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TECHNOPULSE

This Newsletter showcases the achievements of the Computer Science Department of Maharaja Surajmal Institute of Technology.

The CSE department has published numerous journal entries, patents, articles, books and research on various topics from all walks of life. It also includes all the fun and educational events the department has organized.

Our Vision

To maintain academic excellence aiming to produce competent technocrats imbued with ethical values to serve the national emerging technological needs.

Our Mission

To impart quality education to the students by providing effective teaching, learning, research, and application based innovative environment.

To include creativity, team-spirit, leadership, and ethical competence through continuous collective curricular, co-curricular and extracurricular activities.

EVENTS

Webinar on “Effect of NEP on youth empowerment and sports development” on 5th August 2021.

Webinar on “Higher Education by Career labs” on 25th August 2021

Webinar on “A Guidance Program on Career Opportunities after B.Tech by ACE Engineering Academy” on 11th September 2021

Webinar on “IOT by CQS” on 14th September, 2021 for CSE 3rd Year Students

Webinar on “Strategy to crack Gate and other competitive exams by Made Easy” on 20th September , 2021 for CSE Students

Webinar on “How to do well in Aptitude test by T.I.M.E Group” on 22nd October 2021, for CSE students.

Webinar on “ The Achiever’s Talk – know how to crack scholarships and internships” on 13th November 2021, for CSE Students.

Industrial Training on “ Data Science” on 15th Nov.- 26th Nov. 2021, for faculties.

STUDENT ACHIEVEMENTS

The students **Mohak Chugh, Pourav Raj, Pranav Bajaj and Riya Goel** of CSE-2nd shift batch 2017-2021 got placed in companies offering package of more than 20 Lakh per annum LPA

The final year students have shown outstanding performance in placements as well as higher studies.

Arjun Bajpai qualified GATE with All India Rank 1922 and GATE Score of 606.

Raghav Naswa cleared GRE and IELTS and current pursuing MS in University of Washington, USA.



Khushi Balyan

Batch: 2018-2022 CSE - Morning

Full time offer from Microsoft, Ion, IBM & Infosys
6-month internship offer from Microsoft

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- 2 students from CSE got selected in Adobe Internships with a stipend of 1 lakh rupees.
 - 3 students from CSE got selected in Microsoft Internship and Bipolar Factory with a stipend of 80,000 rupees.
 - 13 students bagged an internship of 50,000 rupees and above in Amazon, Trilogy Innovations and Velvet.

STAR ACHIEVERS



Ayush Mahajan

Batch: 2017 – 2021 CSE
55 LPA package offer from
GOOGLE

PLACEMENTS 10 LPA & ABOVE

- Shivangi Shrivastava
- Kartik Kumar
- Adisakshya Chauhan
- Ravi Samwal
- Bhavya Choudhary
- Maryada Sharma
- Nitesh Singh
- Pranav Bajaj
- Riya Goyel
- Pooja Sharma
- Prachi Sethia
- Shubham Jain
- Tamanna Jain
- Amandeep Singh
- Dhananjay Sachdeva
- Mohak Chugh
- Pourav Raj



A STEP TOWARDS FUTURE

On its path of excelling in the journey of imparting the best technical education in the field of computer engineering, the Computer Science Department is always motivated to have the best possible infrastructure. At Computer Science Engineering Department, we believe that motivated students and faculty can be a significant factor in overall success of the organization. For the effective implementation of these best practices, the Computer Engineering Department at MSIT is able to get equipment worth Rs. 20 lacs in 2021, and setup a state-of-the-art laboratory in the department.

In this lab the hardware that has been procured is suitable for matching the future requirements of our students. This will not only help the students in excelling their area of expertise, but it also aims to support faculty towards accessing the best computational facilities. It will act as a milestone towards achieving the mission and vision of Maharaja Surajmal Institute of Technology.

SPECIAL ACHIEVEMENTS



Dr. Koyel Datta Gupta, Associate Professor, Vidwan ID - 240950 along with Ritu Nigam, Deepak Kumar Sharma and Sanjay K. Dhurandher published a research paper titled LSTM based Energy-Efficient Wireless Communication with Reconfigurable Intelligent Surfaces in IEEE Transactions on Green Communications and Networking with Impact Factor 6.177.



Dr. Naveen Dhaiya, Associate Professor, Vidwan ID - 241950 has been able to get a grant of Rs. **10,43,000/-** project scheme as project coordinator from AICTE under MOROB (Modernization and Removal of Obsolescence) project scheme as project coordinator.

The patent (**No. 369023**) entitled 'An automatic sanitizing device' has been granted on 10th June 2021 for a period of 20 years.

He has hosted special issue entitled 'Optimization and convergence of machine learning algorithms for leveraging IOT, blockchain and artificial intelligence' International Journal of Information Retrieval Research, IGI Global Vol. 11, No. 2, 2021. (ESCI

PATENTS AND JOURNALS

- **Dr. Naresh Kumar, Associate Professor, Vidwan ID - 241001** “Learning Based Focused Web Crawler” published by Learning Based Focused Web Crawler, Indexing: SCIE
- **Dr. Naresh Kumar, Vidwan ID - 241001**, Associate Professor “NSGA-III-Based Deep-Learning Model for Biomedical Search Engines” published by Mathematical Problems in Engineering, Indexing SCIE
- **Dr. Naresh Kumar, Associate Professor, Vidwan ID - 241001** “Novel deep transfer learning model for COVID-19 patient detection using X-ray chest images” published by Journal of Ambient Intelligence and Humanized Computing, Indexing: SCIE
- **Mr. Navdeep Bohra, Assistant Professor, Vidwan ID - 241019**, “Group level social media popularity prediction by MRGB and Adam optimization” published by Journal of Combinatorial Optimization, Indexing: SCIE
- **Dr. Rinky Dwivedi, Associate Professor, Vidwan ID - 241399 and Koyel Datta Gupta, Vidwan ID - 240950, Associate Professor, Vidwan ID - 240950**, “Technology Landscape for Epidemiological Prediction and Diagnosis of COVID-19” published by Computers, Materials & Continua, Indexing: SCIE
- **Dr. Koyel Datta Gupta, Associate Professor, Vidwan ID - 240950**, “A Novel Lightweight Deep Learning-Based Histopathological Image Classification Model for IoMT” published by Neural Processing Letters, Indexing: SCIE
- **Dr. Koyel Datta Gupta, Associate Professor, Vidwan ID - 240950**, “LEOBAT: Lightweight encryption and OTP based authentication technique for securing IoT networks” published by Expert Systems, Indexing: SCIE
- **Dr. Naresh Kumar, Associate Professor**, “Efficient automated disease diagnosis using machine learning models” published by Journal of Healthcare Engineering, Indexing: SCIE
- **Dr. Naresh Kumar, Associate Professor**, “Meta-heuristic based deep COVID-19 screening model from chest x-ray images” published by

Advancements in Computational Model-based Medical Image Analysis - special issue of: Journal of Healthcare Engineering, Indexing: SCIE

- **Mr. Vikrant Shokeen, Assistant Professor, Vidwan ID - 241187**, “an extended framework of lung cancer classification using hybrid architecture of surf and svm published by IT in Industry, Indexing: ESCI (wos)
- **Ms. Vimal Gaur, Vidwan ID - 241010**, Reader “Analysis of Machine Learning Classifiers for Early Detection of DDoS Attacks on IoT Devices” published by Arabian Journal for Science and Engineering
- **Mr. Vikrant Shokeen, Assistant Professor**, “Blockchain Technology and Its Industrial Utilization: A Review” published in Design Engineering, Indexing: Scopus
- **Mr. Vikrant Shokeen, Assistant Professor, Vidwan ID - 241187**, “Dwelling Price Prediction Based on Physical, Economical & Social Indicators Using Regression Methods” published by Design Engineering, Indexing: Scopus
- **Dr. Geetika Dhand, Associate Professor, Vidwan ID - 240999 and Dr. Kavita Sheoran, Associate Professor, Vidwan ID - 241003**, “valuate AODV to DSR and Improving AODV” published by Journal of University of Shanghai for Science and Technology, Indexing: Google Scholar
- **Dr. Geetika Dhand, Associate Professor, Vidwan ID - 240999**, “Wi-Fi Based Home Automation System” published by GIS SCIENCE JOURNAL, Indexing: Google Scholar.
- **Dr. Geetika Dhand, Associate Professor, Vidwan ID - 240999**, “Performance Analysis of Machine Learning Algorithms for Chronic Kidney Disease” published by International Journal of All Research Education and Scientific Methods (IJARESM), Indexing: Google Scholar
- **Dr. Kavita Sheoran, Associate Professor, Vidwan ID - 241003, Dr. Geetika Dhand, Associate Professor, Vidwan ID - 240999, Ms. Shaily Malik, Assistant Professor, Vidwan ID - 240998** and et.al published an application titled “IOT Based Smart Shoes for Child Health Monitoring”, Application filed on 20/3/2021, Published on 26/03/2021, Application No.202111011966A
- **Dr. Kavita Sheoran, Associate Professor, Vidwan ID - 241003, Dr. Geetika Dhand, Associate Professor, Vidwan ID - 240999** et. al published an application titled, “Method electronic device for monitoring user in work site”, Application filed on 20/3/2021, published on 26/03/2021, Application No.202111011965

- **Dr. Geetika Dhand, Associate Professor, Vidwan ID - 240999, Dr. Kavita Sheoran, Associate Professor, Vidwan ID - 241003 and Dr. Nishtha Jatana, Assistant Professor, Vidwan ID - 241879,** published an application titled "Method and electronic device for personalizing user activity in virtual reality environment", Application filed on 20/3/2021, Published on 26/03/2021, Application No.202111011967.
- **Dr. Geetika Dhand, Associate Professor, Dr. Amita Yadav, Associate Professor, Vidwan ID - 241017, Dr. Kavita Sheoran, Associate Professor, Dr. Sonia Rathee, Assistant Professor, Vidwan ID - 241006 et.al** published an application titled "Cartoonify Image Detection Using Machine learning", Application filed on 6/04/2021, Published on 30/04/21, Granted on 5/05/2021, Application No. 2021101766.
- **Dr. Nishtha Jatana, Assistant Professor, Vidwan ID - 241879, Dr. Kavita Sheoran, Associate Professor, Dr. Geetika Dhand, Associate Professor et.al** published an application titled, "Communication Assistance System and Method of operating the system", Application filed on 15/04/2021 published on 23/04/2021 Application no. 202111017478.
- **Dr. Kavita Sheoran, Associate Professor et.al,** published an application titled "IOT based smart complaint box", Application filed on 15/01/2021; Published on 22/01/2021, Application no.202111001925
- **Dr. Koyel Datta Gupta, Associate Professor with Dr. Rinky Dwivedi, Associate Professor, Dr. Deepak Kumar Sharma, Dr.Triпти Sharma and Dr. Alka** invented A wearable sensor based customized menstrual cycle predictor on 28/9/2021 . The patent no. Is 202111043930 and it was published at a national level on 15/10/2021 in India.
- **Dr. Geetika Dhand, Associate Professor,** with Dr. Gaurav Dubey, Dr. Monika Arora, Dr. Prabhjot Kaur, **Dr. Kavita Sheoran, Associate Professor, Dr. Anupama Kaushik** with each of their affiliations as ABES Engineering College, PSP-4, Dr KN Katju Marg, Sector 17, Rohini, Maharaja Surajmal Institute of Technology, Maharaja Surajmal Institute of Technology, Maharaja Surajmal Institute of Technology, Maharaja Surajmal Institute of Technology. The inventors are Dr. Gaurav Dubey, Dr. Monika Arora, Dr. Prabhjot Kaur, Dr. Geetika Dhand, Dr. Kavita Sheoran, Dr. Anupama Kaushik, **Ms. Pooja Kherwa, Vidwan ID - 243726,** Surender Singh, Sonika Malik, Preeti Rathee invented method for translating sign language using convolutional neural

network on 15/09/2021. The patent no. Is 202111041578 and it was published at a national level on 15/10/2021 in India.

- **Mr. Navdeep, Vidwan ID - 241019, Assistant Professor** Granted patent in 2021: Reduce, Re-cycle and Reuse (RRR) IOT intelligence waste management system, 202111001043 / 375180
- **Dr. Sangeeta, Assistant Professor, Vidwan ID - 241009**, Sitender “Analyzing twitter data on COVID-19 Vaccines” in journal of Design Engineering” 2021, ISSN: 0011-9342, Vol-9(8), Pp: 653 – 663.
- **Dr. Sangeeta, Assistant Professor, Vidwan ID - 241009**, Sitender “Operating Machines using Facial Expressions” in journal of Design Engineering” 2021, ISSN: 0011-9342, Vol-9(8), Pp: 653 – 663.
- **Dr. Sangeeta, Assistant Professor, Vidwan ID - 241009**, Sitender, K. Sharma, and M. Bala, “New failure rate model for iterative software development life cycle process”, Autom. Softw. Eng., vol. 28, no. 2, 2021. SCIE Indexed (IF: 1.59) ISSN 1573-7535.
- **Dr. Sangeeta, Assistant Professor, Vidwan ID - 241009** et al. "Analysis of machine learning based LEACH robust routing in the Edge Computing systems" Computers and Electrical Engineering, Vol 96 Part B Dec 2021, Impact Factor-3.818, INDEXED in SCIE, ISSN:0045-7906
- **Dr. Sangeeta, Assistant Professor, Vidwan ID - 241009**, Assistant professor CSE Department and Dr.Sitender, Assistant professor IT Department has published Copyright on Literary Work having Registration No. -L-104055/2021 dated on 03-06-2021.

BOOKS AND CHAPTERS PUBLISHED

- **Dr. Koyel Datta Gupta, Associate Professor and Dr. Rinky Dwivedi, Associate Professor**, wrote *Green Computing in Network Security: Energy Efficient Solutions for Business and Home* in the key areas Computer Network published by Taylor & Francis at 6000 Broken Sound Pkwy NW #300, Boca Raton, FL 33487, United States.
- **Dr. Sonia, Assistant Professor, Dr. Amita, Associate Professor, Mr. Navdeep, Assistant Professor**, Harinder published a book chapter “Eye Gaze Mouse Empowers people with Disabilities” in *Disruptive Technologies for society 5.0*, sep2021, CRC press, ISBN 9781003154686.
- **Dr. Koyel Datta Gupta, Associate Professor**, wrote *Channel Allocation in Wireless Networks: Beginner's Guide* in the key area wireless network published by Lambert Academic Publishing. The ISSN/ISBN of the book is 978-620-4-72491-1 .
- **Dr. Sangeeta, Assistant Professor & Dr. Sitender** published a book titled “Practices toward Future Software Reliability Growth Model Evolution” AKN Learning Publications (International), ISBN: 978-8194217183, 2021.

CONFERENCES PUBLICATIONS

- **Dr. Vimal Gaur, Assistant Professor, Vidwan ID - 241010**, invented “Hybrid Classification technique for detection of DDoS attack” at the 5th International Conference on Information Systems and Computer Networks (ISCON-2021) which was published by IEEE Xplore Digital Library.
- **Dr. Sandeep Kumar Associate Professor, Vidwan ID - 241013**, invented “BERLIN: Bidirectional Encoder Representations from Linformer” at the International Conference on Innovations, Research and Challenges in Emerging Technologies (IRCET-2021) which was published by the proceedings of the conference is planned to be published in CCIS series (Springer).
- **Dr. Priyanka Nandal, Associate Professor, Vidwan ID - 241004**, “Graph Coloring based Scheduling Algorithm to automatically generate College Course Timetable”, 2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence).
- **Mr. Navdeep Bohra, Assistant Professor, Vidwan ID - 241019**, “Language Identification using Stacked Convolutional Neural Network (SCNN)” 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence-2021).
- **Dr. Savita Ahlawat, Associate Professor, Vidwan ID - 241471**, “Facial Attributes Classification using Convolutional Neural Network (CNN)” National Conference “digital entrepreneurship”.

CONFERENCE PUBLICATIONS

- **Dr. Savita Ahlawat, Associate Professor, Vidwan ID - 241471,** “Speech Emotion Recognition using MFCC Features” National Conference “DIGITAL ENTREPRENEURSHIP.
- **Ms. Shaily Malik, Assistant Professor, Vidwan ID - 240998,** Dr. Kavita Sheoran, Associate Professor and Dr. Geetika Dhand, Associate Professor, “A system for providing Insight on a tourist Spot Based on Text Mining” International Conference on Innovative Computing and Communications-2021.
- **Dr. Geetika Dhand, Associate Professor, Vidwan ID - 240999,** “Secure and Manage Passwords with Encryption and cloud storage” International Conference on Innovative Computing and Communications-2021.
- **Dr. Priyanka Nandal, Associate Professor, Vidwan ID - 241004,** “Pronunciation Accuracy Calculator using Machine Learning”, 2021 5th International Conference on Computing Methodologies and Communication (ICCMC).
- **Mr. Vikrant Shokeen, Assistant Professor, Vidwan ID - 241187,** “Image Segmentation and Lung Cancer Classification Through Neural Network for CT Scan Images”, International Conference on Recent Challenges in Engineering Science and Technology.
- **Dr. Geetika Dhand, Associate Professor,** “battle royale: First Person shooter Game “, International Conference on Innovative Computing and Communications-2021.

FACULTY ACHIEVEMENTS

- **Ms. Divya, Assistant Professor, Vidwan ID - 241008** papers 'A contemplative perspective on federated machine learning: Taxonomy, threats & vulnerability assessment and challenges, Journal of King Saud University-Computer and Information Sciences' got published by Elsevier in Journal with an impact factor of 13.47. The ISSN of the publication is 1319-1578.
- **Ms. Divya, Assistant Professor**, CSE Department has received a prize of six Adafruit Microsoft Machine Learning Kits for Lobe with Raspberry Pi 4 4GB for MSIT from Microsoft. Out of a total of 589 participants including students and mentors, this team received Honorable Mention under the category Hack for Education (Computer Science).
- **Ms. Gunjan Beniwal, Assistant Professor, Vidwan ID - 243313**, published a research paper " A systematic literature review on IoT gateways" in " Journal of King Saud University- Computer and Information Sciences" with an impact factor of 13.473.

IEEE MSIT CS

Techno Green	19-04-21-24-04-21	NA	250 Views
Tech Talk (Episode - 1)	12-05-21	Akshay Rein Wazir	400 Views
Tech Talk (Episode - 2)	17-05.-21	Prince Kumar Patwari	400 Views
Roadmap To Crack Internship and Placements	24-07-21	Shubhankar Gaikwad, Shashank Chauhan	70
Researching your way into AI(Episode-1)	07-08-21	Sai Siddhartha Maram	400 Views
Introduction to DSA and Roadmap to Programming	11-08-21	Shantanu Shubham, Yashpreet Bathla	50
Researching your way into AI(Episode-2)	14-08-21	Shravan Nayak	300 Views
Researching your way into AI(Episode-3)	21-08-21	Raman Dutt	300 Views
Researching your way into AI(Episode-4)	28-08-21	Sidharth Purohit	400 Views
IEEE DAY 2021	01-10-21 to 04-10-21	-	30
TYCOONS 2.0	17-10-21	-	150
The New Normal	27-11-21 to 16-12-21	-	170

New Joining's of Year 2021



DR. SANGEETA
JOINED AS ASSISTANT PROFESSOR ON 12-03-2021
9 YEARS IN TEACHING AND 4 YEARS IN RESEARCH
EXPERIENCE
QUALIFIED: UGC NET-JRF
PH. D: DELHI TECHNOLOGICAL UNIVERSITY, NEW
DELHI



MR. VIKRANT SHOKEEN.
JOINED AS ASSISTANT PROFESSOR ON 12/03/2021.
3.5 YEARS OF TEACHING EXPERIENCE
HE IS PURSUING PH. D FROM MAU, BADDI

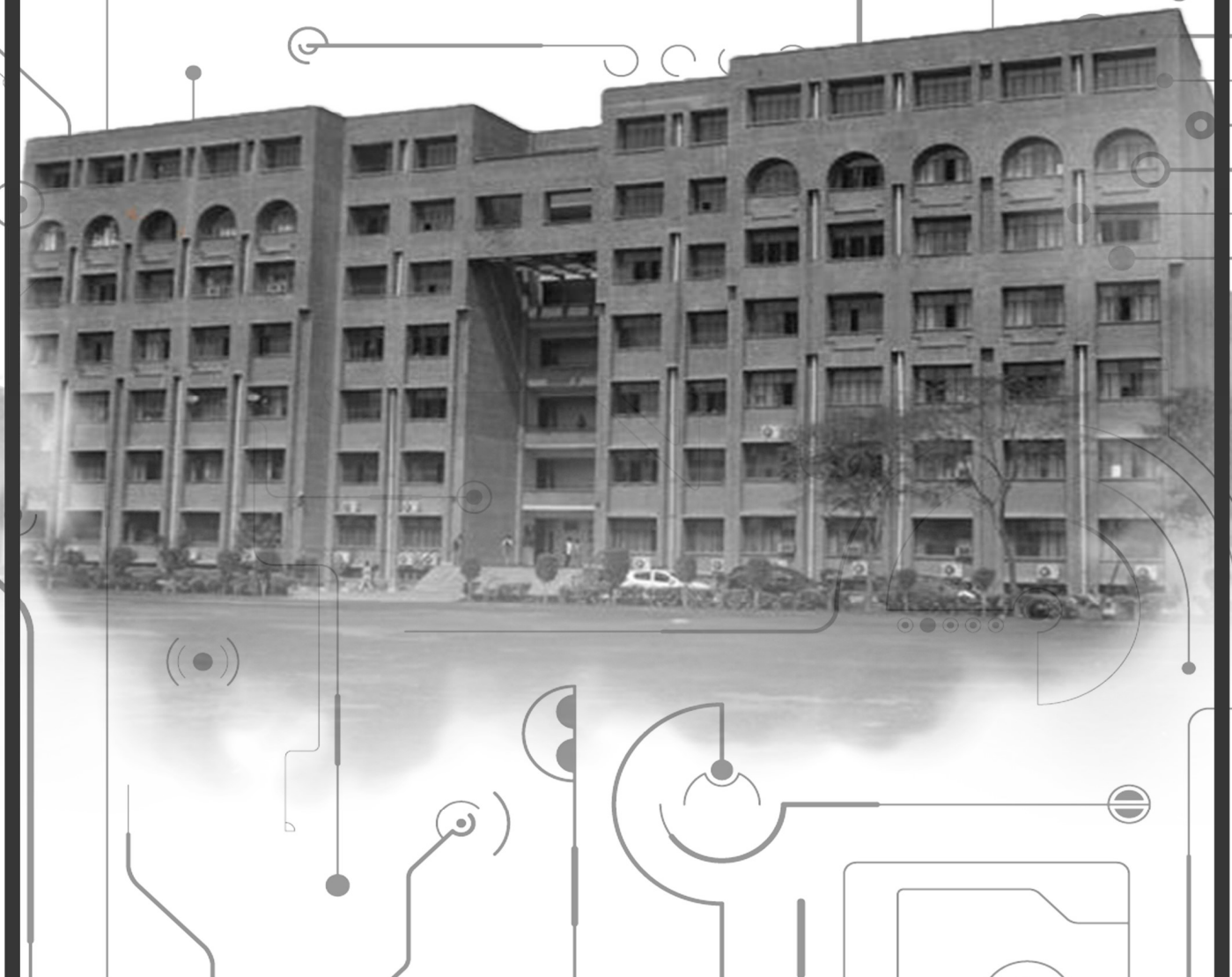


MS. SONICA UPADHYAY
JOINED AS ASSISTANT PROFESSOR ON 15/03/2021
5 YEARS OF TEACHING EXPERIENCE
SHE IS PURSUING PH.D. FROM BANASTHALI
UNIVERSITY, RAJSTHAN.

EVENT GALLERY







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(HOD CSE, Evening)

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