LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)
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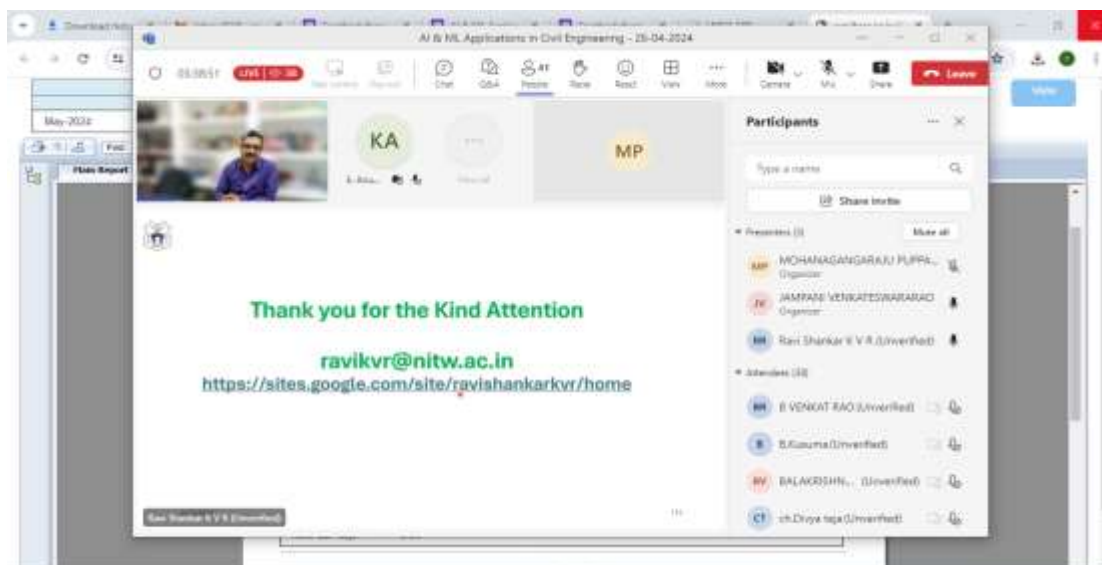Phone: 08659-222933, Fax: 08659-222931
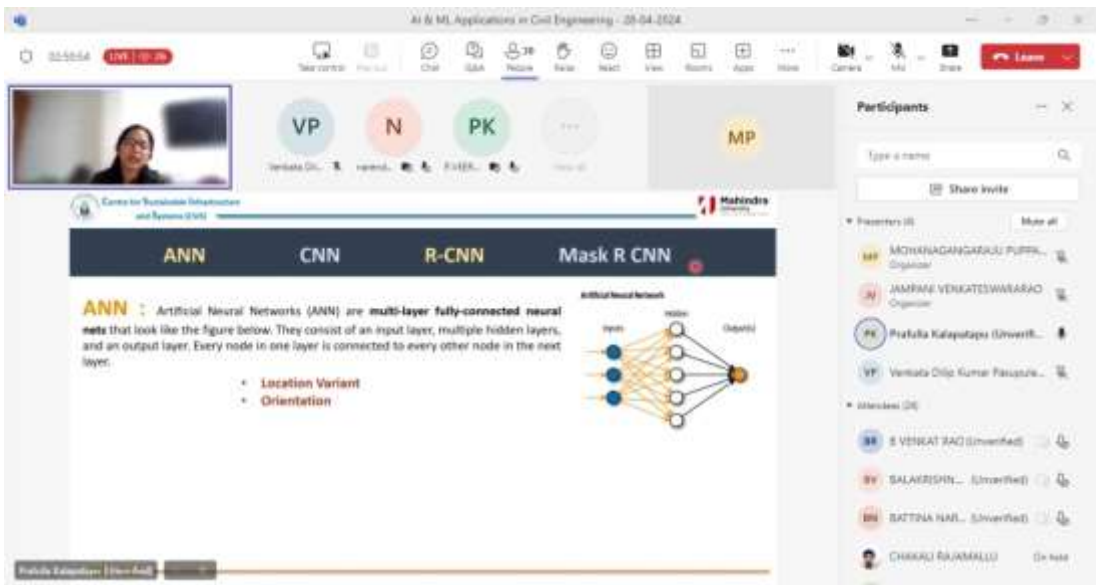
DEPARTMENT OF CIVIL ENGINEERING

REPORT ON ONLINE A FIVE DAY FDP ON

"AL & ML Applications in Civil Engineering"

Event Type	Online Faculty Development Program
Date / Duration	26.06.2024 to 01.07.2024
Name of the Coordinator	Sri K. Harish Kumar, Sr. Assistant Professor Sri P. Mohana Gangaraju, Assistant Professor
Target Audience	Faculty members of Civil, Research scholars and M.Tech students
Total no of Participants	51 (Internal-10, External-41)
Objective of the event	The main objectives of this FDP are to • An exposure to the tools of AI & ML with reference to applications in Civil Engineering. • An exposure to the Intelligent and energy efficient buildings.
Outcome of event	• Faculty will be familiarized with the Applications of AI/ ML in civil engineering, which will in turn disseminate to the students by introducing suitable courses and practical. • Technical skill sets of faculties will be enhanced in these interdisciplinary areas, which will allow them for their increased and effective contribution in research, consultancy and product development.
Feedback / Suggestions	Received positive feedback from participants regarding event conducted and about organizing the event

Photographs

Report

The Department of Civil Engineering, Lakireddy Bali Reddy College of Engineering (A), Mylavaram, organized a Five day online Faculty Development Program during 26th June to 01st July, 2024 on "**AL & ML Applications in Civil Engineering**" through Microsoft Teams. The FDP was inaugurated on 26th June, 2024 by the Principal Dr Appa Rao garu and Head & Professor Dr. J. Venkateswara Rao garu.

The participants gained knowledge about Artificial Intelligence (AI), Machine learning (ML) and their applications, which would aid in the process of problem-solving in Civil Engineering. Total Eleven technical sessions were held from a wide variety of topics and each session was led by a team of expert's viz.:

Schedule & Resource person details of the program
Day - 1 (26.06.2024)
Session - 1
Topic: What makes Buildings Green and Intelligent?
Resource person: Ar. Jit Kumar Gupta, Former Chairman IGBC Chapter. Currently a member of State Transport Committee, Chandigarh UT& Advisor, Review of Master Plan Jammu 2030.
Session - 2
Topic: Machine Learning Applications in Traffic Engineering
Resource person: Ravi Shankar K.V.R., Ph.D. (IIT Bombay), Department of Civil Engineering, National Institute of Technology Warangal – INDIA

Day - 2 (27.06.2024)
Session - 3
Topic: Enhancing Traffic Safety at Intersections: Driver Behavior Analysis at Intersections using ML Techniques
Resource person: Digvijay S. Pawar, Associate Professor; Indian Institute of Technology Hyderabad
Session - 4
Topic: Artificial Intelligence & Machine Learning Applications Used in Civil Engineering
Resource person: Gundala Nagaraju; IT Business & Technology Leader, Hyderabad - India

Day - 3 (28.06.2024)
Session -5
Topic: Applications of Artificial Intelligence in Civil Engineering
Resource person: Dr. Venkata Dilip Kumar Pasupuleti, Associate Professor and Head, Center for Sustainable Infrastructure and Systems (CSIS), Mahindra University, Hyderabad.
Session - 6
Topic: Vision-based Techniques in Civil Engineering Applications
Resource person: Prafulla Kalapatapu, Program Coordinator for Artificial Intelligence, Dept of CSE, Mahindra University.

Day - 4 (29.06.2024)
Session -7
Topic: Using computer vision Applications in Civil Engineering
Resource person: Sai Gayatri Prasad, Senior Data Scientist at Mavenir Systems, Masters in Applied Mathematics and Statistics, Stony Brook University, New York, US.

Session - 8
Topic: Role of AI and Digitisation in Construction - Cement Industry
Resource person: Nandika Srinivasa Rao, Regional Head Technical Services-Telangana. Ultratech Cement Limited

Day - 5 (01.07.2024)
Session -9
Topic: AI and ML applications in Stream Water Quality Modeling
Resource person: Dr. Jagadeesh Anmala, Professor, Civil Engineering Department Co-coordinator, Centre of Excellence in Water Resources Management (CEWRM) BITS, Pilani, Hyderabad.
Session – 10
Topic: Applications of AI for Design and Construction in Civil Engineering
Resource person: Himmi Gupta, Assistant Professor, Civil Engineering Department, National Institute of Technical Teachers Training and Research (Ministry of Education), Chandigarh (India)
Session – 11
Topic: ANN and Machine learning applications in civil engineering
Resource person: V Uma mahesh, Professor, Water & Environment Division, Department of Civil Engineering, NITW.

Valedictory Ceremony:

Overall Fifty One participants benefited from this FDP. Following the completion of all sessions, a valedictory ceremony took place on Day 5. Prof. V Uma mahesh garu and Dr. J. Venkateswara Rao garu were present at the ceremony. The event provided ample opportunities for participants to express their gratitude and share their insights gained during the FDP. After that Sri K. Harish Kumar, Sr. Asst. Professor, shared a vote of thanks to end the program. Certificates of participation were distributed to acknowledge the active involvement of the faculty members.