



COMPLUS

NEWSLETTER



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Department of computer applications

"TECHNOLOGY IS BEST WHEN IT BRINGS PEOPLE TOGETHER"



DEPARTMENT OF COMPUTER APPLICATIONS

ABOUT THE DEPARTMENT

The Department of Computer Applications at Manipal University Jaipur (MUJ) has always been endeavors for academic excellence with the most advanced curriculum and syllabus. Ever since its inception in 2019, the department has attained unparalleled heights and stands on par quality among its equivalent programs. The Department has proven its academic competence and success with an extensive range of courses offered both at the Undergraduate and Postgraduate levels. Currently 650+ students are studying in department.

The Department of Computer Applications prepares students to design, develop and implement software applications. Department emphasizes on the latest programming languages, cutting edge technologies and tools to make the students ready for the IT Industry. The department aims to become a center of excellence in providing in-depth technical knowledge and opportunities for innovation and research with state-of-the-art computer facilities and is to produce versatile students making them ready to be employed and capable of cross disciplinary collaboration in industry/government sector/higher education/research and development/entrepreneurship. Department offers a flexible curriculum designed to let students to explore their own interests. The curriculum is revamped along with the structured feedback taken from all stakeholders to provide strong foundation to each student. The programme provides students wishing to pursue higher education in India and abroad with significant knowledge background.

COURSES OFFERED

- Bachelor of Computer Applications (BCA),
- BCA Specialization (Cybersecurity / Data Science)
- BCA Honors (Software Product Engineering)
- Master of Computer Applications (MCA)
- Ph. D. (Computer Science)

VISION

Encourage Academic brilliance, Technical and research skill for leadership and global competence

MISSION

To inculcate experiential technology-intensive knowledge through application, research and Innovation

To educate students with best practices in the domain of computer applications and integrate it with the latest industry needs

To uphold the students in developing the necessary abilities to perform professionally and act with universal values



DEPARTMENT OF COMPUTER APPLICATIONS

MESSAGE FROM HEAD OF DEPARTMENT



Dr Devershi Pallavi Bhatt

Professor & Head,
Department of Computer Applications
Manipal University Jaipur

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.



DEPARTMENT OF COMPUTER APPLICATIONS

SUMMER INTERNSHIP

Roshmeet Chakravati of BCA IV sem is selected as Intern MERN Developer in iNeuron Intelligence Pvt Ltd Bangalore Karnataka.

Roshmeet Chakravati of BCA IV sem has also completed Junior Database Administrative Apprenticeship Program at IBM on 8 Jan 2024.



iNeuron Intelligence Pvt Ltd

17th Floor Tower A, Brigade Signature Towers,
Sannatammanahalli, Bengaluru, Karnataka -
562129.

DATE: 3rd February 2024

Internship on boarding Letter

Dear, Roshmeet Chakravati,

Congratulations and a warm welcome to iNeuron.ai! We are thrilled to have you on board as our **Intern MERN Developer** for an exciting project. Your skills and enthusiasm have truly stood out, and we are confident that your contributions will make a significant impact on our team.

At iNeuron.ai, we believe in fostering a collaborative and innovative environment, and we are excited to have you be a part of our dynamic team. Your role as an Intern MERN Developer will involve working on cutting-edge projects, where your passion for technology and dedication to excellence will be invaluable.

To kick off your journey with us, we have prepared a welcome package filled with some cool gifts as a token of our appreciation for joining our team. We hope you enjoy these goodies, and they serve as a constant reminder of the exciting adventure that lies ahead.

Your start date for remote work is scheduled from 1st March to 6th June 2024, and you'll be reporting to Mr. Ram Prasad Maheshwari, your project lead during your tenure at this company. If you have any questions or need further clarification, don't hesitate to reach out to Mr. Maheshwari at ram.maheshwari@contact.ineuron.com.

We are confident that your time at iNeuron will be a rewarding experience filled with growth, learning, and memorable achievements. We look forward to witnessing your skills in action and working together to achieve great success.

Once again, welcome to iNeuron! We can't wait to see the incredible contributions you'll make to our team.

Roshmeet
Sudhanshu Kumar
CEO and Chief AI Engineer at iNeuron.ai



1 New Orchard Road
Armonk, New York 10504-1722
United States

Date: 8th January 2024

Trainee Name: Roshmeet Chakravati
ID: 23RC171104

TO WHOMSOEVER IT MAY CONCERN

This letter confirms Roshmeet Chakravati's successful completion of the Junior Database Administrative Apprenticeship Program at IBM. Roshmeet joined us on 20 June 2023 and consistently demonstrated a profound understanding of database management principles.

Throughout the program, Roshmeet effectively managed the pipeline of data and architectural modification of over stacked data, showcasing exceptional problem-solving skills and a collaborative spirit. Their commitment to continuous learning was evident in their dedicated use of virtual machines and lab access for practice and upskilling.

We confidently recommend Roshmeet for future roles in database administration based on their professional aptitude, enthusiasm, and dedication to excellence.

Best regards,

Leo Ralph, Senior Talent Acquisition Manager
IBM, Armonk, USA



DEPARTMENT OF COMPUTER APPLICATIONS

NATIONAL SCIENCE DAY

The Department of Computer Application under the Faculty of Science celebrated National Science Day on February 28, 2024, marking the discovery of the Raman effect by Dr. C. V. Raman in 1928. The theme for this year was "Indigenous Technologies for Viksit Bharat," focusing on sustainability and environmental conservation. Events included a Rangoli Making Competition, Poster Making Competition, Movie Making Competition, Science Model Exhibition, Posters by Research Scholars, Nukkad Natak, and a Quiz Competition. The Poster Making Competition and Nukkad Natak were sponsored by the Bureau of Indian Standards. The event featured a lecture by Chief Guest Professor N Sathyamurthy, Founder Director of IISER Mohali, and INSA distinguished Professor, and welcomed Ms. Kanika Kalia, Director and Head of the Bureau of Indian Standards, Rajasthan, as the Guest of Honour.





DEPARTMENT OF COMPUTER APPLICATIONS

STUDENT'S ACHIEVEMENTS & AWARDS

Sanchit Saldana of BCA 6 participated in a Badminton tournament at the American University of Sharjah and secured 3rd place.

Roshmeet Chakravati of BCA IV semester has been selected for the Pre-Incubation Seed Fund Round at Symbiosis Institute of Technology, Pune.

Rashmi Priya of BCA 2nd semester won the third prize in the 'Error Odyssey' Hackathon conducted by the Cyber Space Club of Manipal University.

Aditya Gandhi of BCA 2nd semester actively participated in volunteering for the event Leadership Summit 4.0 at Manipal University.





DEPARTMENT OF COMPUTER APPLICATIONS

FACULTY DEVELOPMENT PROGRAMME

Department of Computer Application, Manipal University Jaipur held a Faculty Development Program (FDP) on "Enhancing Computation and Visualization through AI Powered Tools" from February 5th to 9th, 2024. This hybrid event aimed to enhance faculty and research scholars' skills in AI for computational and visualization tasks.

Distinguished speakers from various institutions shared insights on generative AI, satellite image analysis, computational biology, and AI applications in research. Notable speakers included Dr. Kavita Khanna, Dr. Vijay Kumar Srivastava, and Dr. Nisheeth Joshi. The FDP successfully fostered learning and collaboration, concluding with a vote of thanks to all contributors.

MANIPAL UNIVERSITY JAIPUR

One Week

FACULTY DEVELOPMENT PROGRAM

ON

ENHANCING COMPUTATION AND VISUALIZATION THROUGH AI POWERED TOOLS

5th-9th Feb 2024
Mode Hybrid [Online- MS Team]

Resource Persons:

 Dr. Kavita Khanna Computer Science (M.Sc. II) & Computational Geometry, India	 Dr. Nisheeth Joshi Associate Professor, Department of I.T., Engineering, Indian Institute of Technology, India	 Dr. Anurag Kumar Professor, Department of I.T., Engineering, Indian Institute of Technology, India	 Dr. Nisheeth Joshi Associate Professor, Department of I.T., Engineering, Indian Institute of Technology, India	 Dr. Vijay Kumar Srivastava Associate Professor, Department of I.T., Engineering, Indian Institute of Technology, India
 Dr. Anurag Kumar Professor, Department of I.T., Engineering, Indian Institute of Technology, India	 Dr. Nisheeth Joshi Associate Professor, Department of I.T., Engineering, Indian Institute of Technology, India	 Dr. Anurag Kumar Professor, Department of I.T., Engineering, Indian Institute of Technology, India	 Dr. Nisheeth Joshi Associate Professor, Department of I.T., Engineering, Indian Institute of Technology, India	 Dr. Vijay Kumar Srivastava Associate Professor, Department of I.T., Engineering, Indian Institute of Technology, India

QR Code for Registration

QR Code for Payment

Organized by: Faculty of Science, Manipal University Jaipur, Rajasthan





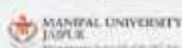
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INDUSTRIAL EXPERT TALKS

The Cypher Club, in collaboration with CyberOps and the Department of Computer Applications, organized a two-day technical talk on February 19-20, 2024, at the Smt. Sharda Pai Auditorium. The event, led by Mr. Mohit Soni, Analyst at CyberOps, focused on collaborative software development and GitHub, educating MUJ students about online coding platforms and hackathons. The sessions were highly engaging with overwhelming student participation.



Department of Computer Applications, Manipal University Jaipur organized Expert talk on : Indigenous Technologies for Viksit Bharat, the event was to Promote Self-Reliance (Aatmanirbhar Bharat), Discussed the importance of self-reliance in technology for economic and strategic autonomy. Outlined government initiatives and policies supporting indigenous technological development.



Department of Computer Applications organizes
Industry Expert Talk

"Indigenous Technologies for Viksit Bharat"

February 28, 2024 | 11:00-1:00

Venue: Smt. Sharda Pai Auditorium, 2nd



Guest speaker
Mrs. Kanika Kalia
Director and head of Bureau of
Indian Standards, Rajasthan

Co-moderator
Dr. Deepesh Kulkarni Shakti





DEPARTMENT OF COMPUTER APPLICATIONS

EXPERT LECTURES

The Department of Computer Applications is committed to providing real-world practical knowledge to our BCA and MCA students. To this end, Department organized number of expert talks by industry professionals in this session. These sessions aim to augment classroom learning with insights from the field, offering invaluable perspectives on industry practices and trends.

MANIPAL UNIVERSITY JAIPUR

MUJ

Industry Expert Talk

Speaker

Ms. Pooja Sharma
Technical Trainer (AI & Data Science),
Scansilears

Department of Computer Applications, Manipal University Jaipur
26 Feb 2024

Learning Objectives

By the end of this session, you will be able to:

- Master database modeling
- Explore the different essential database techniques, the logging, handling and scaling
- Evaluate performance enhancement and the logging
- Reduce errors with the database
- Develop data flow and the database
- Produce a 3D data visualization framework, the database and the data

MANIPAL UNIVERSITY JAIPUR

Functional Programming in Java using Lambdas

By Manish Mathuria

MANIPAL UNIVERSITY JAIPUR

MUJ

Industry Expert Talk on
"Functional Programming in Java with Lambdas"

Speaker

Mr. Manish Mathuria
Instructor,
Project Implementation,
E-Connect Solutions Pvt Ltd

Department of Computer Applications, Manipal University Jaipur
26 Feb 2024

DEPARTMENT OF COMPUTER APPLICATIONS

RESEARCH PAPER PUBLICATION/ PRESENTATION

The Department of Computer Applications takes pride in the significant volume of research output from our faculty members. They have contributed numerous research papers, book chapters, and review articles to prestigious Scopus indexed journals, IEEE Access, Springer conference proceedings, and books. These publications reflect the dedication and expertise of our faculty in advancing knowledge and innovation in the field of computer.

S. No.	MUJ Categorization	Title	Title of Book/ Chapter Published	Name of Publisher	Author Name	Scopus Indexed	Month & Year of Publication
1	Conference Paper	A REVIEW ON CYBERSECURITY LAW AND MANAGEMENT	Fourth Congress on Intelligent Systems	Springer Nature	Mrs Kuntal Gaur, ROSHMEET CHAKRABORTY, Gulshan Khemani, Khushi Sharma, Mohit Jangid	Scopus	March 2024
2	Conference Paper	SUMMARIZATION OF DAILY NEWS USING TEXTRANK AND TFIDF ALGORITHM	Fourth Congress on Intelligent Systems	Springer Nature	Dr Raksha Jain, Dr. Poonam Singh	Scopus	March 2024
3	Conference Paper	LANDCOVER CLASSIFICATION OF VHRS IMAGERY USING SUPPORT VECTOR MACHINE	International Conference on Sustainable Communication Networks and Application (ICSCNA) 2023	IEEE	Dr Pramod Kumar Sori/Computer Applications	Scopus	Jan 2024
4	Conference Paper	LUNG SEGMENTATION FROM CHEST RADIOGRAPHS USING MULTISCALE DEEP NEURAL NETWORK	3rd International Conference on Technological Advancements in Computational Sciences	IEEE	Dr Pramod Kumar Sori/Computer Applications	Scopus	Jan 2024
5	Conference Paper	BLOCKCHAIN: FROM CRYPTOCURRENCY FOUNDATION TO DECENTRALIZED REVOLUTION ACROSS INDUSTRIES	Advances in Data-Driven Computing and Intelligent Systems-2023	Springer Nature	Mr Pradeep Kumar, Mrs Kuntal Gaur, Gautam Samblat, Gaitim Saini	Scopus	March 2024
6	Conference Paper	URBAN LAND COVER CLASSIFICATION OF MULTISPECTRAL SATELLITE IMAGES USING ARTIFICIAL NEURAL NETWORKS		Springer Nature	Dr Pramod Kumar Sori/Computer Applications	Scopus	March 2024
7	Conference Paper	COMPARATIVE STUDY OF LEVELDB AND BADGERDB DATABASES ON THE BASIS OF FEATURES AND READ/WRITE OPERATIONS	2nd International Conference on Advances in Data-driven Computing and Intelligent Systems (AOCIS 2023)	IEEE	Dr Pragya Vaishnav, Dr Litesh Rajar/Computer Applications	Scopus	Feb 2024
8	Original Full	DEVELOPING A HYBRID IRRIGATION SYSTEM FOR SMART AGRICULTURE USING IOT SENSORS AND MACHINE LEARNING IN SRI GANGANAGAR, RAJASTHAN			Anritpal Kaur, Dr. Deveshvi Pallavi Bhatt, Dr. Litesh Raja	Scopus	January 2024
9	Original Full	ARTIFICIAL INTELLIGENCE ENHANCED CONSTRUCTION OF LANDSLIDE RESISTANT SUPPORT INFRASTRUCTURE USING HETEROGENEOUS COMPOSITE NANOMATERIALS: A COMPUTATIONAL ALGORITHM INNOVATIVE DEVELOPMENT			Dr Govind Murari Upadhyay/Computer Applications	Scopus	February 2024
10	Original Full	ENHANCED LUNG SEGMENTATION FROM CHEST XRAY IMAGES USING ATTENTION BASED FCNN			Mr Pradeep Kumar, Dr. Pramod Kumar Sori, Dr. Litesh Raja	Scopus	March 2024
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