

Manipal University Jaipur

Dept. of Data Science and Engineering

Official Newsletter

Vol. 1 Issue 3
July September 2024

Welcome Message



Director (SISDS)



HoD (DSE)

Welcome to the third edition of the newsletter "*EduJunction*" of the Department of Data Science and Engineering, School of Information, Security and Data Science, MUJ. It gives us great pleasure to highlight some of the fascinating advancements and successes in the field of data science and engineering that our faculties and students achieved.

Dept. of Data Science and Engineering formed in 2021 under school of Information Technology keeping in mind the current advancement and trend in the IT industry throughout the years.

At the Department of DSE, we are committed to advancing the frontiers of Data Science, Artificial Intelligence and Machine Learning in terms of research, education, outreach and collaborations. Our faculty consists of outstanding specialists in a variety of Data Science fields, making us a diversified and capable team. Along with cutting-edge research initiatives, internships, and competitions, we also offer a thriving and dynamic environment to students seeking undergraduate and graduate degrees in data science. This newsletter contains the most recent information about department's accomplishments, activities, news and the latest happening events at SISDS(DSE) MUJ.

~ **Dr. Sumit Srivastava, Director, (SISDS), MUJ**

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.

The curriculum of the DSE program is designed to provide students with the fundamentals of applied statistics, applied mathematics, and computer science that are required in the context of data science and its applications. Additionally, the DSE program places a significant emphasis on students gaining hands-on experience through the use of practical, labs, and the experience of dealing with cutting edge technology that are relevant to the real world.

I congratulate and convey my best wishes to every stockholder of Department of DSE and the entire editorial team on the launch of their first newsletter "*EduJunction*".

~ **Dr. Akhilesh Kumar Sharma, HoD, Dept of DSE**



*"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

- Introduction to DSE Dept.
- Mission & Vision
- Academic programs
- Faculty Details
- Anova Club
- Industrial Visit
- ACM Community
- Academic MoUs
- Students Achievements
- Editor's Choice Student Article

Chief Editor:

Dr. Akhilesh Kumar Sharma, HoD,
Dept. of DSE

Editor:

Mr. Deevash Chaudhary
Assistant Professor, Dept. of DSE

Student Editor:

Rashika Ranjan and Rajveer Singh

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

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

Program Educational Objectives (PEOs)

- **PEO1:** Graduates will follow analytical, problem solving and research-oriented approaches for solving real-world problems by providing AI based solutions.
- **PEO2:** Graduates will continue the process of lifelong learning by attaining professional certificates and seeking higher education.
- **PEO3:** Graduates will demonstrate the ability to establish, lead, and manage entrepreneurship ventures and startups in the field of Artificial Intelligence and Machine Learning.

Faculties of Department of DSE

Prof. (Dr.) Akhilesh Kumar Sharma
Dr. Sukhwinder Sharma
Dr. Dinesh 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
Mr. 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

Student Achievement:

Mr. Varun Raskar student of Data Science and Engineering, SISDS, MUJ has been selected to pursue M.Tech in Artificial Intelligence program from IIT Jodhpur, Rajasthan. Department congratulate him for this remarkable achievement and his bright future.



Dept. of Data Science and Engineering conducted expert talk on career opportunities in cyber security by Ms. Gayatri Prasad, Manager, Information Security and Data Governance at Kinetic IT on 23th August 2024. Students discussed about various challenges and opportunities in cyber security field in current market scenario. The speaker shared her experience as Cyber Security manager in Kinetics IT and how they deal with issues related to cyber crimes and related topics.

UPCOMING EVENTS



MANIPAL UNIVERSITY JAIPUR

Department of Data Science and Engineering
In – collaboration with E-cell with Technical Support from MUJ ACM Students Chapter
is organizing the

Project Expo'24 Competition

The topic should encompass aspects of innovation, entrepreneurial skills, start-up development, and eco-sustainability

28th November 2024 | Time: 9:30 A.M. to 5:00 P.M. | Venue: In front of Sharda Pal Auditorium

Organisers

Dr. Kuldip Singh Sangwan (Dean, F&E) | Dr. Sumit Srivastava (Director, SISDS) | Dr. Akhilesh Kumar Sharma (HOD, DSE) | Dr. Divyesh Saini (Director, E-cell)

Prizes:
1st prize: 15000 | 2nd prize: 10000 | 3rd prize: 5000

Last Date of registration: 28th October 2024 | Participation Fee: 1000/- per team

Link of Payment: <https://manu.ac.in/2024/10/28/2024-28-10-2024/> | Link of registration: <https://forms.gle/2024-28-10-2024>

Co-sponsors: Dr. Pooja Gupta (DSE) | Dr. Shikhar Jain (DSE)

Participation: participants need to register as team maximum 3 members. Certificate will be provided to all the participants.



MANIPAL UNIVERSITY JAIPUR

Department of Data Science and Engineering
In – collaboration with E-cell
is organizing

InsightScape 2024

28th November 2024 | Time: 9:30 A.M. to 5:00 P.M. | Venue: In front of Sharda Pal Auditorium

Topics:

- Artificial Intelligence and Machine Learning
- Blockchain Technology
- Augmented and Virtual Reality
- Internet of Things (IoT)
- Cybersecurity Threats
- Biomedical Devices
- Healthcare
- Ethics in AI
- Predictive Analytics in Healthcare
- Big Data in Smart Cities
- Data Science for Social Good
- Environmental Impact of Data Centers
- Deep Learning for Image Recognition
- AI and Business: Learning in Cybersecurity
- Optimization in Supply Chain Management

Organisers

Dr. Kuldip Singh Sangwan (Dean, F&E) | Dr. Sumit Srivastava (Director, SISDS) | Dr. Akhilesh Kumar Sharma (HOD, DSE) | Dr. Divyesh Saini (Director, E-cell)

Prizes:
1st prize: 15000 | 2nd prize: 10000 | 3rd prize: 5000

Last Date of registration: 15th Nov. 2024 | Participation Fee: 1000/- per team

Link of Payment: <https://manu.ac.in/2024/11/15/2024-15-11-2024/> | Link of registration: <https://forms.gle/2024-15-11-2024>

Co-sponsors: Dr. Pooja Gupta (DSE) | Dr. Shikhar Jain (DSE) | Dr. Rekha Chaturvedi (DSE)

Participation: participants need to register as team maximum 3 members. Certificate will be provided to all the participants.

The Department of Data Science (School of Information, Security and Data Science) is Planning to organize a “**Project Expo'24**” in collaboration with E-CELL at Manipal University with Technical Support from ACM on 7th **November 2024**. It is going to be organized for undergraduate, postgraduate and Ph.D. students of Manipal University Jaipur and for other institutes as well. Students will showcase their innovative ideas and advancements in various computing technologies to address real-world challenges. Drawing from their learning, they will suggest solutions to these problems, developing business or startup concepts by leveraging specific tools.

The Department of Data Science (School of School of Information, Security and Data Science) is Planning to organize a Poster Competition “**InsightScape 2024**” in collaboration with E-CELL at Manipal University Jaipur under ICIDS-2024 on 28th & 29th Nov. 2024. It is going to be organized for undergraduate, postgraduate and Ph.D. students of Manipal University Jaipur and for other institutes. Students will present their innovative ideas and latest advancement in different technologies in Computing to solve real word problems. Based on learning, they will propose solutions to problems as business or startup ideas by utilization of some tools.

"Aim for simplicity in Data Science. Real creativity won't make things more complex. Instead, it will simplify them" - Damian Duffy Mingle

Industrial MoU



An enriching MOU signing ceremony, "Industry Connect with **Lyzr.AI**," was held at Manipal University Jaipur, organized by the Department of Data Science and Engineering in association with E-cell on 30 September 2024. This event featured two esteemed speakers from **Lyzr. AI** – **Olivia Deka (Director of Community)** and **Raswanth Shankar (AI Engineer)** gave insights on entrepreneurship, innovation, and skill building. The event focused on allowing the students to explore the possibilities of the latest technologies to innovate using Lyzr.AI platforms.

Faculty Achievement



Dr. Akhilesh Kumar Sharma, Professor, Dept. of DSE, received teaching excellence award named as 'गुरु वन्दन छात्र अभिनंदन कार्यक्रम- 2024' from Bharat Vikas Parishad Jaipur Division, Rajasthan, on October 16, 2024 at Teacher's training institute Jaipur(Rajasthan)



Faculty Achievement



Mr. Gaurav Kumawat, Assistant Professor, along with Dr. Akhilesh Kumar Sharma (HoD), Dept. of Data Science and Engineering attended Third world conference on Information Systems for Business Mangement held in Thailand on 12-13 sept 2024.



ANOVA Technical Club

ANOVA Student Data Science Club is a student-led technical club of Manipal University Jaipur. ANOVA, is a place where curiosity meets computation and where possibilities are as limitless as the data one can explore. The club focuses on fostering interest, knowledge, and practical skills related to data science and analytics among students.

Students Scholarship

Students of DSE Dept. have received following scholarship scheme by MUJ for year 2024-25.

- TMA Pai Merit Scholarships
- Scholarships for the Wards of Single Mother Scholarships for Students of Higher Semesters

Students Achievement



Jatin Khirani, student of III semester, dept. of Data Science and Engineering received award named as 'गुरु वन्दन छात्र अभिनन्दन कार्यक्रम- 2024' from Bharat Vikas Parishad Jaipur Division, Rajasthan. on October 16, 2024 at Teacher's training institute

Academic MoUs

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, Saudi Arabia
- Lyzr.AI
- Altair Pvt. Ltd.
- Celebal Technologies Private Limited, Jaipur
- La Trobe University, Victoria, Australia



Ms. Parisa Magoon secured second position in Squash Event in Astra Sports Fest held at IIITD 2023.

Publications*:

Journal Publications : Q1(7), Q2(4), Q4(2)
Conference Publications : 8(Scopus), 5(Non-Scopus)
*(Jan 2024 – Sept 2024)

Patents Published : 10
Patents Granted : 2

"Data and data science greatly influence everything we do...The impact that data has and will have...continues to grow every day." - Ronald van Loon

Keynote Speakers



Mr. Saurabh Ganeriwala
Chief Business Officer - Mynd
Integrated Solutions Pvt. Ltd.
Gurugram, INDIA



Dr. Phayung Meesad
Associate Professor, FoIT &
Digital Innovation, KMUTNB,
Bangkok, THAILAND



Dr. Amit Sangroya
Scientist, TCS Innovation Labs
Gurugram, INDIA



Prof. Himanshu Rai
Director,
Indian Institute of Management
Indore, INDIA

Thought Leaders

Dr. Sudip Misra
Professor, Indian Institute of Technology, Kharagpur

Dr. Ravinder Ahuja
Data Science Manager, Evalueserve Pvt. Ltd., Gurugram

Dr. Gayatri Prasad
Information Security Manager, Knetic IT, Australia

Dr. Naveen Chilamkurti
Associate Dean, La Trobe University, Australia

About University

Manipal University Jaipur (MUJ) is a premier institution known for its commitment to academic excellence and innovation. Established as part of the Manipal Education Group, MUJ offers a diverse range of undergraduate, postgraduate, and doctoral programs across various disciplines. The university boasts state-of-the-art infrastructure, a vibrant campus life, and a strong focus on research and industry collaboration. With a commitment to holistic education, MUJ nurtures future leaders and professionals, fostering a culture of creativity, critical thinking, and lifelong learning.

About School and Department

The School of Information, Security and Data Science at Manipal University Jaipur is a dynamic academic center dedicated to advancing knowledge in information technology, data science, and cybersecurity. State-of-the-art facilities, industry partnerships, and research-driven education empower students to tackle real-world challenges in data science, security and analytics. Graduates are equipped to lead and innovate in the rapidly evolving tech landscape.

The Department of Data Science & Engineering at Manipal University Jaipur is a pioneering hub for education and research in data science, artificial intelligence, and machine learning. With a forward-thinking curriculum and state-of-the-art laboratories, the department equips students with the skills and knowledge needed to excel in data-driven fields.

About MUJ ACM Student Chapter

The MUJ ACM Student Chapter at Manipal University Jaipur is a vibrant community that fosters innovation, collaboration, and skill development in computing and technology. It provides students with opportunities to engage in workshops, hackathons, and tech talks, enhancing their knowledge, networking, and career prospects in the tech industry.

Patrons

Chief Patron
Mr. S. Vaitheeswaram, Chairperson, MUJ

Patron
Dr. N. N. Sharma, President, MUJ

Co-Patron
Cmde. (Dr.) Jawahar M Jangir, Pro-President, MUJ

Co-Patron
Dr. Nitu Bhatnagar, Registrar, MUJ

Co-Patron
Dr. Kuldip Singh Sangwan, Dean, FoE, MUJ

Chairs

Dr. Sumit Srivastava
Director, SISDS

Dr. Akhilesh Kumar Sharma
Head, Dept. of DSE

Conveners

Dr. Apna Tripathi
Associate Professor, Dept. of DSE

Dr. Sukhwinder Sharma
Associate Professor, Dept. of DSE

Student Coordinator(s)

Mr. Kuljeet Singh Shekhawat
Student

Publication

All registered and presented papers will be published in ISBN proceedings.



Few selected papers, which meet the requirements, will be published in Special Issues under Asian Journal of Computer Science and Technology (AJCST) and Asian Journal of Electrical Sciences (AJES) free of cost.

About Symposium

The symposium offers aspiring data scientists and statisticians a platform to exchange ideas with experts from academia and industry. Participants will engage in knowledge sharing that may inspire future technological innovations in collaboration with global partners. The event aims to tackle real-world challenges across various sectors, turning problems into opportunities. It will also raise awareness among engineering students about applying their skills to scientific research and growing markets, while helping young researchers enhance their thinking, technical writing, and problem-solving abilities.

Call for Papers

Contributions are sought in the following areas (not limited to):

- Computational Statistics
- Database Systems, Data Warehousing, and Data Mining
- Machine Learning
- Data analytics and Visualization
- Software & Data Science Technologies
- Communication Networks and Signal Processing
- Networks and Security
- Embedded Systems and Internet of Things
- Computer Vision and Image Processing
- Cloud Computing
- Big Data Analytics
- Artificial Intelligence
- Deep Learning

Best Paper Award for Each Session

Contact Us

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- **Mr. Kuljeet S. Shekhawat** (+91-9330168199)



MANIPAL
UNIVERSITY JAIPUR
(University under Section 3 of the UPEA Act)



Second International Symposium on Data Science – 2024

(7-8 November 2024)

Organized By
Department of Data Science & Engineering
(School of Information, Security and Data Science)
Manipal University Jaipur

In Association with
MUJ ACM Student Chapter



Manipal University Jaipur
Jaipur-Ajmer Express Highway, Dehmi Kalan,
Near GVK Toll Plaza, Jaipur, Rajasthan - 303007

www.jaipur.manipal.edu

Important Dates

Last Date for Paper Submission:	12-10-2024
Notification of Acceptance:	18-10-2024
Registration Start Date:	20-10-2024
Last Date for Registration:	25-10-2024
Last Date for Camera Ready Paper Submission:	30-10-2024
Conference Dates:	07-11-2024 to 08-11-2024

Author Guidelines

Authors are requested to follow the paper preparation and formatting guidelines available at link accessible through the following QR Code:



Paper Submission

Scan the QR Code for submission of your paper (prepared and formatted as per Author Guidelines):



Registration Fee & Payment Link

Category	Indian Author		Foreign Author
	MUJ	Non-MUJ	
IEEE/ACM Member	Rs. 300/-	Rs. 400/-	USD 25\$
Others	Rs. 400/-	Rs. 500/-	USD 35\$

Scan the QR Code for
Registration Fee Payment:





Name: Dr. Akhilesh Kumar Sharma
[MU - Jaipur], MUJ 0699.

Location: La Trobe University &
University of Melbourne, Australia.

Name of Place: Melbourne | Australia

Date: 18 march-1 April 2024.

Visited the universities in the Melbourne hey and initiated for some collaborative research / lab visit as well as MOU's for international cooperation. During the journey I explored the opportunity to interact with various experts in their domain. Further I have got the opportunity to meet with the director of university as well. I hey have also got the opportunity to learn and share the knowledge with faculty members and research scholars. During the visiting hour I also have talked on joint research possibility on AI and machine learning and electronics engg. Some of meeting professionals were:

1.Prof. Navin, Director, International affairs La Trobe University.

2.Prof. Raj Kumar Buyya, Director, University of Melbourne, (working in Cloud computing)

Sequence of events were as follows:

The visit aimed to visit the labs and to meet with faculty and students and interaction followed by discussion on research collaborations.

1. Interacted with the faculty members of these universities and initiated potential research talks with them. They also found some areas to work together.
2. Interacted with the Ph.D. research scholars and post graduate students and research discussions with them were very fruitful.
3. During the visit explored Digital Library, various labs and research departments.
4. During the visiting hours they discussed the MUJ research initiatives and identified potential research area in the university to cooperate on.
5. During this visit, discussed faculty and student exchange program based on the MOU which has been initiated with this university.
6. In the upcoming conferences they are accepting keynote lecture proposal, workshop proposals etc.(They have also been associated in one of the conference TPC Member and would be participating as keynote in upcoming conference).