, project showcases, expert perspectives, and department milestones, encouraging a spirit of exploration and intellectual curiosity among our students.

This newsletter is not just a publication; it is a reflection of our collective efforts, aspirations, and dedication to academic and technological excellence. I am confident that **Sangnak Samvaad** will grow into a valuable medium for exchanging knowledge, sparking discussions, and inspiring new ideas within our academic community.

I extend my sincere appreciation to the editorial team led by Ms Aakriti Bhardwaj, student and faculty contributors, and everyone who played a role in making this vision a reality. Your hard work and enthusiasm have laid the foundation for what I hope will be a long and successful journey. I look forward to many more editions in the future and encourage all students and faculty members to actively participate in this endeavor.

Wishing **Sangnak Samvaad** great success and longevity!

Sandeep Kumar Singh
Head of the Department
Department of Computer Applications

University

Jaypee Institute of Information Technology

VISION

To become a centre of excellence in the field of IT and related emerging areas of education, training and research comparable to the best in the world for producing professionals who shall be leaders in innovation, entrepreneurship, creativity and management.

MISSION

MISSION 1: To develop as a benchmark University in emerging technologies.

MISSION 2: To provide state-of-the-art teaching learning process and R&D environment.

MISSION 3: To harness human capital for sustainable competitive edge and social relevance.

Department of Computer Application

VISION

To become a centre of excellence to produce skilled applied computing professionals, who not only possess sound theoretical knowledge but also have a rigorous hands-on experience, to lead, innovate, venture in entrepreneurship, adapt to evolving technologies, and make a positive and effective contribution to the society.

MISSION

MISSION 1: To inculcate sound theoretical knowledge, practical experience, ethical values and professionalism through futuristic curriculum.

MISSION 2: To conduct activities for developing competencies for innovation, entrepreneurship, research and pursuing higher education.

MISSION 3: To empower individuals with practical experience in cutting-edge tools and technologies to create computer applications addressing societal and industrial needs.

Bachelor of Computer Applications (BCA)

Bachelor of Computer Applications (BCA) -The department of Computer Applications (CA) offers BCA (3 years), BCA Honours with Research (4 Years). Curriculum of the BCA programme focuses on three major core areas i.e. Artificial Intelligence & Machine Learning, Cyber Security and Data Analytics. BCA Curriculum is well designed to align with industry standards and best practices consisting of core courses, elective courses and dissertation/ project.

BCA program focuses on computer applications and software development wherein graduates develop both core theoretical and hands on practical knowledge in promising areas of computing like Software Development, System and Network Administration, Database Management, Cyber security, Cloud Computing Data Analysis and Machine Learning, Web Development and User Interface Design etc. Students are exposed to real-world scenarios and are encouraged to develop applications, work on software projects, and gain practical experience. With the increasing reliance on technology, there is a high demand for skilled IT professionals and BCA graduates are well-positioned to meet this demand and contribute to various industries. The graduates from this program, especially those with strong technical skills and relevant experience, can command attractive compensation packages. They can also pursue postgraduate degrees like Master of Computer Applications (MCA) or Master of Science (MS) in Computer Science to delve deeper into research areas and contribute to academic or industrial research projects. Additionally, one can participate in research and development activities within organizations or collaborate with research teams on technology-driven projects or can explore entrepreneurship opportunities by starting one's own software development or IT consulting businesses.

Program Educational Objectives (PEOs)

Program Educational Objectives:

PEO 1: To impart core theoretical as well as practical skills in software development to build competencies for creating real-world computer applications in diverse domains.

PEO 2: To imbibe lifelong learning in graduates and prepare them for successful careers in software and IT-enabled industry as well as in entrepreneurship, research and higher studies with all the ethics and professionalism.

PEO 3: To develop strong oral and written communication skills in graduates to effectively convey technical concepts and collaborate with team members, clients, and stakeholders.

PROGRAM OUTCOMES (POs)

PO1: Apply Basic knowledge: Apply the knowledge of mathematics, science and computing fundamentals to provide solutions for complex computer applications.

PO2: Problem analysis: Identify, formulate, research literature, and analyze problems in applied computer science.

PO3: Design/development of applications: Design computer applications that meet the specified societal, health, safety, legal and cultural needs with appropriate consideration to ethics, environment and sustainability.

PO4: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern IT tools including database management, networking AI & ML with an understanding of their limitations.

PO5: Communication: Communicate effective reports, design documentation and make effective presentations.

PO6: Project management and team work: Demonstrate knowledge and understanding of the management principles and apply them to one's own work, and also as a member and a leader in a team, to manage projects in multidisciplinary environments.

PO7: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological changes in computer applications.

PROGRAM SPECIFIC OUTCOMES (PSOs)

Programme Name: BCA (BACHELOR OF COMPUTER APPLICATIONS)

PSO1: To develop proficiency in software development methodologies and tools in order to design, implement, and test solutions across major core areas of AI&ML, Cyber security and Data analytics.

PSO2: To develop a versatile skill set inculcating soft skills, programming proficiency in full stack web and mobile application development.

Master of Computer Applications (MCA)

Master of Computer Application (MCA) -The department of Computer Applications (CA) offers two-year MCA program in addition to undergraduate and Ph.D. program in Computer Applications. MCA Curriculum is well designed to align with industry standards and best practices consisting of core courses, elective courses and dissertation/project.

MCA program will help graduates develop strong theoretical and practical knowledge in computing required to proficiently build software solutions for societal and industrial needs. It will help them to pursue career as entrepreneurs and innovators; software developers or go for higher education and research. MCA program will not only hone their technical skills but also give them skills related to oral and written communication, collaborative working in teams, exhibiting ethical standards, leadership and project management capabilities. This will open up a plethora of career opportunities as software architect, software developer, system analysis, database administrator, Data Scientist, Project Manager and many more. They can also pursue research opportunities by enrolling in Ph.D. programs, collaborating with research institutions, or working in research and development organizations or can even join the respectable profiles in academia/teaching or choose to start their own IT-related business or venture into entrepreneurship.

Programme Outcomes (POs)

PO1. Computational Knowledge: Understand and apply mathematical foundation, computing and domain knowledge for the conceptualization of computing models from defined problems.

PO2. Problem Analysis: Ability to identify, critically analyze and formulate complex computing problems using fundamentals of computer science and application domains.

PO3. Design / Development of Solutions: Ability to transform complex business scenarios and contemporary issues into problems, investigate, understand and propose integrated solutions using emerging technologies

PO4. Conduct Investigations of Complex Computing Problems: Ability to devise and conduct experiments, interpret data and provide well informed conclusions.

PO5. Modern Tool Usage: Ability to select modern computing tools, skills and techniques necessary for innovative software solutions

PO6. Professional Ethics: Ability to apply and commit professional ethics and cyber regulations in a global economic environment.

PO7. Life-long Learning: Recognize the need for and develop the ability to engage in continuous learning as a Computing professional.

PO8. Project Management and Finance: Ability to understand, management and computing principles with computing knowledge to manage projects in multidisciplinary environments.

PO9. Communication Efficacy: Communicate effectively with the computing community as well as society by being able to comprehend effective documentations and presentations.

PO10. Societal & Environmental Concern: Ability to recognize economical, environmental, social, health, legal, ethical issues involved in the use of computer technology and other consequential responsibilities relevant to professional practice.

PO11. Individual & Team Work: Ability to work as a member or leader in diverse teams in multidisciplinary environment.

PO12. Innovation and Entrepreneurship: Identify opportunities, entrepreneurship vision and use of innovative ideas to create value and wealth for the betterment of the individual and society.

Program Specific Outcomes (PSOs)

PSO1: To develop ability to analyze complex system requirements in order to design, develop, and test software applications using appropriate programming languages, frameworks, tools, and methodologies.

PSO2: To develop skills to embark on careers as entrepreneurs, innovators, software developers, consultants or pursue interest in teaching, research and development or higher education.

List of Faculty members in the department



Prof. Sandeep Kumar Singh
Head of the Department



Dr. Shelendra Pal



Dr. Imran Rasheed



Dr. Ruchin Gupta

List of Faculty members in the department

Ms. Preeti Mittal



Ms. Neetu Singh



Ms. Jyoti



Shagun Gupta



Aakriti Bhardwaj



Doctor of Philosophy in Computer Applications

The PhD in Computer Applications is a pure research-centric course that has been designed to develop scholars who stand ahead in the field of Computer applications and computer science.

Research Areas of Ph.D in Computer Applications

Artificial Intelligence (AI), AI Ethics and Responsible AI, Explainable AI (XAI), AI for Healthcare, Federated Learning and Privacy-Preserving AI, Explainable and Interpretable Machine Learning (XIML) and Machine Learning (ML), Natural Language Processing (NLP), Computer Vision, Cybersecurity and Privacy, Internet of Things (IoT), Data Science and Big Data Analytics, Human-Computer Interaction (HCI) and User Experience (UX), Cloud Computing and Distributed Systems, Software Engineering and Development, Quantum Computing, Quantum Machine Learning (QML), Robotic Process Automation (RPA), Cyberphysical Systems (CPS), Explainable Recommendation Systems.

List of PhD scholars in the department:

S. No.	Name
1	Sonali Jolly
2	Harshit Kalucha
3	Kuldeep Singh
4	Deepali Vishnoi
5	Swati Sharma
6	Chanchal Prabha
7	Minal Maheshwari
8	Prashant Kumar Pandey
9	Rekha Kumari
10	Riti Saxena
11	Shikha Tiwari
12	Sonia Sharma
13	Deepika Srivastava

Departmental Spotlight

Some of the highlights of the department are as shown below:

**More than 10 well
qualified faculties.**

**3 Computer Labs
with 30 Machines
each (90 in total).**

13 PhD Scholars.

**Extensive set of
electives UG / PG
including AI, ML,
Data Analytics, and
Cryptography.**

COMPUTER CENTRES

The Department of Computer Applications has its dedicated, well-lit Computer Centres with a maximum seating capacity of 90 students (30 each in 3 centre).

S. No.	Lab/Venue	Instruments	Room No.
1	Computer Centre/ABB III	90 Machines Capacity	ABB III Room no. 417, 421, 423 (30 machines each).

CPU Specifications

Processor - HP 13th Gen Intel(R) Core(TM) i7 - 13700, 2.10GHz

RAM - 16.0 GB (15.7 GB Usable)

SSD - 512 GB

Monitor - Model No. (HPP204V) 19.5"



Seminar / Webinar / FDPs

S. No.	Date	Name of FDP/Workshop /Seminar	Attendees	Organized By
1	18/8/23 - 19/8/23	FDP on Qualitative and Mixed Method Research	Neetu Singh & JIM, Ghaziabad	JIIT 62 Noida
2	3/6/24 - 8/6/24	FDP on Autonomous AI for Sustainable Development	Preeti Mittal & Department of CSE & IT, JIIT Noida	JIIT 62 Noida
3	27/5/24 - 1/6/24	FDP and hands-on training program “High-Performance Computing and Emerging Trends”	Neetu Singh	JIIT 62 Noida

Lectures / Talks / Interactions / Workshops

S. No.	Date	Name	Organized By	Event
1	20/4/24	Ms. Vandana Balayan	Computer Applications	Success vs Target vs Dreams
2	3/5/24	Deepak Kumar Sharma	Computer Application	Transforming Education and Learning with Generative AI
3	18/9/24	Ms. Prachee Ramsinghani	Computer Applications	Navigating life challenges - Stress Management

Elective Courses offered by the Department of Computer Applications

The Department of Computer Applications offers a diverse range of elective courses, including **Artificial Intelligence (AI)**, **Machine Learning (ML)**, **Data Analytics**, and **Cryptography**, to equip students with advanced technical skills. The **Artificial Intelligence** course introduces students to intelligent systems, problem-solving, and AI-driven applications. **Machine Learning** delves into algorithms, statistical models, and neural networks for pattern recognition and predictive analytics. The **Data Analytics** course covers data processing, visualization, and decision-making using big data technologies. Lastly, **Cryptography** focuses on secure communication, encryption techniques, and cybersecurity principles. These electives provide students with specialized knowledge, preparing them for careers in cutting-edge technology domains.

Well-qualified Faculties

The faculty members of the Department of Computer Applications are highly qualified, possessing Advanced degrees, including Ph.D.s and industry certifications, along with extensive teaching, research, and industry experience. They are deeply committed to nurturing students' technical and analytical skills, ensuring they receive both theoretical knowledge and hands-on practical exposure. Through interactive teaching methods, research-driven learning, and real-world project guidance, they help students build a strong foundation in computing and emerging technologies. The faculty also encourage critical thinking, problem-solving, and innovation, preparing students to tackle real-life challenges in the tech industry. Their continuous support extends beyond academics, as they provide career counseling, industry insights, and mentorship, helping students develop essential soft skills, secure internships, and explore job opportunities. By fostering a learning environment that balances academic excellence with industry relevance, the faculty play a crucial role in shaping students into competent professionals and future leaders in the field of technology.

Faculty Development International/National

S. No.	Date	Name Of Conference/ Workshop / Seminar	Attended By	Organized By	Details of Event
1	03-08-24 - 05-08-24	IC3 Conference 2023	Jyoti	JIIT	Held in Noida
2	17-01-24	National Startup Day Celebration	Neetu	JIM, Ghaziabad with Shakti Empathy Project(STEP)	Held in Ghaziabad
3	18/9/24	9th Corporate Summit, India Vision 2047: Navigating Corporate Excellence and Sustainable Growth	Neetu	JIM, Ghaziabad	Held in Hotel Radisson Blu, Kaushambi
4	20-04-24	Motivational talk on 'Success vs Target vs Dreams' by Vandana Balayan, Technical Business Analyst, Qantas, Sydney, Australia	All BCA students & Faculty members	SCC, DCA, NOIDA-62	Held on Campus in Online mode

5	27-04-24	Zencoder	BCA & Btech First Year	CA IIIT 62	On campus
6	03-05-24	Expert talks on Transforming Education and Learning with Generative AI	BCA students and faculty members	IILC, DCA, NOIDA 62	Online, Noida 62
7	01-07-24 - 13-07-24	Emerging Trends in Software Development: Tools and Techniques	Neetu & IIIT NOIDA		
8	03-08-24 - 05-08-24	IC3 Conference 2023	Neetu Singh & IIIT NOIDA	Published and presented paper	
9	08-08-24 - 10-08-24	IC3 Conference 2024 on Contemporary Computing	Preeti Mittal & IIIT 62		

Institution-Industry Linkage Cell (IILC) Event

S. No.	Event Topic	Conducted by	Date	Speaker
1	Transforming Education and Learning with Generative AI	IILC - DCA	3/5/24	Mr. Deepak Kumar Sharma (IT and Consulting Professional, KPMG Global Services)
2	A Small overview of LCNC tool Pega	IILC - DCA	9/11/24	Mr. Mohit Kumar (Senior Analyst, Infosys Ltd India)



Articles

The Role of AR and VR in Revolutionizing Education and Training

In a technology-dominated world, augmented reality (AR) and virtual reality (VR) are transforming education and vocational training. AR and VR were previously used only for entertainment and games, but today they have a significant role in education and skill development.

AR and VR revolutionize education by providing immersive, interactive experiences that are more engaging, experiential, and accessible, changing the way knowledge is delivered and absorbed.

Augmented Reality: Enhancing the Physical World

This technology is used by adding some digital elements to our real-world perspective, which is done by placing a digital image on the current real-life view.

For example, AR can project a 3D model of the human heart for medical students or in archaeology for recreating different structure and placing them in real environment to study properly. As a result, it enhances the experience of reality.



Virtual Reality: Creating immersive Learning Environments

This technology is used by creating a simulated environment, a computer-generated world. This makes VR ideal for high-stakes training. For example, VR flight simulator can help a pilot practice safely at the beginning of their training. Also used in manufacturing and health care.

In education sector, VR can help students by providing immersive environments for students. They can transport students to places like the Amazon rainforest or historical places for their education.

Bridging Accessibility Gaps

AR and VR can make education more comprehensive. Because of this, people can access quality educational content more efficiently without geographical or financial barriers.

It can also provide help to people with disability by providing them with the experiences that they may not be able to experience in real life.

For example in 2018, an exhibit called 'Touching Masterpieces' was staged at the National Gallery in Prague. They used haptic VR to help visually impaired individual see famous artwork by touching it. It can also create an environment for learners with autism and provide real time translation for students with hearing disability or impairment.



Challenges and Considerations



Despite having many useful advantages, there are some drawbacks too. Due to high infrastructure, it is expensive because the overall cost depends on the complexity of the app and the requirement of the customer. There are also safety issues like security threat and cyber attacks. People can become isolated because of the involvement of VR and it can bring risk to our health both physical and mental.

Undoubtedly, each technology has both pros and cons. They do have the potential to transform the various industries, education, and training sectors by unlocking new pathways of creativity. But before investing in it, we have to compare and have proper insights on all the sectors it will bring changes.

**-BY Shreeya Singh
2405170081 (BCA 2027)**



How Technology is Shaping the World

Picture entering an office from years gone by—the clatter of typewriters, the rustle of papers, and the incessant ringing of landline phones.

Now, consider today's work environment: virtual meetings, collaborative cloud-based tools, and AI that enables smarter work practices. The transformation is nothing short of groundbreaking

Technology has not only altered our work methods—it has redefined the very essence of workplaces and workforces. From large desktop computers to the current age of automation and remote employment, the evolution of workplace technology showcases human ingenuity and innovation. With advancements such as AI-powered recruitment platforms, robotic aides, and sophisticated automation, technology is extending the limits of efficiency and productivity

While these advancements offer significant potential, they also prompt inquiries: What effects do they have on the individuals operating behind the screens and machinery? Ongoing research continues to uncover the benefits, drawbacks, and ambiguities. One fact stands out—by the year 2030, automation might displace as much as 30% of jobs worldwide, indicating substantial changes on the horizon. The Rise of Remote Work The COVID-19 pandemic not only altered our working methods, it reshaped the future.

The Flip Side of Remote Work Virtual Communication Challenges Establishing connections and cooperating in a remote environment can be difficult. It necessitates the appropriate tools and intentional efforts to keep teams linked and coordinated.

. Time Management Struggles In the absence of office routines, some individuals might struggle to remain focused. It is essential to set boundaries and objectives.

2. Cybersecurity Risks As more activities occur online, the likelihood of data breaches increases. Strong security protocols are essential.

3. Feeling Isolated Working from home can become lonely without regular face-to-face communication. Companies must devise methods to maintain employee connectivity.

4. Health Concerns The lines between professional and personal life can easily blend, raising the likelihood of burnout. Encouraging healthy habits and ensuring ergonomic workspaces is vital for sustaining well-being.

Looking Ahead:

The Future of Remote Work Hybrid Work Models A combination of remote working and in-office teamwork is becoming standard, providing both flexibility and connection.

Next-Level Tools Investments in more intelligent technology—consider advanced video conferencing and AI-driven project management—are enhancing remote work.

Prioritizing People Organizations are increasingly concentrating on employee wellness, providing chances for development, engagement, and balance.

Conventional office configurations have been supplanted by virtual workplaces, allowing employees to operate from any site. This transition has upended traditional norms, creating new possibilities for both individuals and organizations.

The Perks of Remote Work

- 1. Flexibility Remote work allows employees to function from any location and establish their own schedules. This flexibility facilitates managing personal commitments, such as caring for children or elderly relatives.**
- 2. Time Efficiency Removing commutes provides employees with additional time to focus on their jobs or personal interests. This extra flexibility enhances productivity and contributes to reducing stress.**
- 3. Better Focus, Better Output In the absence of a bustling office environment, many discover they can perform more efficiently and generate superior results.**
- 4. Cost Savings Organizations experience significant savings on rental expenses, utilities, and office supplies, while employees reduce their commuting costs.**
- 5. Global Talent at Your Fingertips Employers now have the opportunity to recruit talent from anywhere, creating diverse and innovative teams without geographical limitations.**

A Truly Global Workforce Remote work has eliminated geographical obstacles, enabling organizations to create diverse teams worldwide.

Sustainability in Action Fewer commutes and less office waste indicate that remote work is also beneficial for the environment

Automation:

A Game-Changer Across Industries Automation is transforming the framework for workplaces in every industry. It's increasing speed, safety, and consistency while allowing individuals to concentrate on meaningful tasks.

Why Automation Matters ?

- 1. Boosting Productivity** By managing repetitive tasks, automation grants employees additional time to engage in creative and critical tasks, potentially leading to greater satisfaction.
- 2. Fewer Errors** Machines excel at precision, minimizing mistakes in tasks such as data entry and billing.
- 3. Saving Time and Money** Automation can markedly reduce expenses and enhance efficiency, providing a better return on investment.
- 4. Safer Workplaces** Robots and automated systems can perform dangerous tasks, lowering risks for staff.
- 5. Consistency You Can Count On** Automation guarantees that workflows continue smoothly, even during peak times or employee shortages.

Everyday example of Automation:

- 1. Marketing Automation Tools** that manage email campaigns, SEO, and social media advertisements assist businesses in quickly and effectively engaging customers.
- 2. HR Automation** Automating payroll, hiring, training requests, and performance evaluation simplifies processes and conserves time.
- 3. Customer Service Bots** Chatbots offer round-the-clock assistance, addressing routine inquiries so agents can focus on more complicated issues.
- 4. Sales Automation** Automating lead generation, inventory management, and invoicing enhances the efficiency of sales teams.
- 5. Finance Tools** Automated accounts payable systems ensure quicker payments and improved cash flow management.

A Balanced Future

Technology is transforming our work patterns, presenting exciting possibilities and considerable challenges. Remote work and automation are leading this change, enabling us to work more intelligently and flexibly while raising critical questions about connection, security, and well-being. As we progress, adopting hybrid models, investing in cutting-edge tools, and promoting sustainable practices will be essential to creating a future where technology and humanity flourish together.

-BY Aashika Jain
240517006 (BCA 2027)

AI/ML Shaping Tommorrow

Artificial Intelligence (AI) and Machine Learning (ML) are no longer just futuristic buzzwords. They're here, changing our lives in ways we might not even notice but can't ignore. From personalized shopping recommendations to advanced healthcare solutions, these technologies are shaping the world we live in and laying the groundwork for an even more exciting tomorrow.

Machine Learning and Artificial Intelligence are creating a huge buzz worldwide. The plethora of applications in Artificial Intelligence has changed the face of technology. The terms Machine Learning and Artificial Intelligence are often used interchangeably. However, there is a stark difference between the two that is still unknown to industry professionals

Artificial intelligence, is a broader field that encompasses machine learning as well as other approaches to building intelligent systems. Artificial intelligence is concerned with creating machines that can perform tasks that would normally require human intelligence, such as recognizing speech, understanding natural language, and making decisions based on complex data.

How AI/ML Are Changing Our World

1. Healthcare:

Saving Lives with Smarter Tools Think about the anxiety of waiting for test results. AI is helping to reduce that stress by analyzing medical images like X-rays and MRIs faster and more accurately than ever before. Imagine a doctor getting instant insights into whether a tumor is cancerous or not, thanks to AI tools like Google DeepMind. AI isn't just stopping there. Drug discovery—a process that used to take years—is now being sped up dramatically by ML models that can predict how different molecules will interact. For example, AlphaFold's breakthroughs in understanding protein structures are paving the way for new treatments we couldn't have dreamed of.

2. Finance:

Safer and Smarter Money Management the financial industry is all about trust and speed. AI ensures both. It's being used to detect fraud in real-time, flagging suspicious transactions before they can harm you. Meanwhile, ML is running complex algorithms to make better investment decisions—whether that's through algorithmic trading or helping robo-advisors manage your savings more effectively. Chatbots powered by AI are also transforming customer service. No more waiting in long queues; these bots can handle your questions 24/7, saving time and reducing frustration.

3. Retail:

Shopping That Knows You Ever wonder how Netflix always knows what you want to watch or how Amazon seems to suggest exactly what you need? That's AI and ML in action. Recommendation engines analyze your behavior to make your shopping and streaming experiences feel almost tailor-made. Retailers are also using predictive analytics to ensure the products you want are always in stock. And if you're shopping online for clothes or furniture, AI-powered augmented reality tools let you see how items look on you or in your home before you click "Buy."

4. Transportation:

Smarter Roads and Safer Rides Autonomous vehicles might seem like science fiction, but they're becoming a reality. Companies like Tesla and Waymo are using AI to navigate roads, avoid collisions, and even improve traffic flow. This isn't just about convenience; it's about safety. For logistics companies, AI is optimizing delivery routes to cut costs and reduce fuel usage.

5. Education:

Learning, Tailored to You Remember struggling with subjects that felt impossible to understand? AI is making that a thing of the past. Adaptive learning platforms adjust lessons to your pace and style, ensuring you're never left behind. Tools like Duolingo use AI to make learning a new language fun and effective. Teachers are also getting a helping hand with automated grading systems that free up their time for more meaningful interactions with students.

AI and ML are revolutionizing how we grow food:

Precision Farming: AI sensors and drones analyze soil quality, monitor crop health, and optimize irrigation, reducing resource wastage.

Pest Detection: ML models identify pest outbreaks early, enabling farmers to act swiftly and minimize crop damage.

Yield Prediction: AI algorithms predict crop yields based on weather patterns, helping farmers plan better.

Example: Companies like Blue River Technology use AI-driven machinery to target weeds with precision, minimizing pesticide use and boosting productivity.

7. Manufacturing:

Smart Factories for the Modern Era Manufacturers are turning to AI to enhance efficiency:- **Predictive Maintenance:** ML algorithms analyze machinery data to predict breakdowns before they occur, saving time and money.- **Quality Control:** Computer vision systems inspect products for defects with pinpoint accuracy.- **Robotics:** Collaborative robots (cobots) powered by AI assist human workers, improving safety and productivity, **Example:** General Motors employs AI for real-time quality checks during vehicle production.

8. Entertainment:

Immersive and Interactive Experiences ,AI is transforming entertainment:

Personalized Content:

Streaming platforms like Spotify and YouTube recommend music or videos tailored to individual preferences.

Interactive Gaming:

AI powers non-playable characters (NPCs) in video games, making them more intelligent and responsive.

Content Creation:

ML tools assist writers, filmmakers, and artists in generating scripts, visual effects, or even complete scenes.

Example:

AI-powered tools like Runway are being used in video production to create stunning visual effects efficiently.

What's Next for AI/ML?

The future of AI/ML is as exciting as it is unpredictable:

Generative AI:

Tools like Chat GPT and DALL•E are opening doors to creative possibilities, generating art, music, and even written content.

Smarter Cities:

AI will power urban systems, optimizing energy usage, traffic management, and waste disposal, creating sustainable and efficient environments.

Healthcare Breakthroughs:

Predictive analytics will make preventive care more effective, while AI-powered robotics will assist in surgeries with unparalleled precision.

Neuromorphic Computing:

This next step in computing mimics the human brain, promising faster and more efficient AI systems. ML tools assist writers, filmmakers, and artists in generating scripts, visual effects, or even complete scenes.

1. A Collaborative Future

AI and ML are not just about replacing human effort—they're about enhancing it. These technologies are tools that amplify our creativity, efficiency, and decision-making. Whether it's diagnosing diseases faster, making our cities smarter, or bringing education to remote corners of the world, AI and ML are helping us achieve what was once impossible. But it's not just about the tech—it's about people. As we shape these systems, they shape us too, teaching us the importance of ethics, collaboration, and shared responsibility for the future.

2. A World of Possibilities

AI and ML hold the key to unlocking human potential. Imagine a world where no one dies from preventable diseases, where education is tailored to every child, and where we find innovative solutions to global crises like climate change. These technologies are already leading us down that path. But the real magic happens when we combine AI's speed and precision with human empathy and creativity. Together, we can build a future where technology truly serves humanity.

3. Responsibility with Innovation

The power of AI and ML is immense, but with great power comes great responsibility. As we embrace these tools, we must remember they are only as good as the people and values behind them.

4. Empowering humanity

AI and ML aren't just technological advancements; they're tools that empower humanity. They free up time by automating repetitive tasks, giving us more room to focus on what matters—family, innovation, and creativity. They make our world safer, healthier, and more connected. But their greatest gift is potential. They remind us that, with the right mindset and effort, there are no limits to what we can achieve together.

5. A Shared Journey

The journey of AI and ML is a shared one—between scientists, policymakers, developers, and every single person affected by their use. These technologies are already reshaping industries and lives, but they're still tools at heart. What makes them powerful isn't just their algorithms; it's the human values and aspirations they carry forward. As long as we put humanity at the center of this journey, the possibilities are endless.

Challenges and Ethical Questions

Of course, it's not all smooth sailing. AI systems can unintentionally reinforce biases present in their training data, leading to unfair outcomes. There's also the ever-present concern about data privacy and how much of our information we're willing to share.

Another pressing issue is transparency. Many AI models function like "black boxes," making decisions without us fully understanding how or why. If AI is to gain widespread trust, it needs to become more explainable.

Conclusion

AI and ML are shaping tomorrow by making our world smarter, faster, and more connected. Whether it's saving lives in hospitals, making daily tasks easier, or opening up new creative possibilities, these technologies are here to stay. But as we embrace them, we must also navigate the ethical and societal challenges they bring.

The future is bright—and if we handle it responsibly, AI/ML will continue to unlock opportunities we've only begun to imagine.

So let's shape tomorrow together, using AI not just as a tool but as a force for good

**-BY Geetika Jain
2407570067 (BCA 2027)**

Information Retrieval in Healthcare and Biomedical Research

Information retrieval (IR) is very important in healthcare and biomedical research because it helps people quickly find useful information in large medical databases. Today's IR systems use tools like natural language processing and machine learning so that doctors can easily search through electronic health records (EHRs), medical articles, and genetic databases.

Examples like PubMed and clinical decision support systems use smart search methods to find the right patient data, research papers, and treatment guidelines.

This helps doctors make better diagnoses and provide care that fits each patient. People who work in drug research also use IR to study how drugs interact and to find side effects in big medical databases, which helps them discover new medicines faster and keep patients safe.

In the future, IR in healthcare will need to solve problems like keeping patient data private, combining different types of data (like text, images, and gene sequences), and making sure AI-based search tools are fair and not biased. However, new technologies like deep learning and knowledge graphs could help connect different sources of medical information, making precision medicine better. As these technologies get better, IR systems will become even more important in healthcare. They could power virtual medical assistants and help doctors make decisions in real time, leading to better care for patients and making research easier and faster.



Dr. Imran Rasheed
Assistant Professor
DCA, IIIT Noida

Blockchain Beyond Cryptocurrency: Practical Uses

Bitcoin and other cryptocurrencies are just one aspect of blockchain technology. Its decentralized, transparent, and secure characteristics make it useful across a range of industries, providing solutions that improve efficiency, security, and trust. Blockchain increases tracking, lowers fraud, and guarantees product authenticity in supply chain management. Blockchain technology is used by healthcare institutions to ensure patient records are safe, accessible, and interoperable.



Blockchain is transforming a number of industries and influencing the direction of digital transactions and information integrity by tackling issues with data security, efficiency, and transparency.

Smart contracts help the banking industry by preventing fraud and facilitating quicker, more affordable transactions. Blockchain is being investigated by governments for transparent public records, safe voting procedures, and digital identity verification. Blockchain is also being used by sectors including intellectual property protection, insurance, and real estate to automate processes and lower fraud.

Ms. Jyoti
Assistant Professor
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The Future of Digital Spaces: The Construction, Connection, and Operation of 3D Virtual Worlds

3D virtual worlds are becoming an increasingly critical element of digital interaction in the swiftly evolving technological landscape of today. The capacity to construct, connect, and operate within these virtual environments is revolutionizing the manner in which we interact with the world and one another, from gaming and social networking to virtual workplaces and education. As we transition into the metaverse era, this article examines the ways in which 3D virtual worlds are altering our digital experiences and the implications for the future.



Creating New Realities: Building 3D Virtual World

Building is the starting point for any virtual environment. Developers and creators are now equipped with sophisticated tools and platforms that enable them to create complex 3D environments that rival or transcend the limits of the real world. Creating detailed virtual landscapes, ranging from expansive natural terrains to immersive cities, has never been simpler thanks to software such as Unity, Unreal Engine, and Blender.

The construction of these environments is not limited to mere aesthetics; it also entails the integration of functionality and interactivity. Virtual environments must be capable of accommodating a diverse array of user experiences, such as attending a concert or investigating an alien planet. This entails the integration of real-time mechanics, lighting, artificial intelligence (AI) characters, and network protocols to facilitate user interaction. Creators can now utilize distant servers to host these worlds, thereby guaranteeing a seamless and expansive digital space, thanks to the advancements in cloud computing.

Social Interaction in Virtual Spaces: Connecting People

Following the creation of a 3D world, the subsequent obstacle is to facilitate communication among individuals within it. In contrast to conventional websites or 2D video games, virtual worlds prioritize community development and social interaction. These environments provide immersive experiences that traditional digital spaces are unable to match, whether it is collaborating in a business meeting, attending a concert, or simply hanging out with friends.

This has been significantly influenced by virtual reality (VR) and augmented reality (AR) technologies, which have enabled users to engage with others in entirely immersive environments that are nearly as authentic as in-person meetings. The potential of 3D virtual environments to unite individuals has been demonstrated by social platforms such as Horizon environments, Roblox, and VRChat. This also implies the potential for businesses to establish virtual offices, which would enable employees to collaborate and reduce their dependence on physical office spaces, thereby circumventing geographical constraints.

Maintenance and Development of Virtual Worlds

The third and final component of 3D virtual environments is the maintenance and continuous expansion of their operations. Although it is crucial to establish connections and construct structures, it is equally critical to ensure that a virtual world function efficiently. Operation encompasses a wide range of tasks, including the maintenance of server stability, the protection of user data, and the establishment of a secure and inviting environment for all.

This is the point at which AI-driven solutions, cloud technologies, and robust backend systems are implemented. To maintain the functionality and freshness of virtual environments, it is imperative to implement consistent updates, content expansions, bug fixes, and security patches. Operators are required to oversee economies within these virtual worlds, which are frequently based on a subscription-based or microtransaction model, in order to maintain a balance between accessibility and profitability.

Additionally, moderators and AI tools help guarantee that users adhere to community guidelines, thereby maintaining the safety and respect of virtual environments, as user interaction continues to expand. The continuous evolution of virtual worlds with new features is a consequence of their development, which guarantees that users will remain engaged and invested in the long term.

The Future of 3D Virtual Worlds

The potential for 3D virtual environments is boundless as technology continues to evolve. In the near future, we will witness an increase in the number of interconnected virtual spaces, which will be facilitated by advancements such as 5G, edge computing, and even avatars that are propelled by artificial intelligence. In recent years, the term "metaverse" has acquired significant popularity. It is intended to establish a network of interconnected 3D virtual environments that will enable users to transition seamlessly between various worlds, platforms, and experiences.

The ability to scale virtual worlds to accommodate millions of users, the continuous development of open standards, and the adoption of cross-platform interoperability are the key components of transforming this vision into a reality. We can anticipate that virtual worlds will become as ubiquitous as social media in the years ahead, playing a critical role in a variety of domains, including education, commerce, and socializing.

Conclusion

The future of digital interactions is being influenced by the transformative force of the ability to construct, connect, and operate 3D virtual environments. The world as we know it will continue to transition into the digital domain as creators continue to create richer, more interactive virtual environments and as users become more immersed in these spaces. These digital spaces possess significant potential, providing distinctive opportunities for social interaction, education, entertainment, and business. The potential of 3D virtual environments is vast, and we are only beginning to explore its potential. The future is promising.

*-Ms. Neetu Singh
Assistant Professor
DCA, JIIT Noida*

Metaverse & Virtual Reality: The Next Big Thing in Tech

The future of technology is unfolding, and at the forefront of this revolution is the Metaverse and Virtual Reality (VR). These immersive digital worlds are redefining how we interact, learn, and connect.

"The Metaverse isn't a distant dream—it's already here" says tech visionary Mark Zuckerberg.



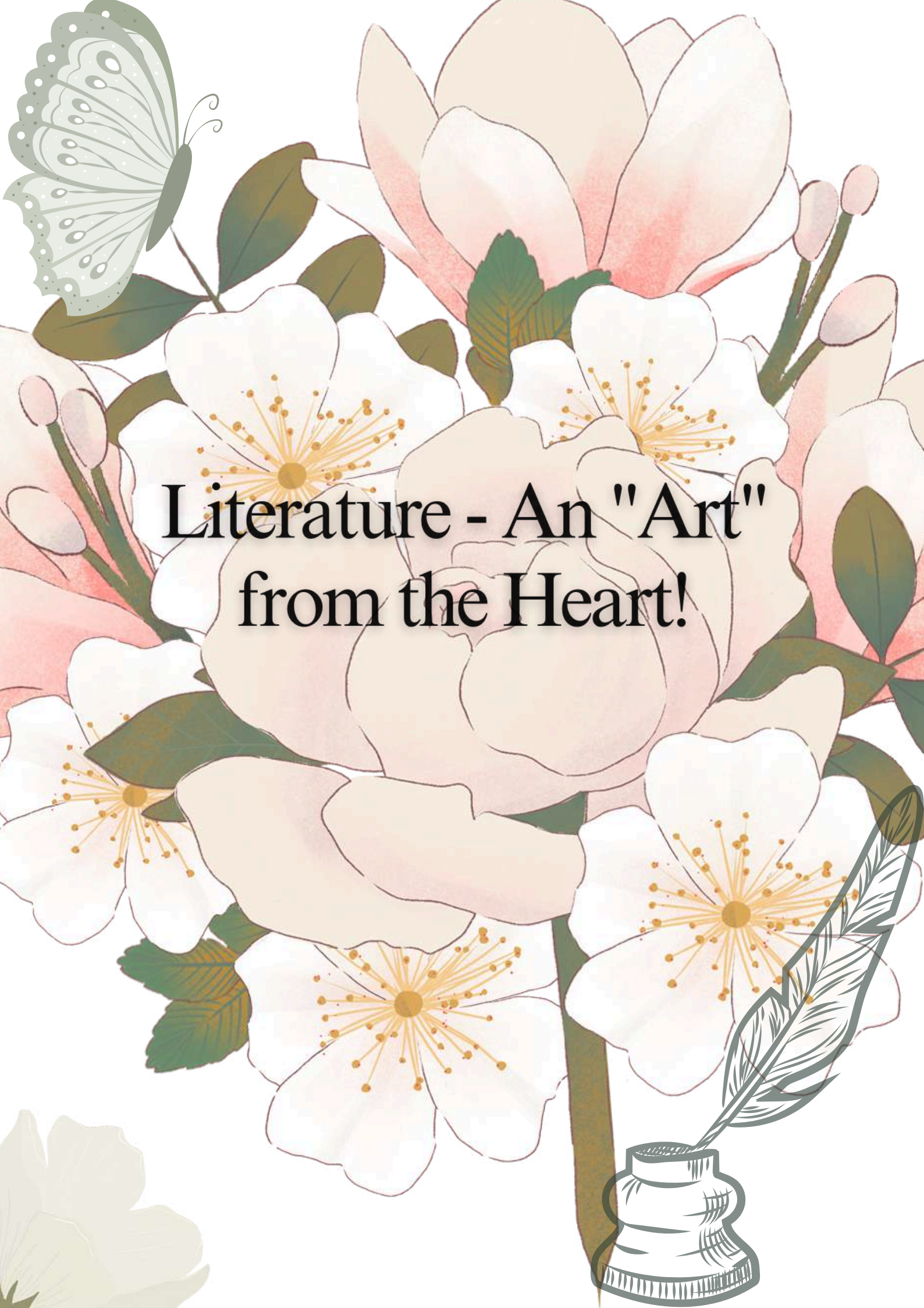
As companies invest billions into creating virtual environments, the Metaverse is transforming industries like gaming, education, and even healthcare. VR plays a crucial role in this transformation by providing fully immersive experiences, allowing users to step into digital environments as if they were real.

In education, for example, VR can bring lessons to life—imagine studying ancient history by walking through a virtual Roman marketplace. In entertainment, VR lets gamers experience thrilling adventures firsthand. "Virtual Reality takes the leap from passive viewing to active participation," says VR pioneer Jaron Lanier.

However, the question remains: Are we ready to fully embrace the Metaverse?

With the rapid evolution of technology, these virtual spaces promise new opportunities for creativity, socializing, and work. Yet, concerns about privacy, security, and the potential for addiction must be addressed. As we stand on the cusp of this digital revolution, it's clear that the Metaverse and VR are not just trends—they are shaping the future. "The possibilities are limitless", and soon, we may live, work, and play in ways we've only dreamed of.

*-Ms. Shagun Gupta
Assistant Professor
DCA, JIIT Noida*



Literature - An "Art"
from the Heart!

"Lights on- for SHE fears DARKNESS"

**Please always leave the lights on,
In case I need to find you!**

*In an instance,when I need a stronger her;
Guide me to free myself ,to not feel a sufferer.
I want you to be beside me and stay,
And just like that we will slay!*

*When I can't find solace in the dark,
I'll return to you to shut the nights from their bark.
I know I've wandered far away,
But I always remember the moments we sway.*

*I think I've lost my own cheerself;
Among the sorrows I still feel weak of myself.
To recover from that I need your help,
Knowing this, I'm free from all sorts of yelp.*

*And the nights,the darkness,
Provides me a feel of being in mess.
Then the sorrows,makes smile a exception that has been borrowed;
But when I reach you, they make their brows furrowed!*

*I have no light left in me,they went to the shore,
The darkness here, keeps my fear uproar.*

*And then just your smile will make it all glow,
Your presence will take me away from its flow
Give me your hand,I want to make it to your light;
Then everything on it's own goes toward it's right.*

**Please always leave the lights on,
In case i need to find you;
When the thing I only want is to take a break from this queue.**

**-Anshika Srivastava
2405170095 (BCA 2027)**

"FOREVER"

**OUR WORLD IS NOT DEFINED.
WE HAVE TO MAKE IT TOGETHER.**

**THERE WILL BE PEACE IN OUR SOULS ,IF WE HOLD ONE ANOTHER.
WE CAN'T DENY THE LOVE WE WANT, FROM THE WORLD.**

**BUT THEY ARE THE SLAUGHTERER OF OUR FOREVER LOVE.
FOREVER IS A MYTH OR TRUTH?**

**IN REALITY, DEATH AND LOVE CAN'T WALK TOGETHER.
THE WORLD WHERE WE CAN LIVE HAPPILY**

**THE WORLD WHERE WE CAN GAZE AT THE MOON
YOU'RE THE ONE I WANT; I DON'T THINK IT'S TOO SOON.
OUR WORLD IS NOT DEFINED. LET'S MAKE OUR WORLD
TOGETHER.**

**-Saurav Kumar
23517099 (BCA 2026)**

AZALEA

She gives birth to my melodious dream.
Wrapping her scatheless stream
on my timid shell,
hauling me out of the disquietude coral hell.
The consequent pain of my Carnations
Carving me into large blemish Bleeding Heart.
But the floating waves of hers taking me to Neptune's
Amethystine part as beautiful as the Venus star,
leaving the Bubbles of Stigende Luminescence of Safe
(Stigende is rising in Danish)
on my arenarious humerus's rufescent Red Osier scars,
healing by wrapping into her name.
The Carmine in Angel Wings makes me want to write
her name in cerise on Caladium leaves,
"Azalea" who blooms into my heaven's breeze.

-Trrisha Digwasiya
23517061(BCA 2026)



Aletheia

*Sometimes I Wonder,
What's above the Cloud?
Beyond the thunder,
Is there Peace or, Loud?*

*Some say there's heaven,
and some say it's hell,
Well who knows perfectly.
What matters is the journey,
with your own ones warmly,
And I am sure it would be afarny.*

*Being a spirit of the world,
I have been puzzled.
Amused by the beauty,
where everyone has to fulfill their duty.*

*Leaving the thought behind might enlighten your light(day),
To find your way through the scary and stormy night(night).
Just stand like the ship which stays calm and smooth,
as It sails through the storm with a gentle truth.*

*-Aditya Garg
23517020 (BCA 2026)*

THE TRUE ESSENCE OF BEAUTY

WHAT IS BEAUTY? IS IT SOMETHING THAT ATTRACTS
OR PLEASES THE EYE?

MANY WOULD SAY YES, AND IN A WAY, THEY'RE RIGHT.

BUT IF BEAUTY WERE ONLY ABOUT APPEARANCE, WOULDN'T IT BE FLEETING? AFTER ALL, AS TIME
PASSES, YOUTHFUL SKIN GIVES WAY TO WRINKLES,
THOSE PLUMPY RED CHEEKS FADE AND THE SO-CALLED "PERFECT" FEATURES CHANGE.
IF BEAUTY IS ONLY SKIN-DEEP, THEN IT'S TEMPORARY. BUT TRUE BEAUTY OR INNER BEAUTY IS
ETERNAL.

IN TODAY'S WORLD, SOCIAL MEDIA CONSTANTLY BOMBARDS US WITH POLISHED, FILTERED
VERSIONS OF REALITY.

WE SEE ONLY WHAT PEOPLE WANT US TO SEE LIKE THEIR PERFECT LIVES, FLAWLESS FACES, AND
CAREFULLY CURATED HAPPINESS.

THIS CREATES UNREALISTIC EXPECTATIONS, MAKING US MEASURE OUR WORTH AGAINST AN
ILLUSION.

WE CHASE PERFECTION, FORGETTING THAT EVEN THOSE WE ADMIRE MAY BE STRUGGLING BEHIND
THE SCENES -WHAT WE SEE IS ONLY THE LIFE THEY WANT US TO SEE.

BUT HERE'S A THOUGHT: WHAT IF THE LIFE WE TAKE FOR GRANTED IS THE VERY LIFE SOMEONE
ELSE DREAMS OF?

WHAT IF, INSTEAD OF CHASING AN UNATTAINABLE VERSION OF OURSELVES, WE EMBRACED WHO
WE TRULY ARE? OUR FLAWS, OUR IMPERFECTIONS-THEY MAKE US REAL.

AND REAL IS BEAUTIFUL

. IT'S TIME TO REDEFINE BEAUTY, NOT AS SOMETHING THAT FADES WITH AGE, BUT AS
SOMETHING THAT GROWS WITH KINDNESS, CONFIDENCE, AND SELF-ACCEPTANCE.

LET'S STOP MEASURING OURSELVES BY IMPOSSIBLE STANDARDS AND START APPRECIATING
THE UNIQUE, IMPERFECT, AND WONDERFUL INDIVIDUALS WE ARE.

THERE IS SO MUCH MORE TO BEAUTY THAN OUR EYES CAN PERCEIVE.

BECAUSE IN THE END, BEAUTY ISN'T ABOUT HOW THE WORLD SEES US - IT'S ABOUT HOW WE SEE
OURSELVES

-BY SUBHIKA SACHDEVA
2405170036 (BCA 2027)

Between Silence And Words

“Lost Between Words...”

I talk too much , I say too fast ,
Then regret the things that passed.
Some people don't love to know ,
Yet still , my words just seem to flow.

I love the crowd, I love the cheer,
But silence too, I hold so dear.
I dream of mountains, sitting alone,
Letting my thoughts just freely roam .

I wish to hide, to stay unknown ,
Yet spill my heart when I feel at home.
I try to stop, to keep things inside,
But then again , I let them slide.

Will I learn to find my way,
Between the words I should not say ?
Or will I always stand between,
Silent thoughts and spoken dreams ?

-Smriti Gaur

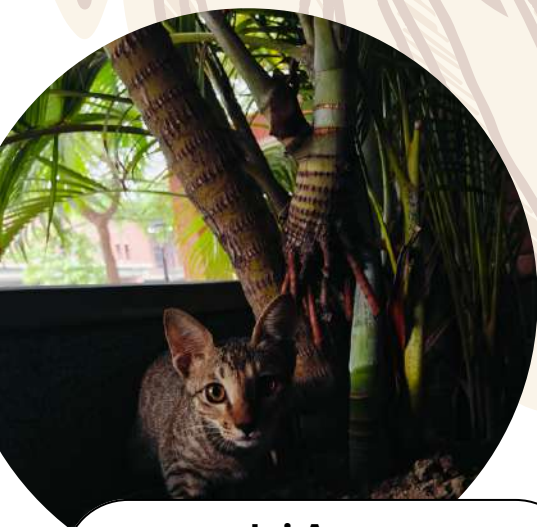
2405170080 (BCA 2027)



Captured Moments

“A picture is worth a thousand words, and through Captured Moments, we bring you stories frozen in time. This section is a visual journey through the heart of our college and beyond—its vibrant streets and everyday life. Every frame tells a unique story, every snapshot captures a moment of culture, tradition, and experience.”

THE CLICK CHRONICLE



Jai Arora
BCA 2027 | 2405170014

Anurag Walia
MCA 2026 | 2410170008



Paridhi Aggarwal
BCA 2027 | 2405170029



Atharv Rastogi
BCA 2026 | 23517052

**"A photograph is a whisper of
time,
captured before it fades into
silence."**

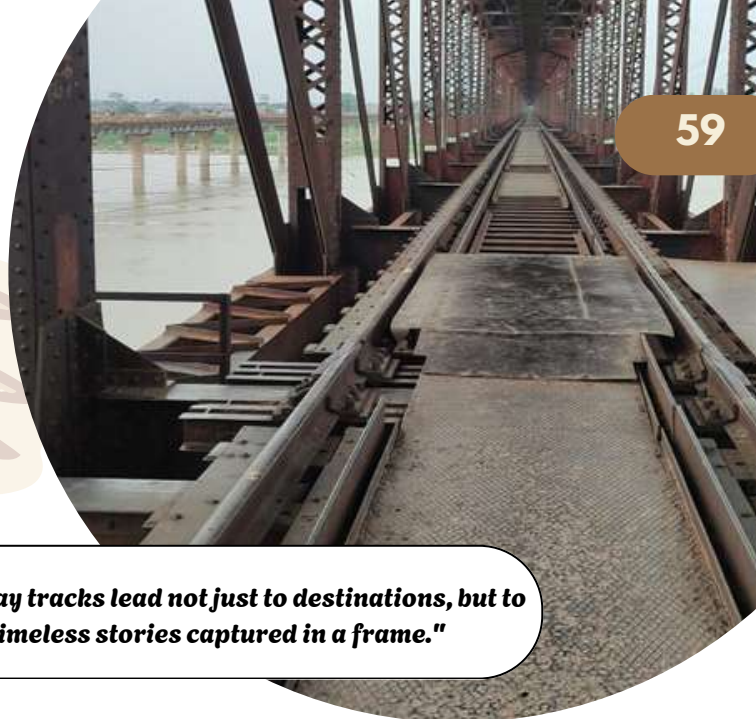
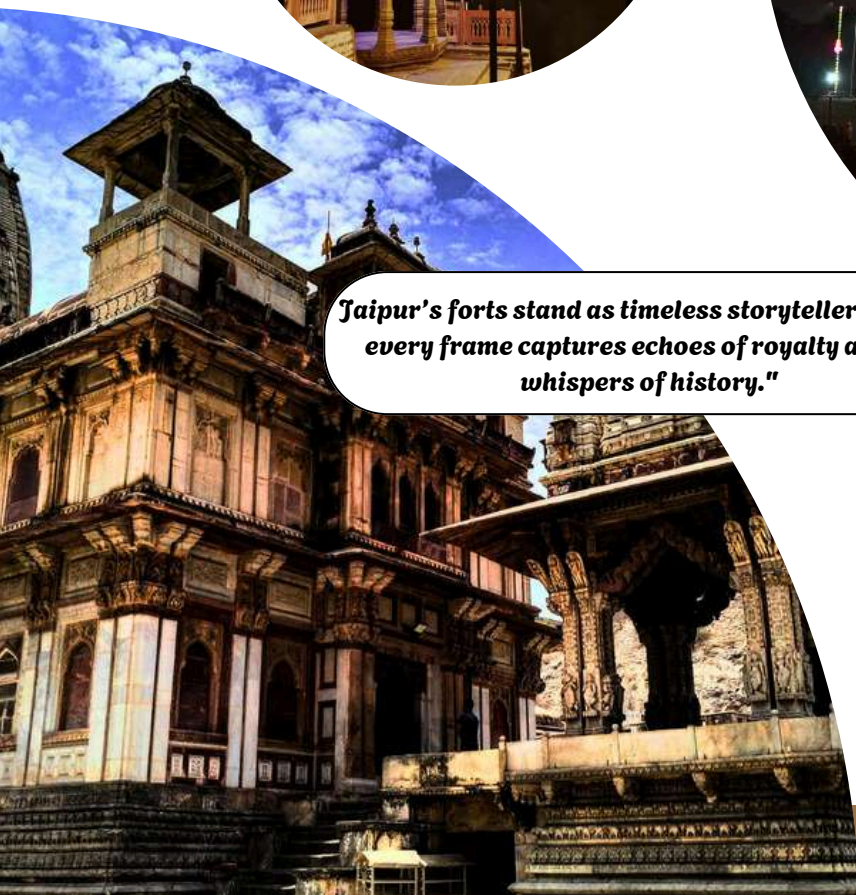
From Anant's Lens



At Yamuna Ghat, the river mirrors the sky, the birds dance with the light, and every click captures a whisper of serenity.



Jaipur's forts stand as timeless storytellers, where every frame captures echoes of royalty and the whispers of history."



"Railway tracks lead not just to destinations, but to timeless stories captured in a frame."

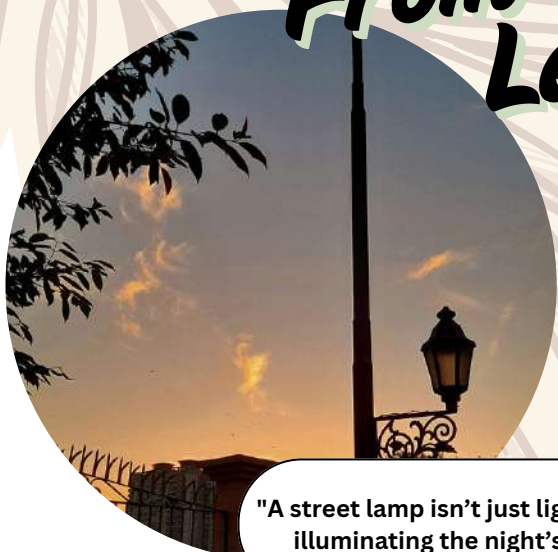


Anant Rastogi

MCA 2026 | 2410170027

"Every frame tells a story - through the eyes of Anant"

From Vivek's Lens



"A street lamp isn't just light; it's a silent poet illuminating the night's untold stories."



"Morning sunrise captures the first brushstrokes of light painting a new beginning."



"Forest adventure photography captures the whispers of the wild and the echoes of untamed beauty."



College photography captures not just buildings, but the laughter, dreams, and memories that live within."

Vivek Kumar Singh
MCA 2026 | 2410170004

For me, photography isn't just about seeing—it's about feeling the unseen."

Click For More: [Vivek Singh | Pexels](#)



PUBLICATIONS

- ☒ **Dr. Sandeep Kumar Singh**
 - ☒ **Dr. Shelendra Pal**
 - ☒ **Dr. Imran Rasheed**
 - ☒ **Dr. Ruchin Gupta**
 - ☒ **Ms. Neetu Singh**
 - ☒ **Ms. Jyoti**
 - ☒ **Ms. Shagun Gupta**
- 

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Dr. Sandeep Kumar Singh

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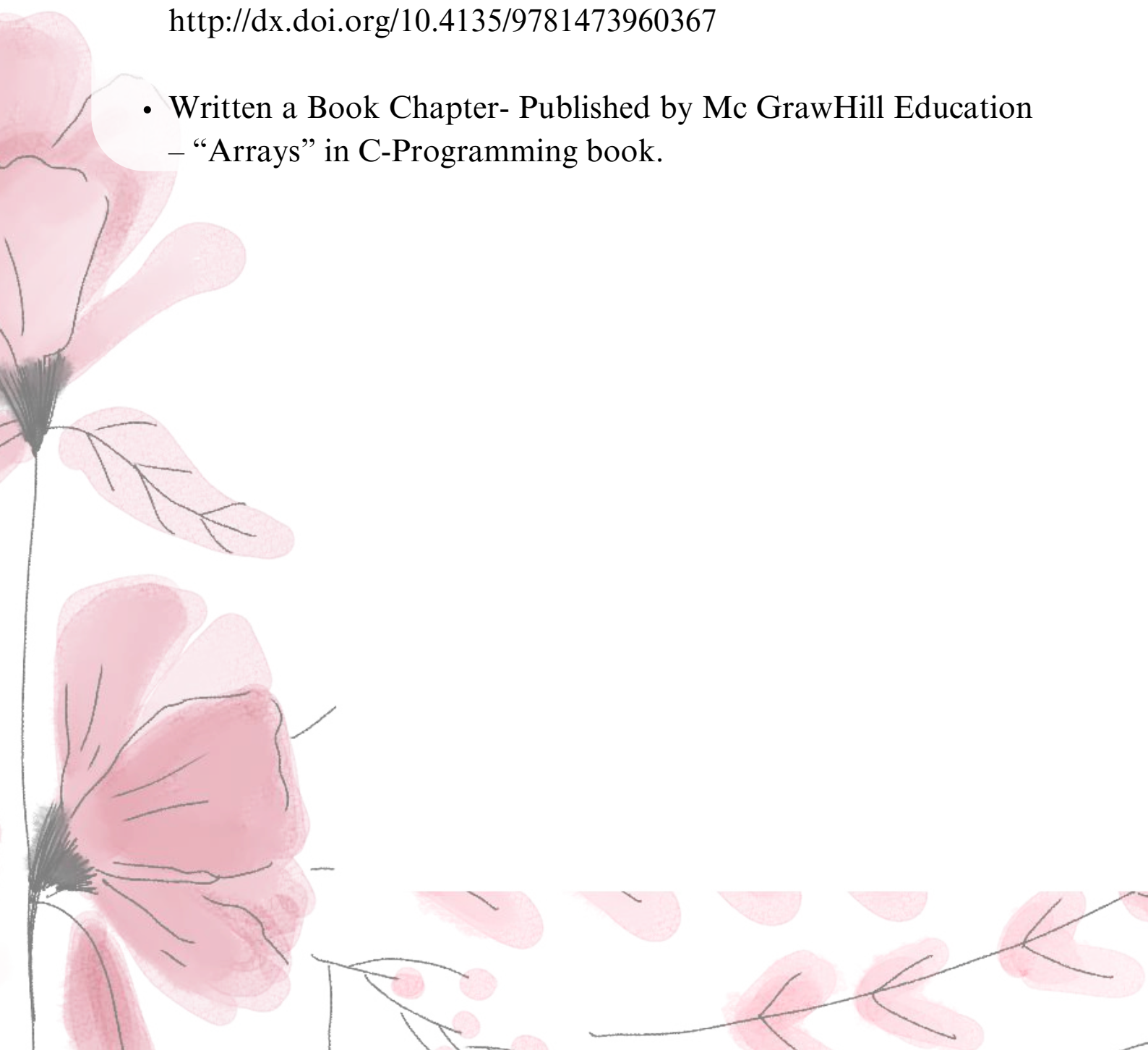
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Dr. Imran Rasheed

Journals

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Published (1) Imran Rasheed, Haider Banka, “Query Expansion in Information Retrieval for Urdu Language”, CAMP’18 4th International Conference on Information Retrieval and Knowledge Management, Kota Kinabalu, Sabah, Malaysia, pp. 1-6. IEEE, 2018, doi: 10.1109/INFRKM.2018.8464762..

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Dr. Ruchin Gupta

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- Gupta, Ruchin. "Discovering Smell Relations between Temporary field and Design Smells: An Empirical Analysis". Innovations in Systems and Software Engineering. 2024 (Scopus, ESCI, IF-1.1). (Accepted)
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- Chaudhary, Deepak, Singh, Pancham, and Ruchin Gupta. "Comparison of cache page replacement techniques to enhance cache memory performance." International Journal of Computer Applications 98.19 (2014).

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- Jain, Paras, Anurag Shukla, Ruchin Gupta, Vishan Kumar Gupta, Priyank Pandey, and Harish Tiwari. "Blockchain technology: A systematic review." Artificial Intelligence and Information Technologies (2024): 103-109. (Scopus)
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- Ruchin Gupta, CPU Scheduling for Multi-user (With Priority) Operating System, National Conference (ACST 2009) on "Future Trends in Applications of Computers in Science & Technology" (ACST- 2009) at IMSEC, Ghaziabad (7-8 Feb 2009).
- Ruchin Gupta, Ranksort Algorithm: an approach, Computer Society of India, Ghaziabad (UP): Second prize at Young IT Professional Award, 2006.
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Patents published

- An AI, ML, and IOT-powered system for tracking, diagnosing, and halting the spread of dengue fever, Application No: 202311002383, Indian Patent.
- Cloud and IOT based secure home automation system using speech through google assistant, Application No: 202211022229, Indian Patent.

Ms. Neetu Singh DCA , IIIT 62

- Published a Paper:” A Systematic Literature Review of Solutions for Cold Start Problem” in the International Journal of System Assurance Engineering and Management an ESCI and Scopus Indexed journal with impact factor:1.8, H-index:39, DOI: 10.1007/s13198-024-02359-y
- Published, an empirical study "Navigating Bug Cold Start with Contextual Multi-Armed Bandits: An Improved Approach To Developer Assignment in Software Bug Repositories", at SCIE nd Scopus Indexed journal named “Automated Software Engineering” Impact Factor:2.3, H-index: 51.
- MABTriage:Multi Armed Bandit Triaging Model Approach, <https://doi.org/10.1145/3474124.3474194>,IC3,2021,Scopus&DBLP Indexed Conference.
- “An Empirical Assessment of the Performance of Multi-Armed Bandits and Contextual Multi-Armed Bandits in Handling Cold-Start Bugs ”, <https://doi.org/10.1145/3607947.3608094>Scopus, and DBLP indexed conference with H-index 21

- Published a book chapter “Reinforcement Learning in Bug Triaging: Addressing the Cold Start Problem and Beyond” at IGI Global-Advancing Software Engineering Through AI, Federated Learning, and Large Language Models Copyright: © 2024 |Pages: 21 Copyright: © 2024 |Pages: 21,DOI: 10.4018/979-8-3693-3502-4.ch011

Under Review

- Under review, an empirical study” Optimizing Developer Assignments in Software Bug Repositories” at ESCI and Scopus Indexed journal named “Innovations in Systems and Software Engineering” Impact Factor:1.1

- Under review. A book chapter on “Contextual Bandits for Recommendations with Vowpal Wabbit” at “Transforming Digital Commerce” Scrivener, Wiley

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- Chauhan, J., & Alam, T. (2024). Adjustable Rotation Gate based Quantum Evolutionary Algorithm for Energy Optimization in Cloud Computing Systems. in International Journal of Computational Science and Engineering, DOI: 10.1504/IJCSE.2023.10059058. (ISSN: 1742-7193, IF 2.0, Scopus, Web of Science (ESCI) and UGC Care).
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Ms. Shagun Gupta
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[1] Aakash, N., Gupta, S., & Noliya, A. (2024). URL-Based Sentiment Analysis of product reviews using LSTM and GRU. *Procedia Computer Science*, 235, 1814–1823. <https://doi.org/10.1016/j.procs.2024.04.172> 1.Cloud Security and Computing Research in Digital Forensics” | National Conference on Managing Global Challenges Through Innovative Strategic Practices -2024 | TIT 2.E-Commerce Decentralized Through Blockchain” | ICAM-2023 | HSCSIT- DST



Achievements

ACHIEVEMENTS

International Training Center of Comptroller and Auditor General of India organized a Presentation/Demonstration competition on the theme "Use of AI/ML for increased transparency and governance". A team of 4 BCA Semester 3 students - Riya Chachra, Vansh Sharma, Atharv Rastogi and Aryansh Chauhan, participated. The title of their work was "AI Connect: Amplifying citizen voices for transparent governance". The team won 1st Runner up position, certificates and a cash prize of INR 5,000.



ACHIEVEMENTS

This event, organised by CodeDay, was an exciting two-day affair held on the 27th and 28th of September at IIT Delhi. Day 1 kicked off with a series of immersive workshops, where participants explored topics like web development, game development, Figma jamming, and even creating a ChatGPT clone in Python. A special highlight of the first day was a virtual talk with WaldenYen, where he discussed how AI is truly game-changing every aspect of our lives and shared his insights on where the future of AI is heading. His perspective left attendees both informed and inspired about the limitless possibilities of AI technology.

Day 2 brought even more excitement with a mini-hackathon, where teams competed to develop innovative solutions within a limited timeframe. I was proud to secure 3rd place by creating a small ChatGPT-like tool that could be run in the terminal, with the output rendered in colourful, markdown-like formatting, making it highly user-friendly. The event was a perfect blend of learning and creativity, offering a chance to network with like-minded individuals.



Student's Activities & Achievements

S. No.	Name of the event	Winners	Organized by
1	GameDev Hub's GameForge	Poorab Gupta Devabh Narang (prize Money:Rs 2500)	JIIT NOIDA
2	Euphoria - Aakrosh	Amresh	JIIT NOIDA
3	Parola	Amresh	JIIT NOIDA
4	Joust	Amresh	JIIT NOIDA
5	Impression - Hera Pheri	Amresh	JIIT NOIDA
6	JOUST,MUN Committe- UNHRC Portfolio-SWEDEN	Madhav Suneja	JIIT NOIDA
7	Presentation / Demonstration of AI/ML for enhanced transparency and governance	Riya Chachra, Vansh Sharma, Atharv Rastogi, Aryansh Chauhan	ICISA
8	Mentor at Techblocks 10.1	Vansh Sharma	JIIT NOIDA

Student's Activities & Achievements

S. No.	Name of the event	Participated by	Organized by
1	Web Development Course	Arihant Gupta	Teachnook
2	Unmanned Aerial Vehicle by CDAC-CICE HUB	Deepesh Chottwani	JIIT NOIDA
3	Quiz Round National Finals	Deepali Gupta	Online
4	Rendezvous Quiz MUN (UNHRC)	Kashish Taneja	IIT and JIIT
5	Azure Community Day	Madhav Aggarwal	Microsoft Office Gurugram
6	Google Cloud Community Day	Madhav Aggarwal	Raddison Hotel, Noida
7	AWS Community Day	Madhav Aggarwal	IIT DELHI
8	BootCamp on Cyber Security	Yashvardhan Arora , Poorab Gupta	CDAC Noida
9	Volunteer at SPARK'24	Madhav Aggarwal	CISA, JIIT NOIDA
10	Volunteer at NSS Blood Donation camp	Ashwin Siby Madhav Aggarwal Sonali Nagar Vijit Malotra Yashvardhan Malhotra	JIIT NOIDA



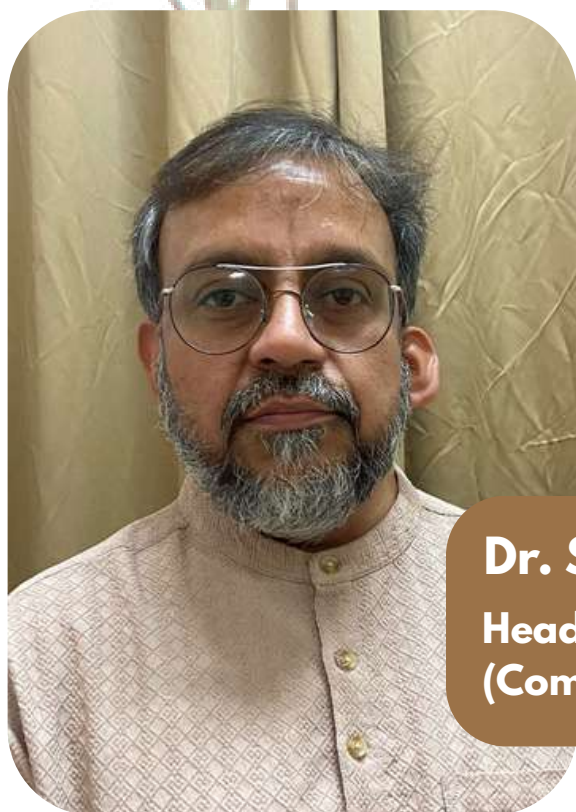
Event: Code Craft

Start Date: 3 October 2024

End Date: 5 October 2024



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**" The future
isn't just
programmed
, it's
imagined
first - keep
imagining! "**