MSIT CSE NEWSLETTER

JAN-JUN 2023

INSIDE THIS ISSUE

- STUDENT ACHIEVEMENTS
- PUBLICATION BY DEPARTMENT FACULTY
- PHD COMPLETION
- EVENT GALLERY
- NBA VISIT

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 that were organized by the department faculty, students, and societies .

OUR VISION

To maintain academic excellence aiming to produce competent technocrats imbibed 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.

PROGRAM EDUCATIONAL OBJECTIVES

- To acquire a deep insight in mathematical, scientific & analytical skills and adopt self-motivating lifelong learning to explore cutting edge technologies.
- To evolve as responsible citizen having sense of ethics and environment aware attitude.
- To acquire necessary technical knowledge to pursue successful professional career posing leadership and team spirit.

PROGRAM SPECIFIC OUTCOMES

- Ability to demonstrate the comprehended fundamentals of computer engineering to resolve mathematical and computation problems.
- Ability to explore evolutionary changes in computing by skills acquired through computer engineering principles and provide solution through innovative ideas.
- Ability to imbibe knowledge in modern computer environment and languages to gain additional skills for successful career and higher studies.

NATIONAL BOARD OF ACCREDITATION (NBA) VISIT

- The expert team from the National Board of Accreditation (NBA) visited the Computer Science Engineering Department at Maharaja SurajmaIq2 Institute of Technology, New Delhi, from 12th to 14th May, 2023, to evaluate its UG Engineering programs in a Tier-II format for the grant of NBA accreditation. The visit schedule was meticulously planned to assess various aspects of the department's functioning and academic programs.

- Day 1 started with a presentation by the Director, MSIT about the institute, a visit to central facilities and 1st year laboratories. The team interacted with the faculty of 1st year which was then followed by a presentation by HoD, CSE Dept. Day 1 ended with individual meetings with select faculty members, as deemed fit by the experts.

- Day 2 focused on in-depth evaluations and examinations of various departmental functions and resources involving: Discussions and Study of Administrative Processes, including different committees and their functioning. Assessment of laboratory equipment adequacy and the conduct of lab sessions. Examination of budget and accounts. It ended with review of all evidence for the attainment of Program Outcomes (POs), a visit to the placement cell and an interaction with alumni, parents, and employers.

- Day 3, the concluding day of the expert team's visit comprised final assessments and an exit meeting to discuss their findings and recommendations.

- On 27th June, 2023, the department received a certificate from the National Board of Accreditation (NBA) confirming the grant of accreditation for the academic years 2022-23 to 2024-25, valid until 30th June 2025. This accreditation worked as a testament to the dedication and commitment of the Computer Science Engineering Department at Maharaja Surajmal Institute of Technology to maintain high academic standards and continuous improvement.

JOURNALS

- **Dr. Navdeep Bohra, Assistant Professor, Vidwan ID- 241019,
  Dr. Savita Ahlawat, Associate Professor, Vidwan ID- 241471,
  Dr. Dinesh Sheoran, Assistant Professor, Vidwan ID- 243571,**
  "Popularity Prediction of Social Media Post Using Tensor Factorization",
  Intelligent Automation & Soft Computing, vol. 36, no. 1, pp. 205-221, Jan
  2023

- **Dr. Rinky Dwivedi, Associate Professor, Vidwan ID- 241399,**
  "Intrusion Detection System for IoE-Based Medical Networks", Journal of
  Database Management, vol. 34, no. 2, pp. 1-18, Apr 2023

- **Dr. Dinesh Sheoran, Assistant Professor, Vidwan ID- 243571,**
  "Evaluating The Contribution Made by Multilevel Cognitive and Machine
  Learning", Res Militaris, vol. 13, no. 1, pp. 3434-3440, Jan 2023

- **Dr. Kavita Sheoran, Associate Professor, Vidwan ID- 241003,
  Dr. Nishtha Jatana, Assistant Professor, Vidwan ID- 241879,
  Dr. Geetika Dhand, Associate Professor, Vidwan ID- 240999,**
  "Pronunciation Scoring with Goodness of Pronunciation and Dynamic
  Time Warping", IEEE Access, vol. 11, pp. 15485-15495, Feb 2023 [Impact
  factor 3.9]

- **Dr. Naresh Kumar, Associate Professor, Vidwan ID- 241001,**
  "LEARNING-based Focused WEB Crawler", IETE Journal of Research,
  vol. 69, no. 4, pp. 2037-2045, Apr 2023

- **Dr. Adeel Hashmi, Assistant Professor, Vidwan ID- 242663,**
  "Enhancing metaheuristic based extractive text summarization with fuzzy
  logic", Neural Computing and Applications, vol. 35, pp. 9711-9723, Feb
  2023

- **Dr. Kavita Sheoran, Associate Professor, Vidwan ID- 241003,
  Dr. Geetika Dhand, Associate Professor, Vidwan ID- 240999,**
  "Real-time hand gesture recognition using multiple deep learning
  architectures", Signal, Image and Video Processing, Jul 2023 [Impact
  factor 2.3]

JOURNALS

- **Dr. Geetika Dhand, Associate Professor, Vidwan ID- 240999,
  Dr. Kavita Sheoran, Associate Professor, Vidwan ID- 241003,**
  Drug review sentimental analysis based on modular lexicon generation and a fusion of bidirectional threshold weighted mapping CNNRNN.
  Concurrency Computation Practice Experience. Vol. 35(3), 2023; [Impact factor 1.83]

- **Dr. Nishtha Jatana, Assistant Professor, Vidwan ID- 241879,
  Dr. Kavita Sheoran, Associate Professor, Vidwan ID- 241003,
  Dr. Geetika Dhand, Associate Professor, Vidwan ID- 240999,
  Dr. Shaily Malik, Assistant Professor, Vidwan ID- 240998,**
  "Multi-Objective Fault-Coverage Based Regression Test Selection and Prioritization Using Enhanced ACO_TCSP"
  Mathematics, vol. 11, no. 13, pp. 1-21, Jul 2023 [Impact factor 2.4]

- **Dr. Geetika Dhand, Associate Professor, Vidwan ID- 240999,
  Dr. Kavita Sheoran, Associate Professor, Vidwan ID- 241003,
  Dr. Shaily Malik, Assistant Professor, Vidwan ID- 240998,
  Dr. Nishtha Jatana, Assistant Professor, Vidwan ID- 241879,**
  "Blockchain based Certificate Validation"
  Fusion: Practice and Applications, vol. 12, no. 2, pp. 42-53, Jun 2023(Scopus)

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BOOKS / BOOK CHAPTERS

- **Dr. Kavita Sheoran, Associate Professor, Vidwan ID- 241003,
  Dr. Geetika Dhand, Associate Professor, Vidwan ID- 240999,
  published a book on Data Wrangling: Concepts, Applications and Tools. John Wiley & Sons, July 2023 ISBN: 9781119879688. (Scopus Indexed)**

PATENTS

- **Dr. Nishtha Jatana, Assistant Professor, Vidwan ID- 241879,**
  Dr. Kavita Sheoran, Associate Professor, Vidwan ID- 241003,
  Dr. Geetika Dhand, Associate Professor, Vidwan ID- 240999,
  Dr. Shaily Malik, Assistant Professor, Vidwan ID- 240998,
  Dr. Divya, Assistant Professor, Vidwan ID- 241008,
  Ms. Vaani Garg, Assistant Professor,

  Title: COMPACT ELECTRONIC SINGLE BRAILLE CELL DISPLAY DEVICE
  filled on 06/02/2023; Granted on 10/8/2023
  Patent No.: 444157; Application No.: 202311007354
  Patentee: 1. SIMERNEET SINGH 2. GURMEET KAUR

BEST FACULTY AWARD

- **Dr. Koyel Datta Gupta, Professor, Vidwan ID- 240950**, was awarded with the Best Faculty(second) award for the academic year 2021-2022 during Annual Day of MSIT April 15, 2023 in recognition for outstanding contribution to the institution in academic, research & publications and co-curricular activities.

Dr. Koyel Datta Gupta, Professor, Vidwan ID- 240950 & Dr. Rinky Dwivedi, Professor, Vidwan ID- 241399, obtained gold medal in MOOCS Data Mining course.

Mr. Sundar lal was awarded with best employee non-teaching.

PHD COMPLETIONS

- **Dr. Vikrant Shokeen, Assistant Professor, Vidwan ID- 241187**
  has been awarded a Ph.D. from Maharaja Agrasen University. The topic of his thesis was **'Segmentation and Classification of Biomedical Image for the Detection of Lung Cancer through Artificial Intelligence'.**

- **Dr. Vimal Gaur, Reader, Vidwan ID- 241010**
  has been awarded her Ph.D. degree under the supervision of Prof. Rajneesh Kumar from Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala. The topic of her thesis is **"Detection of DDoS Attacks on IoT Devices Using Machine Learning Techniques"**

STUDENTS' ACHIEVEMENTS

- Sheoran Kavita, Arpit Bajgoti, Rishik Gupta, Nishtha Jatana, Geetika Dhand, Charu Gupta, Pankaj Dadheech, Umar Yahya, and Nagender Aneja. "Pronunciation Scoring with Goodness of Pronunciation and Dynamic Time Warping." IEEE Access

- Priyanshi student of CSE department, 4th Sem, received a medal in NCC PM rally, 2023.

- Drishti Pandita student of CSE department 4th Sem was a National Finalist in Shri Ram Conquonomics at the Shri Ram Economics Summit Held on 7th -8th April, 2023 organized by The Economics Society, SRCC.

- Karan Kumar student of CSE department, 4th Sem secured 1st position in the event "Web Wizard" held on 19-20 April, Avensis 2023, the annual technical fest of MSIT.

- Himanshu student of CSE department, 4th Sem secured 3rd position in the event "Web Wizard" held on 19-20 April, Avensis 2023, the annual technical fest of MSIT.

- Anurag Shankar Pandey student of CSE department, 4th Sem secured 2nd position in the event "4 x 200m Relay" held on 17-18 April, 2023, sports day of MSIT.

  A. Aggarwal, Nikhil Bhutani, Ritvik Kapoor, Geetika Dhand and Kavita Sheoran
  "Real-time hand gesture recognition using multiple deep learning architectures", Signal, Image and Video Processing, Jul 2023 [Impact factor 2.3]

IEEE CS ANNUAL REPORT 2K23

Trivia And Family Feud

IEEE CS Chapter in collaboration with IEEE PES organized a Trivia on technical "Family Feud" on the 27th of March.

The Trivia, conducted in an interactive manner, was hosted by CS Chairperson Shaan Goswami and PES Chairperson Aryan Anand. The students were randomly selected from amongst the audience and they had to answer questions who raised their hands were selected randomly to answer the questions continuously while hopping on a single leg. All in all, it was a fun-interactive & engaging questionnaire event.

Generational Google Scholarship Webinar

IEEE CS hosted a webinar featuring Sunaina Rastogi,
a third-year college student, who shared her story of
winning the Generational Google Scholarship in 2022, on the
22nd of April. The session aimed to
guide and inspire other girls for the scholarship.

It involved providing insights into cracking the Generational
Google Scholarship for Girls. Sunaina Rastogi shared her
journey of winning the scholarship, explaining its perks,
eligibility criteria, and competition level, covering various
aspects including preparing for the scholarship, dos and
don'ts, tips for essays, efficient resume building, and
preparation for the coding test.

Zuno - Dream Internship Challenge

IEEE Computer Society (CS) MSIT, in collaboration with Zuno, organized the 'Dream Internship Challenge' on June 10, 2023.

The 'Dream Internship Challenge' was meticulously planned and hosted on the user-friendly Zuno platform.

The event comprised a series of carefully crafted activities, mentorship opportunities, and skill-building sessions, all aimed at equipping participants with the tools and knowledge needed for a successful internship journey.

Through interactive sessions and expert guidance, attendees gained valuable insights into the internship application process and career development.

Beyond Limits - IEEE Computer Society Event

"Beyond Limits," was an event organized by the IEEE Computer Society at MSIT, on the 24th of June featured industry expert Garima Sehgal—an IIT professional with 15 years of experience in Quantitative Aptitude and Mainframe Technologies.

She provided insights into coding and testing methodologies. Her discussions encompassed topics such as data privacy, security, and compliance. The event also featured a comprehensive overview of the Software Development Lifecycle (SDLC). Garima Sehgal discussed various SDLC models, including Waterfall, Agile, and DevOps.

The event served as a catalyst for students' professional growth, equipping them with the necessary knowledge and skills to excel in the ever-evolving field of software development. It fostered a deep understanding of business analysis, coding, testing, SDLC practices, and emerging industry trends, empowering students to become future-ready professionals.
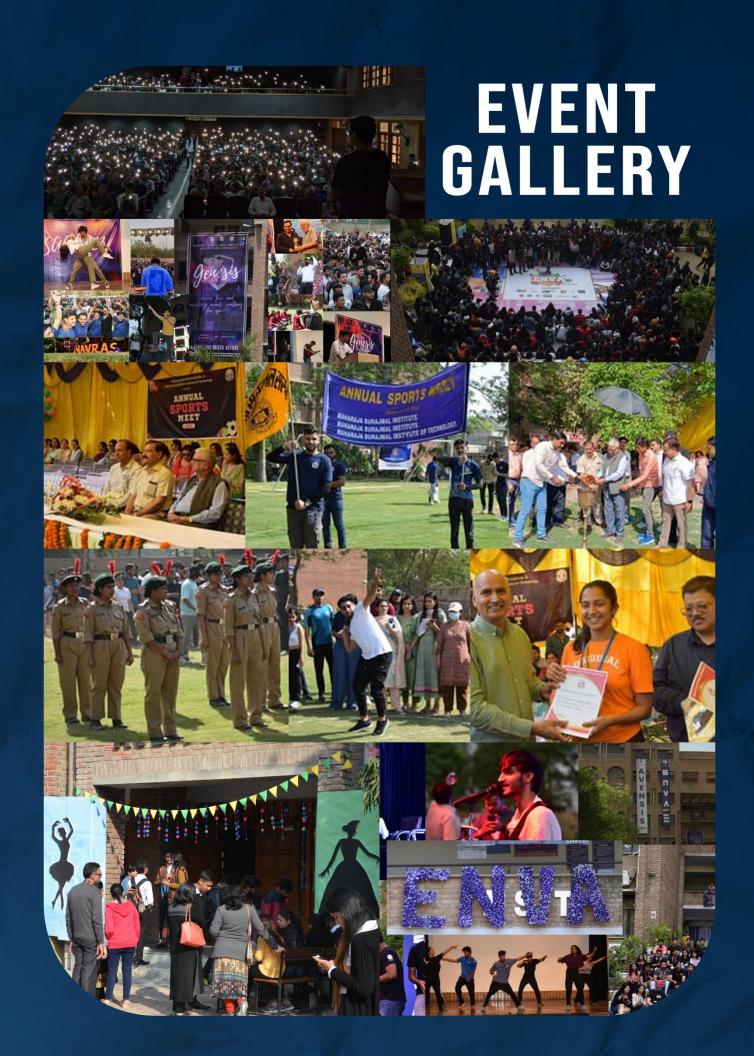
TEDx MSIT

CSE Department MSIT Organized TEDxMSIT on 28th April 2023 at the Auditorium under the guidance of faculty coordinators Dr. Kavita Sheoran & Dr. Nishtha Jatana. Ayush Garg of CSE department worked as the student coordinator. The enthusiasm in the room was palpable as 11 outstanding speakers from various backgrounds joined together to present their individual takes on a challenging Theme: Show Up and Be You. Each speaker shared their unique experiences and views during the day of thought-provoking conversation and moving storytelling. It served as a reminder that everyone has something to contribute and that by uniting and sharing our experiences, we can make the world more accepting and caring. Whether it was a personal tale of overcoming adversity, an academic viewpoint on the subject, or a creative interpretation through art or music, each speaker brought something unique to the event. The presenters' passion and vigor grabbed the audience, and they left them feeling motivated and equipped to bring about constructive change in the world. The effort and commitment of the volunteers and organizers had a significant role in the event's overall success. It was a day that will live in memory for years to come as a symbol of the strength of community, diversity, and inclusion.

ANNUAL DAY 2K23

EVENT GALLERY

GLIMPSE INTO OUR CAMPUS

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