

IOT TODAY

Latest news and bulletin updates Technical, Curricular, Co-curricular, Research

Runner-up Won Gold in Western TechnoVision 2024

Sept 16, 2024



Abhishek Kumar Gupta (Reg. No. 229302354) and their team LastBenchers secured Runnerup position in TechnoVision 2024 competition, dated 16^{th} September 2024.

National Finalist **Silicon** Valley Immersion Program

Sept 4, 2024

Vansh Kumar Singh (Reg. No. 229311079) got the award of National Finalist in Silicon Valley Immersion Program on Sept 4, 2024.

29 Sep, 2024



Rhythm Taneja (229303052),Ram Kaushik (229311119) and their team won 1st prize in Mood Indigo Multicity Desi Beats Competition conducted by IIT Bombay on 29th Sep in Apex University. They are



directly qualified for Asia's biggest cultural fest Mood Indigo in IIT Bombay to be held December 2024.

in Selected Official Media **Partner of Mood Indigo** in **Multicity** Apex **University by IIT Bombay** 29 Sep, 2024



Desk of Director, SCIS

Issue#3



Dear students and colleagues, our pursuit of knowledge and innovation enriches the community and propels us forward. Being a part of Computing and Intelligent Systems, let's continue to collaborate, inspire, and drive positive change together.

Best Wishes

Prof. V. S. Dhaka (Director), School of Computing and Intelligent Systems

Desk of HoD, IoT & IS



Dear Friends, remember that every challenge is an opportunity to grow. Keep pushing your boundaries and embracing new knowledge. Your dedication is the key to unlocking endless possibilities. Wishing you continued success in all domains.



Vedant Agrawalla, Reg.No. 229311182 and his team was selected as "the (Faculty) media partners" for Mood Indigo, one of the largest cultural festivals in India. This partnership marks a significant achievement for MUJ, as i involves managing media coverage and amplifying the event's reach across various platforms in Apex University by IIT Bombay.

Dr. Geeta Rani (HoD), IoT and Intelligent Systems

Dev Taneja-Sports Head(Student) Rhythm Taneja-Curricular Head (Student)

Dr. Hemlata Goval

Editor:





MANIPAL UNIVERSITY JAIPUR

Jul-Sep 2024

IOT TODAY Sports News

Issue#3

Won Silver in Tennis, Bronze in Basketball and Participation in Volleyball at BITS, Pilani

18-22 Sep, 2024



Lokesh Kothari (Reg. No. 219311108) and team SECURED SILVER MEDEL IN th TENNIS. Ram Pathak, Reg. No. 229311172 se and his team scored 9 goals in 3 matches and were praised by everyone for giving the head to head competition to the teams at BITS PILANI in Football.





Marathon on Sports Day at MUJ 29 Aug, 2024 Dev Taneja (Reg. No. 229303259), Ojas Khetarpal (Reg. No. 23FE10CII00003), Divij Pant (Reg. No. 229311274) and their team won BRONZE MEDEL IN BASKETBALL at BITS, annual sports fest, organized by BITS PILANI, secured third position, held from 18-22, September 2024.

Secured 2nd Position in BrandIT 2024

Aug 3-5, 2024



On the National Sports Day, students supporting the celebration by running marathon, which, in Dev Taneja secured (7th Position), Yash Chowdhary (10th position) in the event. Two students Divij Pant and Ojas Khetarpal participated in the sports day marathon to the support significance of the day.





BRAND IDENTITY.

Terra was born from a deep-rooted belief that fashion should be a celebration of art, translated into wearable masterpieces. With every stitch and every carefully chosen material, we craft experiences that resonate with the soul.

Terra is more than just a brand; it's a journey of selfexpression, where luxury meets sustainability. Join us in Amrrisha Srivastava got 2nd place in BrandIT 2024 organized by IEEE WIE MUJ from Aug 3-5, 2024.

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Technical News

Robomaniapl got 3rd rank in WSRO

July 20,2024

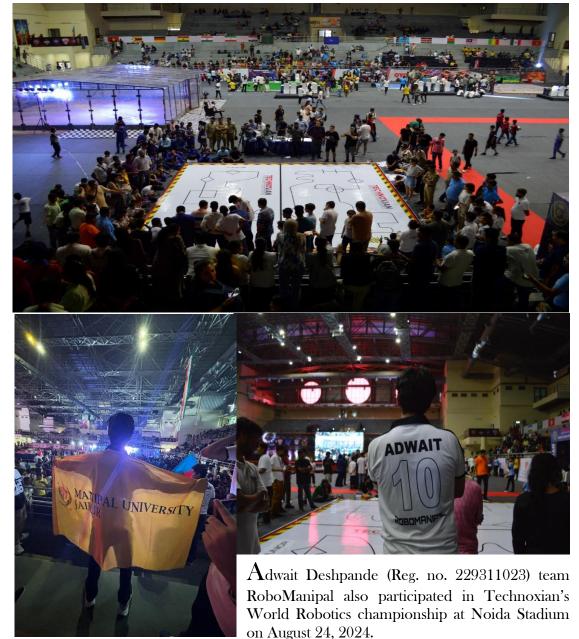




Adwait Deshpande (Reg. no. 229311023) team RoboManipal got 3rd position in WSRO (World STEM Robotics Olympiad) Goa regionals in the fastest line follower robot competition in Goa on July 20, 2024.

Technoxian's World Robotics Championship

August 24, 2024



Top 10 MUJHackX Winner

September 5-6, 2024

MUJ HackX 2.0 organized by Department of CSE, Manipal University Jaipur, 36hour technical hackathon that challenges participants to think critically and transform their ideas into impactful solutions. Department of IoT & IS, Three Student teams selected in Top 10 Teams, Cash Prize of INR 20,000.

Team Matter:



Het Valera, Reg No. 229311153; Jaskaran Singh Taneja, Reg No. 229311089; Divyanshu Nautiyal Reg No. 229311173; and Arunav Ganguly Reg No. 229311106.

Gargi Arora & Team

Anvit & Team



Top 30 in Tata Innovent Hackathon

Diya Goyal (229311082) & team secured a position in top 30 in Hackathon-among 2200 teams in tata innovent hackathon and received scholarship of Rs. 1,00,000. She was selected among top 100 girls from 22000+ participants. The event was supported by google.





IOT TODAY Departmental Activities

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MoU with NTNU Norway

Sep 9, 2024



The Department of IoT and Intelligent Systems at Manipal University Jaipur has signed a Memorandum of Understanding (MoU) with the Norwegian University of Science and Technology (NTNU), Ålesund, Norway on September 09, 2024. It was a pleasure to meet and engage in discussions with Prof. Robin T. Bye, Prof. Ottar L. Osen, and Dr. Vijander Singh during their visit to Manipal University Jaipur. The delegation also conducted an informative session with students, highlighting higher education and research opportunities at NTNU. To explore various collaborative initiatives under this partnership, the key areas of collaboration outlined in the MoU include short- and long-term student exchange programs based on mutual agreements, faculty development, and exchange opportunities on a reciprocal basis, collaborative research, joint co-supervision of Ph.D. scholars, and the joint organization of conferences, workshops, and other academic events; sharing experiences in innovative teaching methods and course design; establishing a Centre of Excellence at MUJ in collaboration with NTNU, Norway.

Trail Blazer

Sep 17, 2024

The Department of IoT & IS, organized "Trailblazer" the Website Challenge, a dynamic competition where teams of 2-4 students worked to enhance a pre-built, travel-themed website by adding features known as "Boosts." Teams were judged based on



the creativity, functionality, code quality, and time management, with the difficulty level. The event evaluated not only technical skills but also the ability to innovate and collaborate effectively under pressure.

5-Day FDP on Preparing Students for Placements and Higher Studies Aug 9, 2024



five-days' Faculty Development Α Programme (FDP) on topic "Preparing Students for Placements and Higher organized Studies" was by the Department Electronics of & Communication Engineering, SEEC along with Dept. of IoT & Intelligent Systems, SCIS on 05th Aug. to 09th Aug. 2024 in association with MUJ-TEC, Corporate Relations & T&P and HR, Manipal University Jaipur. This event is being conducted by NITTTR in collaboration Chandigarh with Manipal University Jaipur as a remote centre.

1 - week FDP on IoT Enabled Embedded Systems Jul 22-26, 2024



Resume Building 101 Aug 3, 2024

Department of IoT & IS, organized an insightful session on resume building led by Dr. Shikha Gupta, dated 3rd Aug 24. This interactive workshop provided key information on structuring



an effective resume, focusing on essential components such as Contact Information, Education, Experience, and Skills. Dr. Gupta highlighted the importance of clarity and relevance in showcasing individual strengths.

The Department of IoT and Intelligent Systems, SCIS, has organized a one-week ICT-based Faculty Development Program (FDP) on "IoT Enabled Embedded Systems" from Monday, 22nd July to Friday, 26th July 2024, in association with MUJ-TEC and HR, Manipal University Jaipur. This event was conducted by NITTTR Chandigarh in collaboration with Manipal University Jaipur as a remote centre.

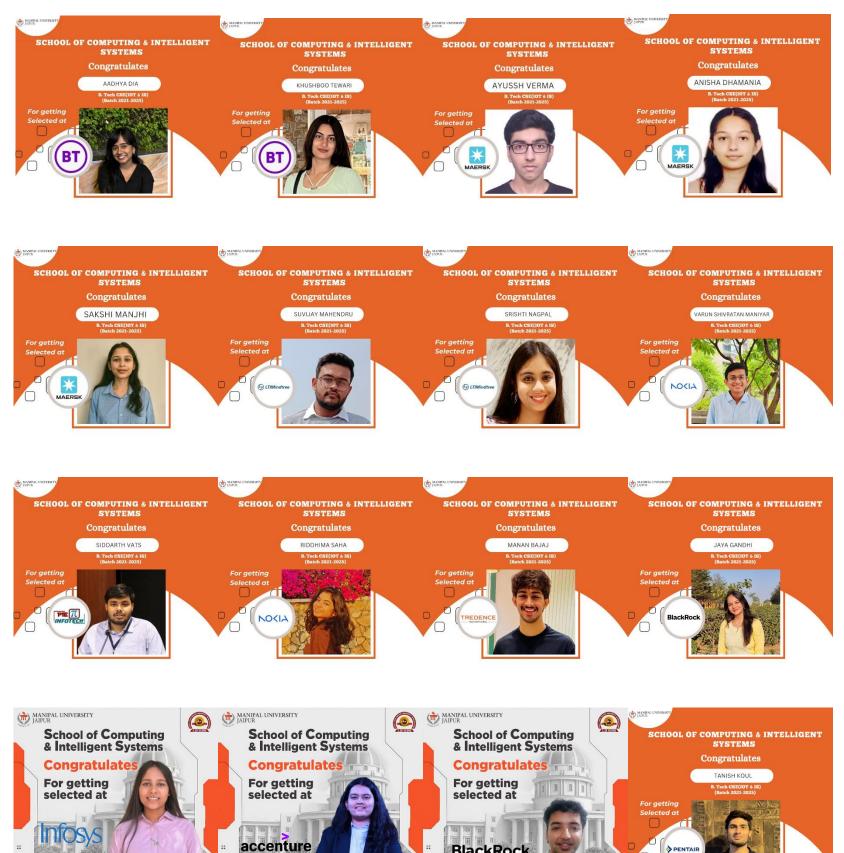




IOT TODAY Internship & Placement

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Internships & Placement











IOT TODAY

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Research & Publication

Top Researcher of The Month Award

July 2024	Aug 2024	Sep 2024
• Dr Dinesh Kumar Saini	• Dr Deepak Sinwar • Dr Amita Nandal • Dr Geeta Rani • Dr Vijaypal Singh Dhaka	• Dr Dinesh Kumar Saini • Dr Deepak Sinwar

JOURNAL PUBLICATIONS

M. Saini, N. Kumar, A. Kumar, D. Sinwar, and M. Saini, "Stochastic Modeling and Availability Optimization of Reverse Osmosis Water Purification System Using Metaheuristic Algorithms", Journal of Quality in Maintenance Engineering, Sep. 2024, SCOPUS (Q2), https://doi.org/10.1108/JQME-02-2024-0016.

D. Sinwar, N. Kumar, A. Kumar, and M. Saini, "Stochastic modeling and optimization of turbogenerator performance using meta-heuristic techniques", Quality and Reliability Engineering International, Aug. 2024, SCIE (IF 2.2), SCOPUS (Q2), https://doi.org/10.1002/qre.3639.

A. Kumar, M. Saini, N. Kumar, D. Sinwar, and M. Saini, "Availability Optimization of Bolts Manufacturing Plant Using Particle Swarm Optimization and Genetic Algorithm", Journal of the Nigerian Society of Physical Sciences, Aug. 2024, SCOPUS (Q2), https://doi.org/10.46481/jnsps.2024.2180.

N. Kumar, A. Kumar, D. Sinwar, and M. Saini, "Stochastic Modeling and Availability Optimization of Nuts Manufacturing Plant using Markov Process and Particle Swarm Optimization", Austrian Journal of Statistics, Aug. 2024, ESCI, SCOPUS (Q4), https://www.ajs.or.at/index.php/ajs/onlinefirst/view/1922.

Rajput, A., Kumawat, R., Sharma, J., & Srinivasulu, A. (2024). Design of Novel High Speed Energy Efficient Robust 4: 2 Compressor. Journal of VLSI Circuits and Systems, 6(2), 53-64. https://doi.org/10.5281/Zenodo.12680965

Alhudhaif, A., Alsubai, S., Aseeri, A. O., Nandal, A., & Polat, K. (2024). Spectrally distinct pixel extraction and kernel filtering for brain tumour diagnosis. Biomedical Signal Processing and Control, 98, 106787. https://www.sciencedirect.com/science/article/abs/pii/S1746809424008450

Kumar, Krishan & Saini, Dinesh Kumar (2024) Security issues in cloud, fog and edge computing models and suggested solutions, Journal of Discrete Mathematical Sciences and Cryptography, 27:4, 1247-1257, DOI: 10.47974/JDMSC-1979

Sharma, R., Verma, S. S., & Dhaka, V. S. (2024). SAR images change detection using proposed lamina attention-based noise-resistant UNet advance network (LANRUNet++). Digital Signal Processing, 155, 104726. https://doi.org/10.1016/j.dsp.2024.104726

Rajput, A., Kumawat, R., Sharma, J., & Srinivasulu, A. (2024). Design of Novel High Speed Energy Efficient Robust 4:2 Compressor . Journal of VLSI Circuits and Systems, 6(2), 53-64. Retrieved from https://vlsijournal.com/index.php/vlsi/article/view/115

Saini, K., Saini, M., Kumar, A. et al. RAMD and transient analysis of a juice clarification unit in sugar plants. Int. j. inf. tecnol. (2024). https://doi.org/10.1007/s41870-024-02147-8

CONFERENCE PUBLICATIONS

Jha, R.S., Saini, D.K., Gupta, P. (2024). Task Scheduling Cost Evaluation over Cloud with Using GA, ACO, PSO. In: Somani, A.K., Mundra, A., Gupta, R.K., Bhattacharya, S., Mazumdar, A.P. (eds) Smart Systems: Innovations in Computing. SSIC 2023. Smart Innovation, Systems and Technologies, vol 392. Springer, Singapore. https://doi.org/10.1007/978-981-97-3690-4_24

Jha, R.S., Saini, D.K., Gupta, P. (2024). Sentiment Analysis: Concepts, Methods, and Applications. In: Somani, A.K., Mundra, A., Gupta, R.K., Bhattacharya, S., Mazumdar, A.P. (eds) Smart Systems: Innovations in Computing. SSIC 2023. Smart Innovation, Systems and Technologies, vol

392. Springer, Singapore. https://doi.org/10.1007/978-981-97-3690-4_27

Saini, A., & Singh, R. (2024, July). Random shift and OTP based encryption and decryption. In AIP Conference Proceedings (Vol. 3168, No. 1). AIP Publishing.

N. Babbar, A. Kumar and V. K. Verma, "Predicting Wheat Yield Using Sequential and Deep Convolutional Neural Networks," 2024 5th International Conference on Electronics and Sustainable Communication Systems (ICESC), Coimbatore, India, 2024, pp. 1104-1108, doi: 10.1109/ICESC60852.2024.10689887.

Sonam, G. Rani and V. Singh Dhaka, "A Deep Learning-Powered Intelligent System for Crowd Management and Seamless Navigation for Cultural Heritage Exploration," 2024 IEEE International Workshop on Metrology for Living Environment (MetroLivEnv), Chania, Greece, 2024, pp. 498-502, doi: 10.1109/MetroLivEnv60384.2024.10615904

Rajpurohit, J., Sharma, T.K., Bhushan, S., Sharma, A. (2024). A Modified Honey Badger Algorithm with Logistic Map and Enhanced Exploitation. In: Kumar, R., Verma, A.K., Verma, O.P., Wadehra, T. (eds) Soft Computing: Theories and Applications. SoCTA 2023. Lecture Notes in Networks and Systems, vol 971. Springer, Singapore. https://doi.org/10.1007/978-981-97-2089-7_38

Jha, R.S., Saini, D.K., Gupta, P. (2024). Task Scheduling Cost Evaluation over Cloud with Using GA, ACO, PSO. In: Somani, A.K., Mundra, A., Gupta, R.K., Bhattacharya, S., Mazumdar, A.P. (eds) Smart Systems: Innovations in Computing. SSIC 2023. Smart Innovation, Systems and Technologies, vol 392. Springer, Singapore. https://doi.org/10.1007/978-981-97-3690-4_24

