NEWSLETTER

"EduJunction"

OCT-DEC '25 | **VOLUME 2 ISSUE 4**

DEPARTMENT OF DATA SCIENCE AND ENGINEERING

CIDCRLAB

> "Information is the oil of the 21st century, and analytics is the combustion Engine"

Peter Sondergaard
(Senior Vice President and the Global Head of Research at Gartner Inc)

HIGHLIGHTS

CHIEF EDITOR:
Dr. Akhilesh Kumar Sharma
Head of Department, DSE

EDITOR:
Mr.Deevesh Chaudhary
Assistant Professor, Department of DSE

STUDENT EDITOR:
Chahat Verma

DR. ROHEET BHATNAGAR
ASSOSCIATE DEAN, SCSE, MUJ

Welcome to the third edition of "EduJunction," the official newsletter of the Department of Data Science and Engineering (DSE), School of Information, Security, and Data Science (SISDS), MUJ. This edition highlights the latest achievements, events, and innovations from our faculty and students. Established in 2021 under the School of IT, the DSE department was created to meet the growing demands and trends of the tech industry. We are committed to advancing the frontiers of Data Science, Artificial Intelligence, and Machine Learning through research, education, outreach, and collaboration. With a diverse team of experts, vibrant academic programs, exciting internships, and competitive opportunities, we provide a dynamic environment for both undergraduate and postgraduate students.

DR. AKHILESH KUMAR SHARMA
HEAD OF DEPARTMENT, DSE

Data Science is an interdisciplinary field that combines tools and methods from applied statistics, mathematics, and computer science to analyze large volumes of data, providing deeper insights and enabling smarter, data-driven decisions across various domains. The DSE program curriculum is carefully designed to equip students with strong foundations in these areas, emphasizing both theoretical knowledge and practical skills. It ensures hands-on learning through labs and real-world applications using cutting-edge technologies. I extend my heartfelt congratulations and best wishes to every stakeholder of the Department of DSE and the entire editorial team on the successful launch of their first newsletter, "EduJunction."

INTRODUCTION

B.Tech Computer Science and Engineering (Data Science) trains engineering graduates to be skilled data scientists. The emphasis is on core data science subjects along with the related computational mathematics, statistics, and computer science subjects.
The program introduces students to the various application domains like finance, business, and healthcare wherein data science can be used to make informed decisions.

The course is a multi-campus model and promotes one-semester mandatory student mobility in 4/5/6th semester, between the MAHE Manipal, Manipal University Jaipur, and Sikkim Manipal Institute of Technology campuses. It is an eight-semester programme that helps software and IT professionals build the skillset required to advance their careers as Data Analysts, Data Engineers, Data Architects, and Data Scientists, among other roles. The programme covers fundamental to advanced skill and knowledge areas.

Data science is the field in which various tools and methods from the fields of applied statistics, mathematics, and computer science are applied in order to gain greater insight and to make better and more informed decisions for a variety of purposes by analyzing a large amount of data.

VISION
To prepare the next generation of practitioners and researchers with human values and ethics to thrive in a data-centric world.

MISSION
- To establish the department as the epitome of motivation and guidance among aspiring engineers.
- To nurture academic, research, and professional excellence in the domain of Data Science and engineering.
- To transform young learners into competent data engineers by inculcating holistic values

ACADEMIC PROGRAMS
- B.Tech Computer Science and Engineering (Data Science)
- M.Tech (Data Science)
- Ph.D

FACULTIES
- Prof. (Dr.) Akhilesh Kumar Sharma(HoD)
- Dr. Sukhwinder Sharma
- Dr. Aprna Tripathi
- Dr. Rekha Chaturvedi
- Dr. Chirag Joshi
- Dr. Anju Susan George
- Dr. Sudhir Sharma
- Dr. Neha V Sharma
- Dr. Ginika Mahajan
- Dr. Shitanshu Jain
- Mr. Deevesh Chaudhary
- Dr. Gaurav Kumawat
- Mr. Abhishek Dwivedi
- Dr. Shweta Redkar
- Ms. Shatabdi Basu
- Dr. Malvinder Singh Bali
- Ms. Meenakshi Gaur
- Dr. Srikanta Pradhan
- Dr. Ashish Pandey
- Dr. Neeraj Kumar Verma
- Mr. Ram Kumar Yadav
- Dr. Aishwarya Mishra
- Dr. Sandeep Kumar Gupta (Associate Professor of Practice)
- Dr. Hemant Petwal
- Dr. Sanjeev Ojha
- Dr. Jayanthi.J

STUDENTS VISIT

The Department of Data Science and Engineering at Manipal University Jaipur (MUJ) had the privilege of participating in the prestigious Security Synergy Seminar: A Whole-of-Nation Approach (WoNA) to Counter Future Conflict.

The two-day seminar, held on November 10-11, 2025, at the Sapta Shakti Auditorium, Jaipur, was organized as a joint initiative of HQ South Western Command and the Centre for Land Warfare Studies (CLAWS).
Our department was effectively represented by:Dr.Pooja Gupta. The seminar provided a vital platform for our students and faculty to engage with strategic defense and security experts on the rapidly evolving nature of modern conflict.

The core theme, "Whole-of-Nation Approach (WoNA)," highlighted the importance of synergy among Academia, Industry, and Government—an approach that aligns closely with our department's mission to develop data professionals equipped to address real-world challenges.
Discussions on critical areas such as Information Warfare, Cyber Security, and the integration of Artificial Intelligence (AI) in defense demonstrated the increasing relevance of Data Science in national security.

STUDENT ACHIEVEMENTS

Vishrut Mishra, V sem, Data science and Engineering, MUJ made a stunning mark in the MP State Games, 2025 clinching not one but two gold medals in the highly competitive speed skating events! He dominated the track, securing top honors in both the 1000m and 500m races. Vishrut's exceptional speed, agility, and endurance showcased his remarkable talent. This impressive achievement is a testament to his tireless efforts, unwavering dedication, and passion for the sport. Congratulations to Vishrut Mishra on this outstanding victory!"

30th M.P. STATE ROLLER SKATING CHAMPIONSHIP 2025
Result Sheet
Rink V (500+D) Inline

Age Group: 18 Years and Above Sr Male

Position	Racer No.	Name of Skater	Team	Timings
1	539	VISHRUT MISHRA	Bhopal district	0.48.44
2	568	SHREY MISHRA	Gwalior district	0.48.72
3	628	HIMANSHU PAAL	Indore district	0.49.49
4	630	PRIYANSH GURJAR	Jabalpur district	0.51.94

Dept. of Data Science and Engg. congratulates SWASTIK DUTT along with TEJAS MEHRA and Suryansh Shah for achieveing two of the most rewarding milestones this year.

💻 BrandIT 2.0 – Organised by IEEE WIE MUJ conducted from 18th–20th June 2025, this online hackathon challenged teams across multiple rounds — from brainstorming and refining ideas to crafting our final solution and presentation. After three intense days of collaboration and learning, Team 7MOD3 emerged as the WINNERS 🥇.💡 VICHAR SE VIKAS: IDEA2IPR IDEATHON 2025 – Hosted by the Department of Data Science and Engineering Manipal University Jaipur

and E-cell MUJ, this ideathon pushed to think creatively, validate the ideas, and present impactful solutions. Competing with several innovative teams was an inspiring experience, and team 7MOD3 secure the 2nd position 🥈.
🙌.

ADJUNCT FACULTY

Dr. Ramakrishna Mundugar is an experienced researcher with nearly 15 years of expertise in designing and developing algorithms in Computer Graphics, Video Processing, and Computer Networks. He has worked with leading multimedia research groups in both academia and industry in Germany and the United Kingdom. Dr. Mundugar holds a PhD in Multimedia Processing and Streaming from Manipal Academy of Higher Education, an Institute of Eminence (IoE) recognized by the Government of India. Additionally, he has significant experience in internationalizing academic programs, including dual degree, integrated, and student mobility programs.

Dr. Bhargavi Goswami is a seasoned researcher with over 11 years of research experience and 13 years in teaching, specializing in Computer Science, Communication Networks, Network Security, and Algorithm Design. She holds 2 patents, has authored 2 monographs, led 2 funded research projects, and has contributed to over 50 journal and conference publications, with more than 600 citations. Her research expertise spans Smart Grids, Software Defined Networks, Blockchain, Cryptography, Cybersecurity, Mathematical Modeling, and Congestion Control in Data Networks. Recognized as an ethical technologist and a prominent figure in education, research, and development, she is currently teaching at Queensland University of Technology (QUT).

ACADEMIC/INDUSTRIAL MOU

An academic MoU establishes a formal partnership between two or more academic institutions for the purpose of collaboration in research, education, training, or other areas of mutual interest. An academic MoU can also facilitate the exchange of faculty, students, information, and resources between the partner institutions.

- **King Mongkut's University of Technology North Bangkok, Bangkok, Thailand**
- **Prince Sultan University, Riyadh, SaudiArabia**
- **Lyzr.AI**
- **Altair Pvt. Ltd.**
- **Celebal Technologies Private Limited, Jaipur**
- **La Trobe University, Victoria, Australia**

INTERNATIONAL COLLABORATION

On 3rd November 2025, A delegation from the University of Missouri–Kansas City (UMKC), including Mr. Mark Daly, Senior Internationalisation Officer and Director of International Affairs, and Mr. Kevin Truman, Dean of the School of Science and Engineering, visited Manipal University Jaipur.

The aim of the visit was to discuss the development of a strategic academic partnership between the two institutions through a Memorandum of Understanding (MoU). Two official meetings with university administration were held during the tour to discuss potential joint ventures.

The visit concluded with a Student Interaction Session where students from the third and Fifth semesters from the Department of Data Science and Engineering engaged in an interactive session with representatives from UMKC. The discussion covered UMKC's academic programs, research opportunities, campus life, and support services for international students at UMKC

The visit was organised by The Department of Data Science and Engineering, under the guidance of Department Head Prof. (Dr.) Akhilesh Kumar Sharma Sharma.

PLACEMENT SESSION

The Department of Data Science and Engineering, Manipal University Jaipur, organized an interactive placement guidance session for students, featuring our esteemed alumnus Harshit Gupta, 2024 graduate from the Data Science and Engineering department and currently working as a Software Engineer at Dell Technologies. Held on 31.10.2025, the session offered students a practical and experience-based understanding of placement strategies. Harshit shared valuable insights on resume building, project presentation, interview approach, and skill enhancement. His journey and advice helped students gain clarity on how to position themselves effectively in the competitive tech landscape.

JAIPUR

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING
DEPARTMENT OF DATASCIENCE AND ENGINEERING

NAVIGATING THE PATH FROM DATA SCIENCE GRADUATE TO DELL TECHNOLOGIES ENGINEER

HARSHIT GUPTA

Software Engineer, Dell Technologies

Experienced in building scalable, AI-driven software systems integrating Data Science.
Expert in LLMs, chatbots, and intelligent report automation.
Gold Medalist and patent holder in AI automation; Manipal University alumnus featured on the Dean's List every semester.
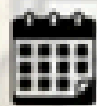
DATE
31-10-2025
TIME
5:00PM
MODE
Online, MS Teams

HEAD OF THE DEPARTMENT
Dr. Akhilesh Kumar Sharma

MANIPAL UNIVERSITY JAIPUR

RESEARCH

"Research paper titled **"Exploring the Landscape of Post Quantum Cryptography: A Bibliometric Analysis of Emerging Trends and Research Impact"** by Dr. Malvinder Singh Bali has been published in the Journal of Big Data (Q1, H-index: 91) – a reputed and impactful journal in the field of data science and emerging technologies.

About the Paper:

With the rapid progress of quantum computing, traditional cryptographic methods face unprecedented challenges. This study performs a bibliometric analysis of 14,230 records from the Scopus database to map emerging trends, research impact, and global contributions in the field of Post Quantum Cryptography (PQC).

This work provides a comprehensive overview of PQC's evolving landscape—an area critical for building quantum-resistant security solutions in the future.

"Research paper titled **"Detection of unseen malware threats using generative adversarial networks and deep learning models"** by Dr. Chirag Joshi and Dr. Gaurav Kumawat has been published in the Scientific Reports (Nature Portfolio) — a Q1, SCIE-indexed journal, a reputed and impactful journal in the field of data science and emerging technologies.

About the Paper:

It focuses on improving malware detection using GAN-based data augmentation and deep learning-aiming to make systems smarter and more adaptive against new cyber threats.

SOCIAL MEDIA