





NEWSLETTER "Edus Junction"

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DEPARTMENT OF DATA SCIENCE AND ENGINEERING



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

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

HIGHLIGHTS

- 1. Introduction to **Department**
- 2. Industry expert interaction
- 3. Student Achievements
- 4. Adjunct Faculty
- 5. Academic/Industrial MOU
- 6. Book Launch
- 7. Upcoming Events

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Dr. Akhilesh Kumar Sharma **Head of Department, DSE**

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Mr.Deevesh Chaudharv Assistant Professor, Department of

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 Engineering (DSE), and Information, School of 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 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 data-driven smarter, 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 cuttingedge technologies. I extend my heartfelt congratulations and best wishes to every stakeholder of Department of DSE and the entire editorial team on the successful launch of their 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 Yaday

- Dr. Aishwarya Mishra
- Dr. Sandeep Kumar Gupta (Associate Professor of Practice)
- Dr. Hemant Petwal
- Dr. Sanjeev Ojha
- Dr. Jayanthi.J



FACULTY INDUSTRIAL VISIT



Digital Twin, RapidMiner AI Studio, and Physics AI are advanced technologies driving innovation in data science and intelligent systems. A Digital Twin is a virtual replica of a physical object or process, enabling real-time monitoring, simulation,

maintenance

manufacturing

across

and

RapidMiner AI Studio is a user-friendly platform for building and deploying machine learning models through a visual, drag-and-drop interface.

predictive

like

and

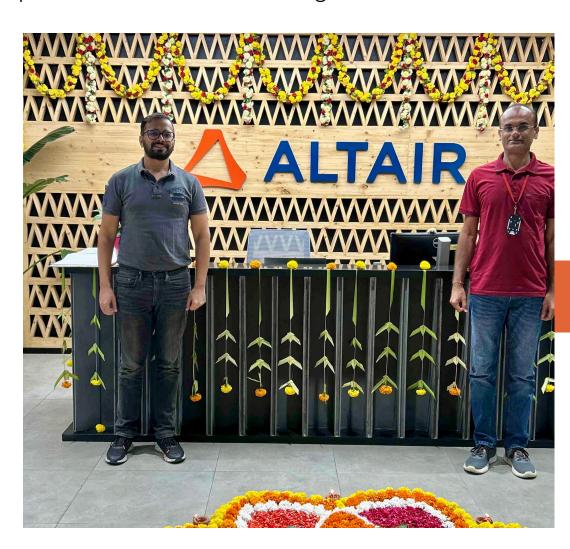
industries

healthcare.

Physics AI enhances traditional AI by incorporating physical laws and constraints, resulting in more accurate and explainable models, especially useful in engineering and scientific applications.

Dr. Sukhwinder Sharma and Mr. Deevesh Chaudhary during their faculty industrial visit to Altair, Bengaluru from 25th to 26th September 2025.

The visit provided valuable insights into RapidMiner AI Studio, Digital Twins, and Physics AI, expanding our understanding of cutting-edge AI applications. It was a wonderful experience visiting the state-of-art Innovation Centre and seeing firsthand how AI is applied to solve real life problems in industrial settings.





It was a pleasure meeting the team members—Mr. Deepak, Manoj KV, and others—whose warm welcome and expertise made the experience truly enriching. We extend special thanks to Ramesha BS, Head of Academic Initiatives at Altair, and Seema T., Senior Account Manager for North & East at Altair Engineering, for their exceptional support throughout the visit.



STUDENT ACHIEVEMENTS



म रागमण हागा, ।जसम राजस्थान से दो प्रतिभागी चयनित हुए हैं।कोटा को लौटेगा। चीन में प्रतिनिधिमंडल

के कैंसर विशेषज्ञ डॉ. कौशल गौतम और जयपुर मणिपाल विश्वविद्यालय के डाटा साइंस छात्र सार्थक शर्मा इस ऐतिहासिक यात्रा का हिस्सा बनेंगे। यह दल 25 अगस्त को दिल्ली से रवाना होकर 2 सितम्बर



Department of Data Science & Engineering

Mr. Sarthak Sharma, a talented student of Data Science and Engineering, Manipal University Jaipur, has been selected to be part of the prestigious China Exchange Visit Program 2025 organized by Friends of China Society, India Chapter.

Out of only nine participants selected from across India, Sarthak Sharma will represent Rajasthan and Manipal University Jaipur in this historic journey.

As part of the program, the delegation will travel across Yan'an, Xi'an, Shijiazhuang, and Beijing (26th Aug - 1st Sept 2025) to experience the rich civilizational exchange between India and China.

This fully sponsored program, supported by the Embassy of China in India, covers travel, hospitality, and cultural immersion — offering students a once-in-a-lifetime opportunity to learn connect, and represent India on a global platform.



The Department of Data Science and Engineering extends its heartfelt congratulations to Mr. Utkarsh Somvanshi on the publication of his insightful article on Medium, titled "Mutation" Testing in Java: Are Your Tests Good or Just Lucky?"

Your work reflects a strong grasp of advanced testing methodologies and a commendable ability to communicate complex technical concepts with clarity. It is always encouraging to see students and researchers from our department contribute meaningfully to the broader tech community.

We are proud of your achievement and look forward to more such contributions in the future. Keep up the excellent work!

Link: https://medium.com/@2024sl93081/mutationtesting-in-java-are-your-tests-good-or-just-lucky-8f219e7950f9



ADJUNCT FACULTY



Ramakrishna Mundugar is experienced an 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 by the Government of India. (IoE) recognized Additionally, significant experience he has 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, in Computer Science, Communication specializing 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.Al
 - · Altair Pvt. Ltd.
 - Celebal Technologies Private Limited, Jaipur
 La Trobe University, Victoria, Australia



FACULTY ACHIEVEMENTS



Dr. Aishwarya Mishra has been honored with the Best Paper Award (IETE Journal 2025) in the domain of Smart Farming at the prestigious CSIR-CSIO, Chandigarh.

The award ceremony was graced by the esteemed presence of Sh. Ajay Kumar, Chairman UPSC, and Prof. M. Jagadesh Kumar, Former UGC Chairman.

This remarkable achievement is a testament to her dedication and excellence in research. The Department of DSE applauds her outstanding contribution and wishes her continued success!

Dr. Malvinder Singh Bali, a valued faculty member of the Department of DSE, has been invited as an Eminent Speaker at the Five Days (Hybrid) Faculty Development Program on "Cutting Edge Innovation in IoT Horizons and Integration in Computer Science Engineering" organized by the Department of CSE, Anand International College of Engineering, Jaipur, scheduled for September 23–27, 2025.



This certificate is awarded to Dr. Malvinder Singh Bali

Assistant Professor, Manipal University, Jaipur

Eminent Speaker

For imparting his valuable thoughts in the Five Days (Hybrid) Faculty Development Program

"Cutting Edge Innovation in IoT Horizons and Integration in Computer Science Engineering"

23rd-27th September, 2025

organized by

Department of Computer Science & Engineering Anand-ICE, Jaipur, Rajasthan-303012



UPCOMING EVENTS

The 2nd International Conference on Innovations in Data Science (ICIDS) brings together a stellar lineup of R&D presentations from leading experts in the field.

This conference is an excellent opportunity for researchers, practitioners, and industry professionals to explore new techniques, share insights, and discuss the latest advancements and trends in data science.

We are thrilled to host the ICIDS on November 20th and 21st, 2025, in the vibrant city of Jaipur, India.

The event will be conducted in a hybrid mode: the first day (November 20th) will be held in physical mode, and the second day (November 21st) will be in digital mode.



ASSOCIATE DEAN: Dr. Roheet Bhatnagar

HEAD OF DEPARTMENT: Dr. Akhilesh Kumar Sharma

FACULTY CONVENERS:

Dr. Anju Susan George | Dr. Aishwarya Mishra

FACULTY CO - CONVENER:

Mr. Gauransh Kalla STUDENT CONVENERS:

Parthay Shah I Eshaan Saha

Submission of Paper is free.

MANIPAL UNIVERSITY

2nd International Conference on
Innovations in Data Science (ICIDS - 2025)

20 - 21 November 2025

CALL FOR PAPERS

CONFERENCE TRACKS

- · Data Science in Medicine
- Data Science in Autonomous Systems
- Al and Machine Learning Advances
- Deep Learning and Data Science
- Big Data Technologies and Applications
- · Computer Vision and Image Analysis

IMPORTANT DATES

Full Paper Submission	30 September 2025	
Acceptance	10 October 2025	
Registration on or Before	30 October 2025	

REGISTRATION FEE

Category	Authors from India	Authors from Abroad
Research Scholar and Student	₹10000	\$300
Academician (Faculty)	₹12000	\$350
Industry Professional	₹18000	\$400
Co-Author Registration	₹4000	\$100

MORE INFORMATION

Scan to Submit Your Paper







The Department of Data Science and Engineering at MUJ, in collaboration with the MUJ ACM Student Chapter, is thrilled to announce the 3rd International Symposium on Data Science (ISDS 2025), happening on 6th & 7th November 2025!

Join us for two days of insightful keynote sessions, innovative research presentations, and engaging panel discussions with leading experts from academia and industry.

Whether you're a student, researcher, or professional in data science, this is a fantastic opportunity to learn, network, and explore the latest trends and breakthroughs in the field.



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

FACEBOOK: HTTPS://WWW.FACEBOOK.COM/PROFILE.PHP? ID=61574661437092

INSTAGRAM: HTTPS://WWW.INSTAGRAM.COM/DSEMUJ/

INKEDIN: HTTPS://WWW.LINKEDIN.COM/IN/DEPARTMENT-OF-DATASCIENCE-AND-ENGINEERING-MANIPAL-UNIVERSITY-JAIPUR-028067245/
WEBPAGE: HTTPS://JAIPUR.MANIPAL.EDU/FOSTA/DEPARTMENT-OF-DATASCIENCE-ENGINEERING.PHP