COMPLUS NEWSLETTER

DEPARTMENT OF COMPUTER APPLICATIONS

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" Technology is best when it brings people together "

MANIPAL UNIVERSITY JAIPUR

INSPIRED BY LIFE

ACCREDITED WITH GRADE A+ NAAC

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About the Department

The Department of Computer Applications & School of CSE-II and Faculty of Science, Technology and architecture at Manipal University Jaipur (MUJ) strives for academic excellence with a cutting-edge curriculum. Since its inception in 2019, the department has reached significant heights, offering high-quality programs at both undergraduate and postgraduate levels. Currently, over 750 students are enrolled with 23 faculty members. The department prepares students to design, develop, and implement software applications, emphasiz- ing the latest programming languages and technologies. It aims to become a center of excellence, providing technical knowledge,innovation opportunities, and state-of-the-art facilities. The flexible cur- riculum is designed to let students explore their interests and is regularly updated with feedback from stakeholders. This foundation supports students in pursuing higher education in India and abroad.

Courses Offered

1. Bachelor of Computer Applications (BCA),
2. Specialization (Cybersecurity / Data Science)
3. BCA Honors (Software Product Engineering)
4. Master of Computer Applications (MCA)
5. Ph. D. (FoSTA)
6. MSC (Cyber Security) - A new course is going to be introduced in the department

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Message from the Head of Computer Applications Department

I am pleased to express my heartfelt appreciation for the successful release of the Newsletter from the Department of Computer Applications. Your dedication and efforts in showcasing the diverse talents of our students, both academically and creatively, are truly commendable. The Newsletter serves as a reflection of the myriad activities undertaken by our Department, offering a clear picture of our achievements. Moreover, it will play a significant role in nurturing the creative writing skills of our students and faculty members through their technical articles, essays and poetry, thereby enhancing students' reading practices. I am confident that this issue of the Newsletter will positively impact all students and individuals interested in not only Computer Applications and IT but also in arts, literature, sciences and other areas. Your continuous efforts in producing this Newsletter annually deserve immense recognition. I extend my sincere appreciation to the Department of Computer Applications and all faculty members for their wonderful contributions in accomplishing this task. Additionally, I congratulate all the students for their fruitful efforts.

Dr. Shilpa Sharma Kulkarni
Associate Professor & Head,
Department of Computer
Applications
Manipal University Jaipur

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Newly joined Faculty Members

As we begin this new semester, we would like to extend a sincere welcome to some new faculty members.

Dr. Ningthoujam Avichandra Singh

A dedicated researcher and educator in the Department of Computer Applications, specializing in statistical analysis, medical data analysis, NLP and machine learning. Earned their Ph.D. in Computer Science from National Taipei University of Technology, Taiwan, in 2018, with a research focus on medical data assessment and classification.

Dr. Avishek Nandi

A dedicated academic and researcher with a strong foundation in computer science. He holds a PhD in Computer and System Sciences from Visva-Bharati University and has developed a diverse set of technical skills over the years. As a UGC NET-JRF-qualified professional, deeply committed to research and innovation. His primary research interests lie in Machine Learning and Facial Expression Recognition, driven by a passion for making meaningful contributions to society through his work.

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Faculty Achievement

Dr. Monika Vishwakarma showcased remarkable talent and perseverance, securing the Runner-Up position in the **Table Tennis Championship in Expression Event** . Her dedication to excellence extends beyond academics, inspiring both students and colleagues alike to embrace diverse passions.

Dr.Devershi Pallavi Bhatt shares details on the program's unique offerings during a special session on Manipal Community Radio 90.8 FM with RJ Tamanna.Join this industry-aligned program and become a cybersecurity expert in today's rapidly evolving digital landscape.

This certificate of Excellence is presented by Worthy Wellness Foundation to **Dr. Arpana Sinha**l in recognition of her outstanding contribution to field of education and her dedicaiton towards academic excellence

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Article Crafting

TECHNOLOGY & EDUCATION

In recent years, technology has profoundly impacted the education sector, reshaping how students learn and teachers teach. The integration of digital tools and online learning platforms has created new opportunities for interactive and personalized education.

One significant change is the rise of online learning platforms, which provide access to a vast range of courses and materials from anywhere in the world. This has made education more accessible, allowing students to learn at their own pace and according to their schedules.

Moreover, technology facilitates collaboration among students through virtual classrooms and discussion forums, encouraging a more inclusive learning environment.

By: Khushboo Tawari (BCA-B)

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Innovation

Alok, a dedicated student at Manipal University Jaipur, is currently pursuing a Bachelor of Computer Applications (BCA) and is making remarkable strides through his venture, Centaurus Arena. This initiative, supported by our college, aims to provide structured platform capable of competing on a global scale. Centaurus Arena seeks to address many issues by creating opportunities for professional players, organizers, and investors to collaborate and develop a sustainable ecosystem. Alok's vision is inspired by the transformative impact of the Indian Premier League (IPL) on cricket in 2008, and he believes that Centaurus Arena has the potential to similarly reshape India's gaming landscape.
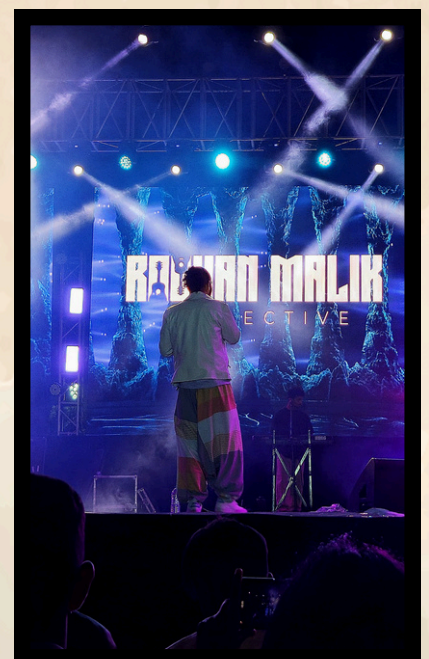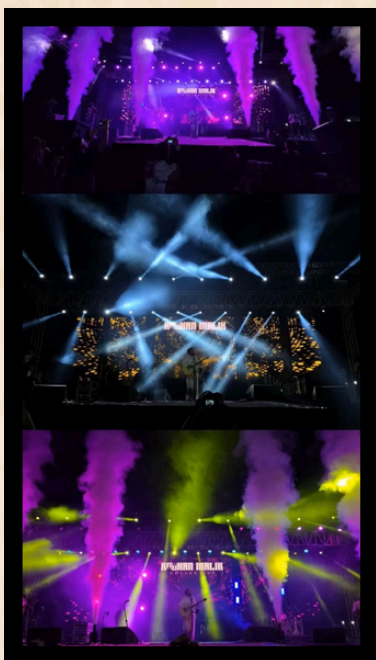
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Oneiros

Oneiros 2025 lit up the nights at Manipal University Jaipur with an unforgettable blend of music, energy, and excitement. Spanning three electrifying days, the festival brought together students for a celebration like no other—filled with pulsating beats, mesmerizing performances, and an atmosphere buzzing with enthusiasm.

This year's event featured stellar performances, including a soulful live set by Armaal Mallik and Rouhan Mallik, captivating the audience with his signature melodies, and an electrifying DJ night with DJ Cheshta, keeping the energy high till late.
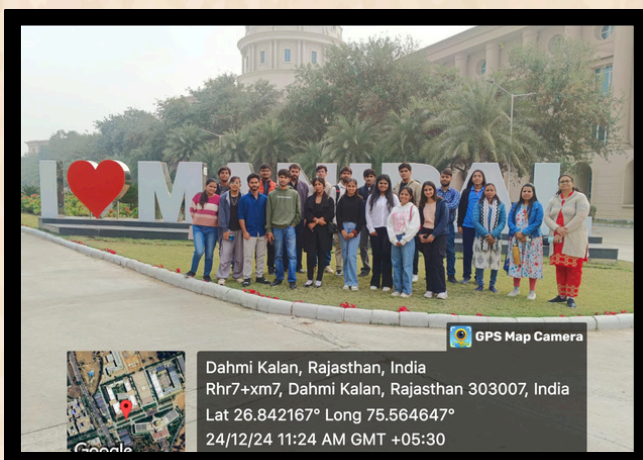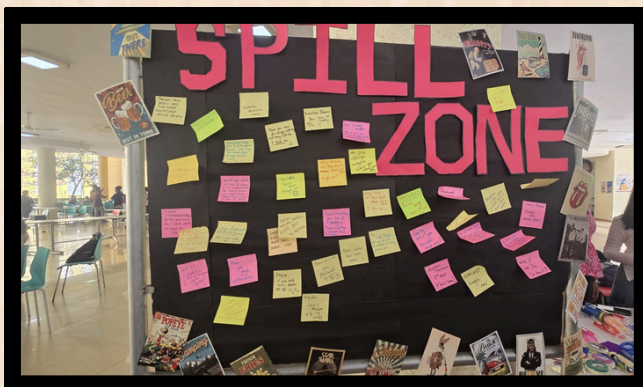
With its dynamic lineup, vibrant atmosphere, and enthusiastic participation, Oneiros continues to be a highlight of the university calendar, bringing students together for an unparalleled celebration of music and camaraderie.

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Cypher Club

We are delighted to introduce a new innovative club "The Cypher Club" of our Department. The club also recently hosted an innovative and engaging event known as "Snake and Trivia" and other events during oneiros .This event, inspired by the classic board game Snakes and Ladders, introduced a unique twist by incorporating technology-themed questions. Instead of traditional ladders, participants encountered question marks on the board. The event not only tested participants' knowledge but also fostered a fun and competitive atmosphere. The Cypher Club, known for its creative approach to blending technology with entertainment, continues to provide enriching experiences for its members and the larger student community.

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Faculty Retreat

The Faculty Retreat 2025 was conducted on 23rd March 2025 **at Royal Orchid, Jaipur** and is an important part of the institution's strategy to promote faculty bonding and generate new ideas for the year. This is pivotal to the staff's harmony and productivity. **Dr. Shilpa Sharma Kulkarni - Associate Professor & Head, inaugurated the retreat** with a prayer for dispositions and emphasized the need for the staff to adopt an agile approach in their work.

The Head appreciated and acknowledged the great work done by faculty in the previous year and made constructive recommendations for the upcoming academic year, with the goal of fostering resource management skills and technical skills.
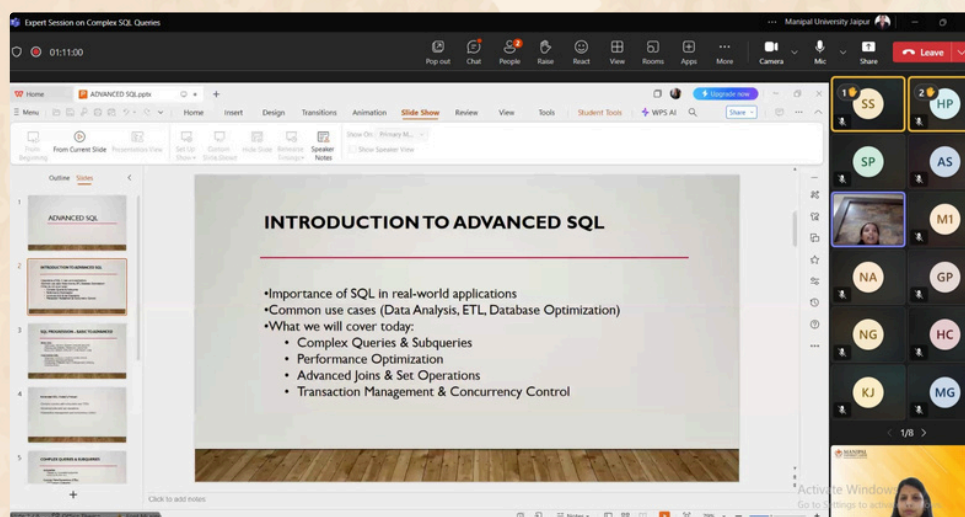
For the faculty, the retreat was a vitalizing and reviving event which came to end with an examen asking God's blessing for the coming academic year 2025.

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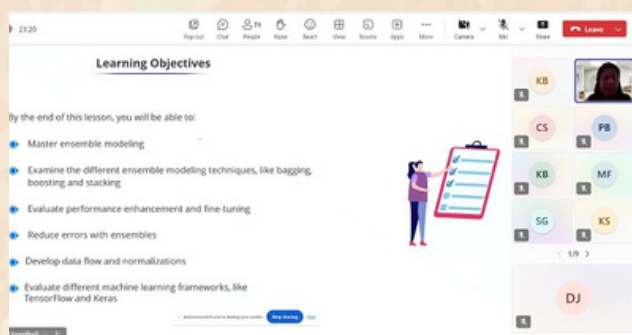
Expert / Guest Lectures

An expert lecture on Advanced SQL was recently organized at our college, drawing an enthusiastic audience of students and faculty. The session delved deep into advanced database management concepts, including query optimization, complex joins, stored procedures, and performance tuning. With real-world examples and hands-on demonstrations, participants gained valuable insights into mastering SQL for modern data-driven applications. The lecture not only enhanced technical acumen but also inspired participants to explore cutting-edge trends in database technologies.

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Expert / Guest Lectures

Manipal University Jaipur's Computer Applications Department hosted an expert talk on advanced ensemble learning by **Ms. Pooja Sharma** from Simplilearn.The session enriched participants with insights into boosting, bagging, and stacking techniques in AI.

Manipal University Jaipur hosted an expert talk on "Frontend Revolution" by **Progyan Bhattacharya** from Sprinklr on 11 January 2025, focusing on generative AI's impact on frontend development.

Manipal University Jaipur hosted an expert talk on "Industry Perspective on Software Engineering" by **Mr. Prashant Gupta,** Engineering Consultant at Global Payments.

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Student Achievements

Ishaan Yadav, a Bachelor of Computer Applications (BCA) student at Manipal Jaipur, received the Certificate of Merit for securing the 1st position in Cricket at the prestigious Sportikon event hosted by Bennett University. His outstanding performance was recognized with a medal and a certificate signed by university officials, marking a moment of pride for the institution.

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Student Achievements

Students at Manipal University Jaipur have demonstrated exceptional performance across academic and co-curricular platforms. From winning accolades in national-level hackathons and coding competitions to actively participating in technical fests and cultural events, their contributions have been commendable. These achievements reflect not only their technical proficiency but also their creativity, teamwork, and dedication to continuous growth. The School of Computer Applications takes pride in nurturing such talented individuals who continue to bring recognition to the university.

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PhD Awarded

Dr. Avishek Nandi

Avishiek Nandi is a dedicated academic and researcher with a strong foundation in computer science. Currently, he serves as an Assistant Professor at Manipal University Jaipur.

He was awarded a PhD in Computer and System Sciences from Visva-Bharati University and has developed a diverse set of technical skills over the years. .

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Research & Publications

Dr.Govind Murari Upadhyay has published a research paper in **Journal of Information & Optimization Sciences** titled "Fuzzy logic-based mathematical modeling and optimization of ICT integration in primary education curriculum".

Dr.Govind Murari Upadhyay and **Dr.Pramod Kumar Soni** has published a research paper in **Journal of Interdisciplinary Mathematics** titled "A mathematical approach to model signal variation in an aquatic robot's environmental sensor using heavy-tailed distributions" and "Mathematical modelling of time until anxiety reduced through yoga".

Dr. Arpana Sinhal has made significant contributions to constructive learning and large language models, advancing research in artificial intelligence and machine learning."

Recognizing Research Excellence at IEEE InC4 2025
The 2025 IEEE International Conference onContemporary Computing and Communications (InC4) held at CHRIST (Deemed to be University), Bangalore, recognized groundbreaking contributions in AI-driven hardware optimization. **Chandrashekhar Patel** presented his research on FPGA-Based Power-Efficient Arithmetic Logic Unit for AI Processors alongside co-authors Linesh Raja, Vishal Sharma, and Pragya Vaishnav.

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Research & Publications

Swami Nisha Bhagirath, along with collaborators Vaibhav Bhatnagar and Linesh Raja, presented groundbreaking research on explainable AI for wheat leaf disease prediction at the 7th International Conference on Communication and Computational Technologies. Their work highlights the transformative potential of AI in agriculture, aiming to enhance crop health monitoring with transparency and precision. This advancement bridges technology and farming, paving the way for smarter agricultural practices.

SR University, Warangal, recently hosted the 3rd Congress on Control, Robotics, and Mechatronics (CRW2025) from February 1-2, 2025. The event brought together researchers and professionals from around the world to discuss the latest advancements in these fields.

One of the highlights was the presentation by **Divya Sharma** on "A Survey of Deep Learning Techniques for License Plate Character Recognition," co-authored with Shilpa Sharma and Vaibhav Bhatnagar. The paper received positive feedback for its innovative approach and thorough research.

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Pedagogic Effective Workshop

Dr. Monika Vishwakarma and **Dr. Arpana Sinhal** actively engaged in the Pedagogic Effective Workshop, contributing valuable insights and expertise to enhance teaching methodologies. The workshop focused on modern pedagogical approaches, equipping educators with strategies to improve student engagement and comprehension. Dr. Vishwakarma and Dr. Sinhal shared their perspectives on effective classroom techniques, collaborating with fellow academics to exchange best practices. Through their involvement, they reinforced the institution's dedication to continuous learning and professional development, ensuring that students benefit from the latest advancements in educational strategies.

The Teaching Enhancement Cell (TEC), in collaboration with the HR Department of Manipal University Jaipur, organized a two-day workshop on **"Pedagogic Effectiveness: An Orientation to Essentials of Teaching & Learning** on 27th and 28th March 2025.
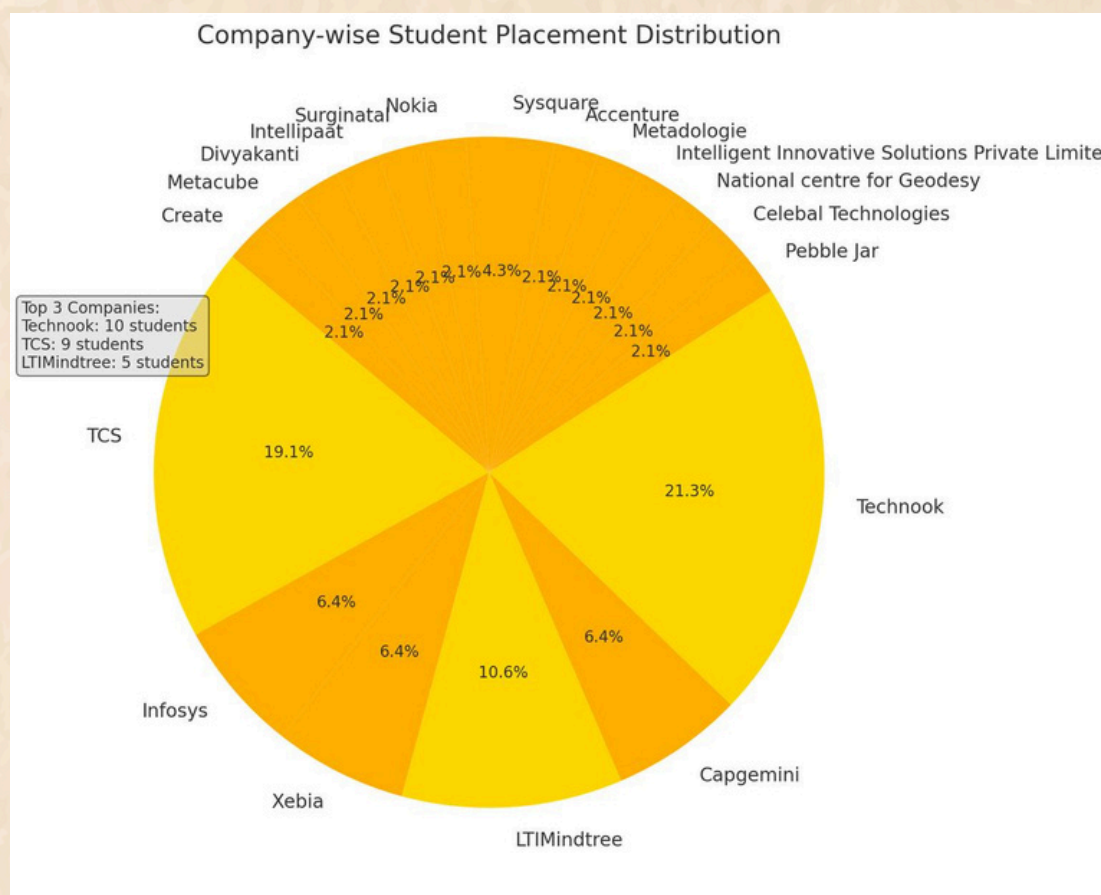
The event was inaugurated in the presence of the distinguished **Prof. (Dr.) K. Ramnarayan,** Pro Chancellor of Sikkim Manipal University (SMU), Former Chairperson of Manipal University Jaipur, and Former Vice Chancellor of Manipal Academy of Higher Education (MAHE), who served as the resource person for the workshop. His sessions focused on effective teaching methodologies, learner-centered approaches offering valuable insights for all faculty participants.

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Placements

This year has been remarkable for our students, with top recruiters recognizing the talent and dedication at our institution. From tech giants to finance leaders, our graduates have secured roles in renowned companies, proving their skills and adaptability in competitive industries. Congratulations to all achievers—your hard work has paved the way for a bright future!

Company-wise Student Placement Distribution

Top 3 Companies:
Technook: 10 students
TCS: 9 students
LTIMindtree: 5 students

- Total number of students placed:45
- Total number of different companies that came for placements:18