IT COMPENDIUM

DEPARTMENT OF INFORMATION TECHNOLOGY

OCTOBER-DECEMBER ISSUE 2025

"
Unleashing Potential, Transforming Futures

INSIDE THIS ISSUE

CHIEF EDITOR:-

Dr. Pratistha Mathur, HOD of Information Technology

FACULTY EDITOR:-

Dr. Shweta Sharma, Department of Information Technology

STUDENT EDITOR:-

Rehan Saini, 2nd Year

MESSAGES

MESSAGE BY ASSOCIATE DEAN

Dear Readers,

The Department of Information Technology at Manipal University Jaipur continues to evolve as a hub of academic excellence, innovation, and industry alignment.

Since its inception in 2012, the Department has grown into a thriving ecosystem—home to state-of-the-art laboratories, a future-ready curriculum, and a distinguished faculty dedicated to academic excellence, innovation, and impactful research.

Our programs are thoughtfully designed to equip students with both foundational and advanced computing knowledge. From mastering basic concepts to creatively solving real-world problems through research and innovation, we aim to empower our students to become industry- and society-ready professionals. Beyond technical competence, we strive to ignite curiosity, nurture creativity, and cultivate a research-driven mindset.

This newsletter marks a new chapter in our journey—a platform to celebrate our achievements, share insights, and reflect the vibrant spirit of our department.

I warmly invite you to explore, engage, and be inspired.

Prof. (Dr.) C. S. Lamba
Associate Dean,
School of Computer Science and Engineering

MESSAGE BY HOD

Think beyond theoretical frameworks- our world class industry ties open doors to real-world challenges and opportunities. Through Value-Added Courses, MOOCs, Workshops, and Industrial Visits, you'll test your mettle, hone your skills, and network with the pioneers shaping the digital landscape. Our mission is your success. We support, guide, and empower you every step of the way as you craft your unique code in the symphony of the digital revolution. This isn't just a department; it's a launchpad, a community, and your home in the heart of the IT revolution. Join us, innovators, dreamers, and builders let's rewrite the very definition of an IT professional, together. Welcome to the Department of Information Technology at Manipal University Jaipur. Welcome to your future

Prof. Pratistha Mathur
HoD, Department of IT

Department of Information Technology – Manipal University Jaipur

Established in 2012, the Department of Information Technology at Manipal University Jaipur is committed to bridging the gap between academia and industry. We offer a cutting-edge curriculum designed to equip students with the latest technical knowledge and industry-relevant skills.

Our department prepares students for the evolving global IT landscape by fostering innovation, research, and hands-on learning. With state-of-the-art computing facilities, we provide a comprehensive curriculum covering fundamental programming languages to advanced domains such as Machine Learning, Cloud Computing, Networking, Image Processing, Android Development, and the Internet of Things (IoT).

Designed to meet industry demands, our curriculum emphasizes practical applications and real-world problem-solving. We actively collaborate with leading industries in areas like Computer Networking, Data Mining, Big Data Analytics, Computer Vision, Cloud Computing, and Cybersecurity. Additionally, the department maintains strong affiliations with prestigious research communities, including IEEE, CSI, ACM, and NVIDIA, ensuring students stay at the forefront of technological advancements.

Through a blend of academic excellence, industry partnerships, and research opportunities, the Department of IT empowers students to thrive in the ever-evolving world of technology.

VISION

To achieve global excellence in higher education, research and human development by adapting innovations in IT domain.

MISSION

To become the most inspirational department among the students and engineering aspirants who want to pursue their career in the field of Information Technology.

To foster academic, research, and professional excellence within the domain of Information Technology.

To transform young minds into competent IT professionals imbibing strong moral values.

FACULTY OF IT

Program Educational Objective (PEO)

- To Imbibe the inquisitive practices in students to have thrust for innovation and excellence that leads to use research-based knowledge and research methods.
- To foster world-leading technological innovation to support teaching and learning, research and outreach.
- To support the students to acquire various knowledges and ski ls and nurture constructive attitude and behaviour.
- Promoting the development of resilience, determination, confidence, and creative and critical thinking among students.
- To support students to ensemble easily in integrated environment of learning and pragmatic implementation of concepts.

LIST OF FACULTIES

Dr. Ankit Mundra
Dr. Anurag Bhatnagar
Dr. Anju Yadav
Dr. Ashish Jain
Dr. Avani Sharma
Dr. Bagesh Kumar
Mr. Chandrapal Singh Dangi
Dr. Debolina Ghosh
Dr. Devesh Kumar Srivastava
Dr. Ganpat Singh Chauhan
Dr. Kavita
Dr. Krishna Kumar
Dr. Krati Dubey

Dr. Lokesh Sharma
Dr. Narendra Singh Yadav
Ms. Nandani Sharma
Dr. Nirmal Kumar Gupta
Dr. Nripendra Narayan Das
Dr. Pankaj Vyas
Dr. Prakash Chandra Sharma
Dr. Pratistha Mathur
Dr. Rahul Saxena
Mr. Ravinder Kumar
Mr. Ravindra Saini
Ms. Rashmi Bartwal
Mr. Rohit Kumar Gupta

Dr. Shally Vats
Dr. Shalini Puri
Dr. Shikha Chaudhary
Dr. Shweta Sharma
Dr. Smaranika Mohapatra
Mr. Suman Saurabh Sarkar
Dr. Sulabh Bansal
Dr. Sumit Srivastava
Dr. Vineeta Soni
Dr. Venkatesh Gauri Shankar
Dr. Vivek Kumar Verma
Mr. Vijay Prakash Sharma
Mr. Virender Dehru
Dr. Yogender Sharma

FACULTY ACHIEVEMENTS
DEPARTMENT OF INFORMATION TECHNOLOGY
RESEARCH DATA

Department of Information Technology - Research Highlights
Faculty of Engineering | School of CSE (CSE & IT)

Reporting Period:. OCTOBER 1- DECEMBER 31, 2025

The Department of Information Technology at Manipal University Jaipur has shown commendable scholarly productivity and innovation in the fourth quarter of 2025. Our faculty and researchers have actively contributed to advancing knowledge through high-quality publications and intellectual property filings

Research Publications

During this period, the department produced a total of **research publications**. This includes:

- **18 Q1 journal publications**, reflecting impactful and high-ranking contributions.
- **3 Q2 publication**, **1** in Q3, and **0** in Q4, indicating consistent engagement across recognized journals.
- Additionally, **Few publications** were contributed to **Scopus-indexed book chapters and conference proceedings**, strengthening the department's presence in academic and research communities.

Innovation & Intellectual Property

Innovation remains a core focus for the department. In this quarter, faculty members achieved:
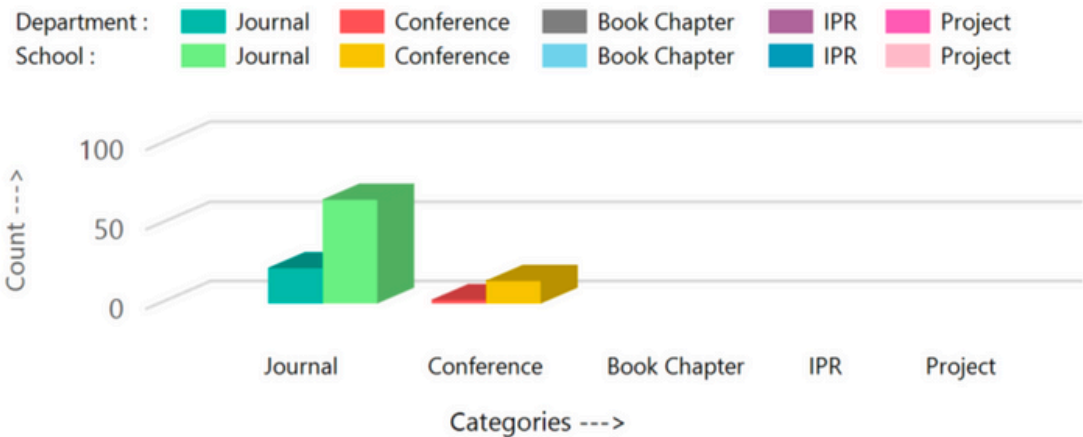
- **1 patent Grant**

These IPR activities reflect our ongoing efforts to transform academic research into real-world applications and solutions.

Publication trends

| Department : | Journal | Conference | Book Chapter | IPR | Project |
| School : | Journal | Conference | Book Chapter | IPR | Project |

IT DEPARTMENT RESEARCH INDEX

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The Department of Information and Technology, under the School of Computer Science and Engineering-1, has maintained a strong research trajectory during the fourth quarter of 2025. Faculty members actively contributed to journals, books, and intellectual property development, reflecting the department's continued focus on scholarly excellence and innovation within the Faculty of Science, Technology and Architecture.

RESEARCH PUBLICATIONS

During this quarter, the department produced a total of 13 research publications, distributed across multiple recognized formats. The highlights include:

- Journal Publications: 9 total
  - Q1: 18
  - Q2: 3
  - Q3: 1
  - Q4: 0
  - Non-Quartile Scopus: 0
  - Non-Scopus: 0

- Book Chapters: 2 (both Scopus-indexed)

These outputs reflect strong engagement in high-impact journals (Q1–Q3) and scholarly book chapters, emphasizing quality research dissemination over volume.

Innovation & Intellectual Property

The department continued to encourage innovation-driven research. During this quarter, a total of 1 IPR activities were reported:

- Patents Published: 0
- Patents Filed: 0
- Patents Granted: 1

These achievements underscore the department's sustained commitment to research translation, innovation, and intellectual property generation.

SUMMARY

As of DECEMBER 2025, the Department of Information and Technology has achieved a cumulative output of 24 publications . The research outcomes primarily lie in high-ranked journals and Scopus-indexed publications, signifying academic excellence and institutional visibility.

The department remains focused on nurturing an ecosystem that blends research, innovation, and societal impact, reinforcing its pivotal role within the Faculty of Science, Technology and Architecture and its alignment with SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure).

FACULTY ACHIEVEMENTS
DEPARTMENT OF INFORMATION TECHNOLOGY
RESEARCH DATA

Department of Information Technology – Research Highlights
Faculty of Engineering | School of CSE (CSE & IT)
Reporting Period: **OCTOBER 1 – DECEMBER 31, 2025**

The Department of Information Technology at Manipal University Jaipur has shown commendable scholarly productivity and innovation in the second quarter of 2025. Our faculty and researchers have actively contributed to advancing knowledge through high-quality publications and intellectual property filings

Title : LEVERAGING TRANSFER LEARNING WITH LSTM GANS FOR ADAPTIVE TRAFFIC SIGNAL CONTROL
Quartile: Q1
Date of Publication: Oct 2025
Journal name: Discover Applied Sciences

Title : GRAPH EMBEDDING BASED LABEL PROPAGATION FOR COMMUNITY DETECTION IN SOCIAL NETWORKS
Quartile: Q1
Date of Publication: Nov 2025
Journal name: Scientific Report

Title : An effective cyberbullying-flashing identification on whatsapp using PTS-GReLU-GRU with harmful level prediction
Quartile: Q1
Date of Publication: Dec 2025
Journal name: Scientific Report

Tittle: Design of ISE-based frequency regulation scheme for airport microgrids using FOPDT approximation and reaction curve method.

Quartile: Q1

Impact factor: 3.9

Date of Publication: 5 Dec 2025

Journal name: Scientific Report

FACULTY ACHIEVEMENTS
DEPARTMENT OF INFORMATION TECHNOLOGY
RESEARCH DATA

Department of Information Technology – Research Highlights
Faculty of Engineering | School of CSE (CSE & IT)
Reporting Period: OCTOBER 1 – DECEMBER 31, 2025

The Department of Information Technology at Manipal University Jaipur has shown commendable scholarly productivity and innovation in the second quarter of 2025. Our faculty and researchers have actively contributed to advancing knowledge through high-quality publications and intellectual property filings

Dr. Sulabh Bansal delivered an expert talk on the topic "Quantum-Inspired Computing for Optimisation" as a Resource Person in an Atal FDP at Govt. Mahila Engineering College, Ajmer on 12 Nov. 2025.

The FDP was titled "Demystifying Quantum Computing: Theory, Technology, and Real-World Applications". Scheduled from 10 -15 Nov, 2025.

Dr. Devesh Kumar Srivastava received the *Best Paper Award* at the International Conference on Emerging Technologies in Electronics and Green Energy (ICETEG 2025), hosted by JSS Science and Technology University, Mysuru. The award was conferred for his research paper titled "Car Damage Detection Using UNet Neural Networks", presented during the conference held on 10–11 October 2025. This recognition highlights his significant contribution to the application of deep learning in intelligent vehicle damage assessment.

STUDENT ACHIVEMENTS

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC FIELD

ABHINEET MATHUR

Conference Paper Presented - YES
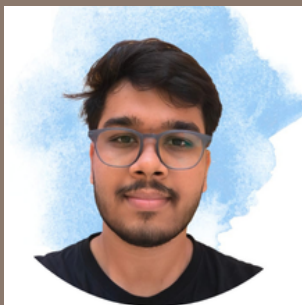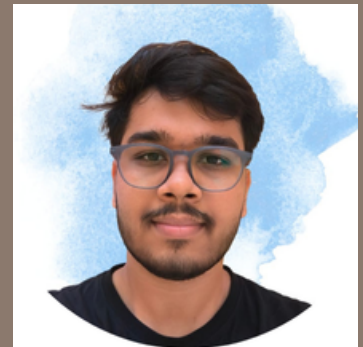Conference Paper Published - Under process
Name of Conference -   16th ICCCNT 2025 (16th International IEEE Conference on Computing Communication and Networking
Technologies)
Date of Conference Paper Presented - 07/10/2025
Title of Paper Presented / Published - Credit Risk Modelling Using Machine Learning

NISCHAL KAPADIA

- Startup PIXELLYRICS received Pre-Incubation approval at Manipal University Jaipur under the E-Cell initiative, marking a key entrepreneurial milestone.

- He was awarded a Certificate of Appreciation for successfully organizing Rewind & Recode, a National-Level Hackathon at Manipal University Jaipur, recognizing leadership and event management excellence.

Project Qualified for the State-Level Buildathon at the OpenAI Academy × NxtWave Buildathon, demonstrating innovation and strong technical problem-solving skills.

STUDENT ACHIVEMENTS

DEPARTMENT OF INFORMATION TECHNOLOGY

ACADEMIC FIELD

Our department students are actively contributing to the field of Intellectual Property Rights (IPR) through patent filing, publication, and grant in emerging technologies such as Artificial Intelligence (AI), Machine Learning (ML), and the Internet of Things (IoT). Their innovative ideas and dedication to research reflect a strong commitment to technological advancement, bringing immense pride to the Department of Information Technology, School of Computer Science and Engineering, Manipal University Jaipur.

GRANT

Mr. Pranav Kumar, Dr. Bhawana Sharma, and Dr. Lokesh Sharma have achieved a significant milestone with the publication of their patent titled "An AI-Driven Automatic Number Plate Recognition (ANPR) System" in the Indian Patent Office Journal on 12 December 2025. Filed by Manipal University Jaipur, the patented innovation leverages advanced AI and deep learning techniques to enhance the accuracy of vehicle number plate recognition. The system holds strong potential for impactful applications in law enforcement, traffic management, and smart city surveillance.

DEPARTMENT EVENTS

SOCIAL OUTREACH ACTIVITY
"Gift of Learning, Gift of Living"

Join us for an inspiring and rewarding experience as we engage with underprivileged children!

📅 1 December 2025

📍 Every Person's Hope Foundation, R 9/32, Ajmer Road, near Kamla Nehru Nagar Road, Chordiya

DONATION COLLECTION DETAILS

Department of Information Technology, 2AB, FB4, Workstation 11 or 28

Collection Period: Till 30 November 2025

KEY HIGHLIGHTS:
OBJECTIVES:

- To support underprivileged children and communities through educational assistance.
- To contribute learning resources that promote knowledge, growth, and dignity.
- To encourage student involvement in social service and community engagement.
- To reinforce the theme "Gift of Learning, Gift of Living" through practical outreach activities.

SDG Mapping:
1. No Poverty (SDG 1): Empowering vulnerable communities through access to education.
2. Zero Hunger (SDG 2): Indirect contribution to holistic child development and well-being.
3. Clean Water and Sanitation (SDG 6): Promoting awareness of dignified living conditions and basic human needs.

EVENT SEGEMENTS:
- Pre-Event Activity: Donation collection drive within the Department of Information Technology.
- Outreach Visit: Visit to Every Person's Hope Foundation with faculty and students.
- Material Donation: Formal handover of books and stationery to beneficiaries.
- Engagement Session: Interaction, informal learning, and motivational activities with children.

Interactive FDP Sessions:
- Pre-Event Activity: Donation collection drive within the Department of Information Technology.
- Outreach Visit: Visit to Every Person's Hope Foundation with faculty and students.
- Material Donation: Formal handover of books and stationery to beneficiaries.
- Engagement Session: Interaction, informal learning, and motivational activities with children.

Each session combined conceptual understanding with hands-on demonstrations, emphasizing reproducible workflows and data ethics.

DEPARTMENT EVENTS

Jaipur, Rajasthan, India
Sector -18, Mother Teresa Road, Sanganer, Sector 18, Pratap Nagar, Jaipur, Rajasthan 302033, India
Lat 26.800457° Long 75.828062°
04/11/2025 10:49 AM GMT +05:30

Jaipur, Rajasthan, India
No. 74, 74, Underpass, Near Underpass, Sector 18, Sanganer, Jaipur, Rajasthan 302033, India
Lat 26.800132° Long 75.828277°
04/11/2025 11:06 AM GMT +05:30

KEY HIGHLIGHTS:
OBJECTIVES:

- To provide essential winter clothing to individuals in need.
- To support health and well-being during the cold season through material assistance.
- To instill values of kindness, empathy, and volunteerism among students.
- To encourage active student participation in meaningful community service.

SDG Mapping:
1. Good Health and Well-Being (SDG 3): Supporting physical health by providing winter clothing.
2. Quality Education (SDG 4): Promoting value-based education through social engagement.
3. Peace, Justice & Strong Institutions (SDG 16): Encouraging inclusive, compassionate, and value-driven community support systems.

EVENT SEGEMENTS:
- Pre-Event Planning: Coordination with NSS and DSW for organizing the donation drive.
- Collection Drive: Collection of winter clothes contributed by students and faculty.
- Outreach Visit: Visit to Mother Teresa Home, Pratap Nagar, Jaipur.
- Donation Activity: Distribution of winter clothing to beneficiaries

Interactive FDP Sessions:
- **Student participation in donation coordination and outreach activities.**
- **Faculty guidance promoting experiential and value-based learning.**
- **Collaborative engagement fostering empathy, leadership, and social awareness.**

Each session combined conceptual understanding with hands-on demonstrations, emphasizing reproducible workflows and data ethics.

Jaipur, Rajasthan, India
160/04, Bhairav Ji Cir, Sector 16, Pratap Nagar, Jaipur, Rajasthan 302033, India
Lat 26.803093° Long 75.827655°
Tuesday, 04/11/2025 12:00 PM GMT +05:30

Jaipur, Rajasthan, India
Jaipur-ajmer Express Highway, Dehmi Kalan, Near Gvk Toll Plaza, Jaipur, Rajasthan 303007, India
Lat 26.841633° Long 75.563867°
Tuesday, 04/11/2025 02:21 PM GMT +05:30

KEY HIGHLIGHTS:
OBJECTIVES:

- To promote social responsibility and empathy through community service.
- To collect and donate usable household items, clothes, toys, and essentials.
- To support NGOs working for the welfare of underprivileged communities.
- To encourage active participation of students and faculty in social outreach initiatives.

SDG Mapping:

1. No Poverty (SDG 1): Supporting vulnerable communities through material assistance.
2. Good Health and Well-Being (SDG 3): Improving quality of life by providing essential resources.
3. Reduced Inequalities (SDG 10): Encouraging inclusive support for marginalized sections of society.

EVENT SEGEMENTS:

- Awareness & Announcement: Promotion of the donation drive among students and faculty.
- Collection Phase: Donation collection at designated campus points.
- Coordination: Faculty and student coordinators managing collection and logistics.
- Distribution: Contributions shared with Surman Sansthan, Jaipur.

Interactive FDP Sessions:

- **Student-led coordination and volunteer engagement activities.**
- **Faculty mentoring and supervision during planning and execution.**
- **Collaborative teamwork fostering leadership, responsibility, and social awareness.**

Each session combined conceptual understanding with hands-on demonstrations, emphasizing reproducible workflows and data ethics.

CLUB
ORGANIZED EVENTS

LearnIT is one of the founding clubs established at the start of Manipal University Jaipur under the Department of Information Technology. Since its inception, LearnIT has become a cornerstone of collaboration, innovation, and technical excellence at MUJ. The club has organized numerous hackathons and codeathons that have attracted thousands of participants from across India. In addition to competitive events, LearnIT has hosted a wide range of workshops and industry talks focused on the IT sector and emerging technological advancements, fostering a culture of continuous learning and industry engagement.

MANIPAL UNIVERSITY JAIPUR

LEARNIT

AWARENESS DRIVE
"On advancing technologies future career path"

VENUE: GOVERNMENT UPPER PRIMARY SCHOOL, KHARITALI
DATE: 06-11-2025

STUDENT CO-ORDINATOR:
KARTIK RATAN GAUR
HARSHITA RATHOR
AKASH PATEL

FACULTY CO-ORDINATOR:
DR. SHWETA SHARMA
DR. SHALINI PURI
MR. VIJAY PRAKASH

KEY HIGHLIGHTS:
OBJECTIVES:

- To introduce students to the fundamentals of the Internet and Artificial Intelligence.
- To highlight the importance of Internet governance, digital ethics, and online safety.
- To empower students to make informed decisions in the digital age.
- To inspire responsible and innovative use of technology for academic and personal growth.

SDG Mapping:

1. Quality Education (SDG 4): Enhancing digital literacy and foundational technology awareness.
2. Industry, Innovation & Infrastructure (SDG 9): Encouraging understanding of AI, innovation, and digital ecosystems.
3. Decent Work & Economic Growth (SDG 8): Building early digital skills essential for future career opportunities and reducing the digital divide.

EVENT SEGEMENTS:
- Introductory Session: Overview of the Internet, AI basics, and their real-world impact.
- Awareness Talk: Discussion on Internet governance, digital safety, and ethical usage.
- Interactive Engagement: Quizzes, fun facts, and one-to-one student interactions.
- Conclusion & Gratitude: Interaction with school authorities and group engagement activities

Interactive FDP Sessions:
- **Interactive discussions led by faculty and LearnIT members.**
- **Student-centered learning through quizzes and open Q&A sessions.**
- **One-on-one interactions encouraging curiosity, critical thinking, and digital responsibility.**

Each session combined conceptual understanding with hands-on demonstrations, emphasizing reproducible workflows and data ethics.

Bagru, Rajasthan, India
1-12,solitare Park, Nh-8, Near Dehmaikala Balaji, Bagru, Rajasthan 303007, India
Lat 26.82254° Long 75.560021°
Thursday, 06/11/2025 11:58 AM GMT +05:30

Bagru, Rajasthan, India
1-12,solitare Park, Nh-8, Near Dehmaikala Balaji, Bagru, Rajasthan 303007, India
Lat 26.822816° Long 75.559302°
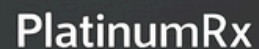
PLACEMENTS

Placement Report – 2025
Faculty of Science, Technology and Architecture
School of Computer Science and Engineering | Manipal University Jaipur

Total Placements Achieved: 250

The Department of Information and Technology proudly reports continued excellence in campus placements for the academic year 2024–2025, reflecting the department's strong industry connect, skill-oriented pedagogy, and student preparedness for diverse career roles.

Students have secured opportunities across a broad spectrum of global technology, consulting, analytics, and finance organizations, with several achieving multiple offers in core and emerging domains such as data analytics, cloud computing, product engineering, and consulting.

Highlights
- Placement Conversion Rate: Exceptional—reflecting strong alignment with current industry requirements.
- Core & IT Roles: Software Development, Data Science, Business Analytics, and Cloud Engineering.
- Recruiter Spectrum: Spanning global MNCs, emerging startups, and consulting leaders.

TEAM IT

As we wrap up the Fourth quarter of the year, it's inspiring to reflect on the remarkable achievements, vibrant events, and collaborative spirit that defined the past three months. From academic excellence and innovative projects to cultural celebrations and community engagement, each milestone showcases the dedication and enthusiasm of our students, faculty, and staff. Let's carry this momentum forward, embracing new challenges and opportunities with the same passion and purpose. Here's to a productive and impactful year ahead!