

SCHOOL OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING – DATA SCIENCE

DATE: 04-08-2025

A report on “Sense of Urgency to develop the preparation & implementation of operation plans in irrigation projects using the tools of AIML, Spatial Technologies & Optimization methods to ever increase the water use efficiency: Case Studies”



NALLA NARASIMHA REDDY EDUCATION SOCIETY'S
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Industry Institute Interaction Cell (IIC) & Institution's Innovation Council (IIC)
in association with
DEPARTMENT OF CIVIL ENGINEERING
Organize a Guest Lecture on

Sense of Urgency to develop the preparation & implementation of operation plans in irrigation projects using the tools of AIML, Spatial Technologies & optimization methods to ever increase the water use efficiency: Case Studies

Resource Person



Dr. Mohammed Hussain
CEO, Chief Empowering Officer, Centre of Capacity Building for Seventeen Sustainable Development Goals of United Nations (CCB-SSDG) & Former Professor of Civil Engg., GRIET & Former Faculty Member WALAMTARI, Hyderabad

Date: 4th August 2025
Time: 11:00 AM
Venue: Conference Hall, Ground Floor

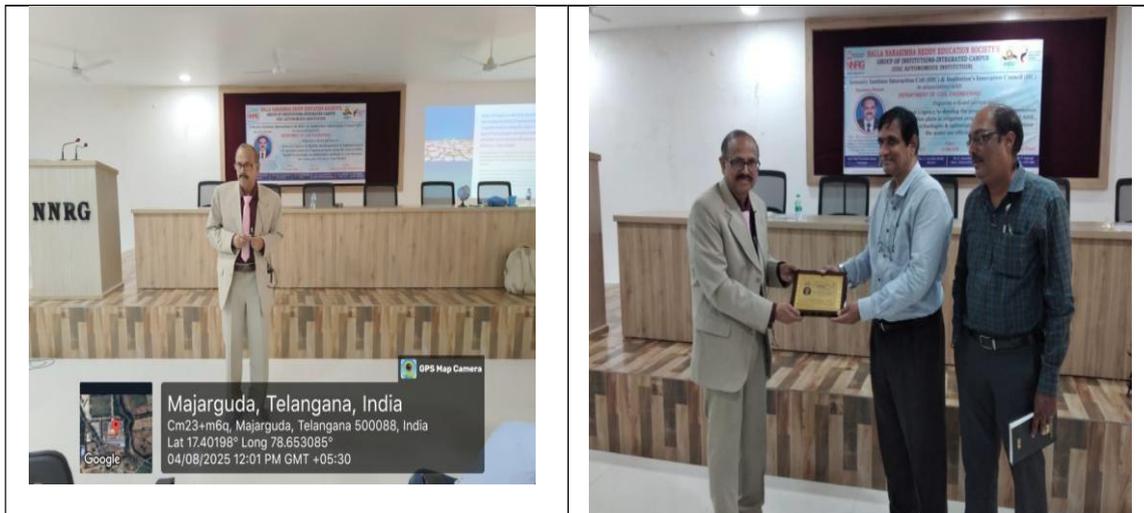
Shri Nalla Narasimha Reddy Chairman	Shri Nalla Prashanth Reddy Vice-Chairman	Dr. C.V. Krishna Reddy Director	Dr. G. Janardhana Raju Dean - School of Engineering	Dr. G. Subba Rao HoD - Civil	Dr. V. Indrani HoD - DS
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The Department of Civil Engineering organized a Guest Lecture on **A report on “Sense of Urgency to develop the preparation & implementation of operation plans in irrigation projects using the tools of AIML, Spatial Technologies & Optimization methods to ever increase the water use efficiency: Case Studies”** by inviting Dr Mohammed Husain, in collaboration with the IIC. The expert lecture is designed to help the Civil and CSE (DS) students to understand how the tools of AIML, Spatial Technologies & Optimization methods. Throughout the session, the Resource Person engaged the student participants with theoretical concepts, real-world examples, and case studies to foster a deeper understanding.

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The session began at 11 AM with an introduction of the Resource Person Dr Mohd Hussein and his experiences in various fields. A total of 115 students (Civil 59 & CSE Ds55) and 11 faculty (Civil08&CSE-DS03) attended the Guest Lecture. Dr Mohd Hussein, he spoke about Irrigation and its progress using IOT. He also emphasized on usage of cloud computing, drone technology with respect to water resources and irrigation. He said that Drone technologies can also be used as a part of Spatial Technologies in coordination with Machine Learning. Artificial Intelligence can be used as a supporting tool for Irrigation systems to optimize moisture and enhance crop yield.



The resource person spoke about a project which was implemented in Turkey in which native plant species were grown by using Artificial Intelligence Technologies. He also emphasized on Flood monitoring, Drought monitoring, water use efficiency and Crop Production which can be implemented by using QGIS and Google Earth Engine



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The session concluded with a recap of the key concepts like tools of AIML, Spatial Technologies, Optimization methods in irrigation projects. The session provided a comprehensive understanding of how these frameworks work together to foster innovation and problem-solving. The session ended by vote of thanks by Ms Harika III year CSE-DS student



Dr G SUBBARAO
HOD-CE



Dr G JANARDHANARAJU
Dean – SoE & Convener -
IIC



HOD-CSE (DS)