

## TiHAN, IIT HYDERABAD Organizing Secretaries

Dr. P. Shunmuga Perumal

VIT, Vellore

Dr. Murugan V

VIT Vellore

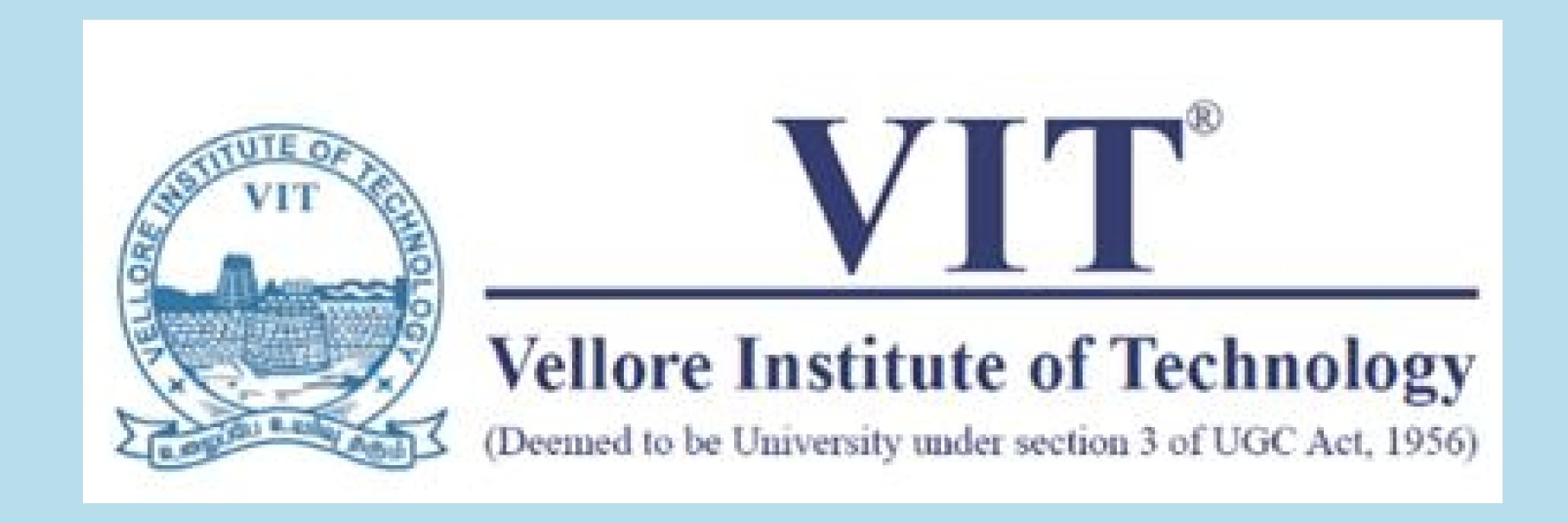
Dr. Ezhil Arasi V

VIT Vellore

## Student Organizer

Mr. Maheshkumar S VIT, Vellore





# 2 DAY SKILL DEVELOPMENT WORKSHOP ON "EXPLORING AGRICULTURE'S FUTURE WITH AI, IoT, & AUTONOMOUS ROBOTS"

## **ORGANIZED BY**

SCHOOL OF COMPUTER SCIENCE ENGINEERING AND INFORMATION SYSTEMS VELLORE INSTITUTE OF TECHNOLOGY, VELLORE, INDIA

## About the Skill Development Workshop:

The fusion of AI, IoT, and autonomous robots promises to revolutionize agriculture, enhancing precision, efficiency, and sustainability. Through real-time data analysis and autonomous decision-making, Al-driven systems optimize crop management, resource allocation, and pest control. Integrating IoT sensors with autonomous robots enables proactive monitoring, facilitating timely interventions and maximizing yields while minimizing environmental impact. In sugarcane crop management, Al, IoT, and autonomous robots streamline processes such as irrigation scheduling, fertilizer application, and weed detection, ensuring optimal growth conditions. Through advanced disease and pest control systems, Al analyzes environmental data and pest behavior to predict and prevent outbreaks, minimizing crop damage. Yield improvement is facilitated by Aldriven algorithms that analyze crop health indicators, guiding farmers in optimizing harvest timing and techniques. Furthermore, these technologies offer decision support tools for farmers and experts, providing insights into market trends, weather forecasts, and best practices for sustainable sugarcane cultivation.

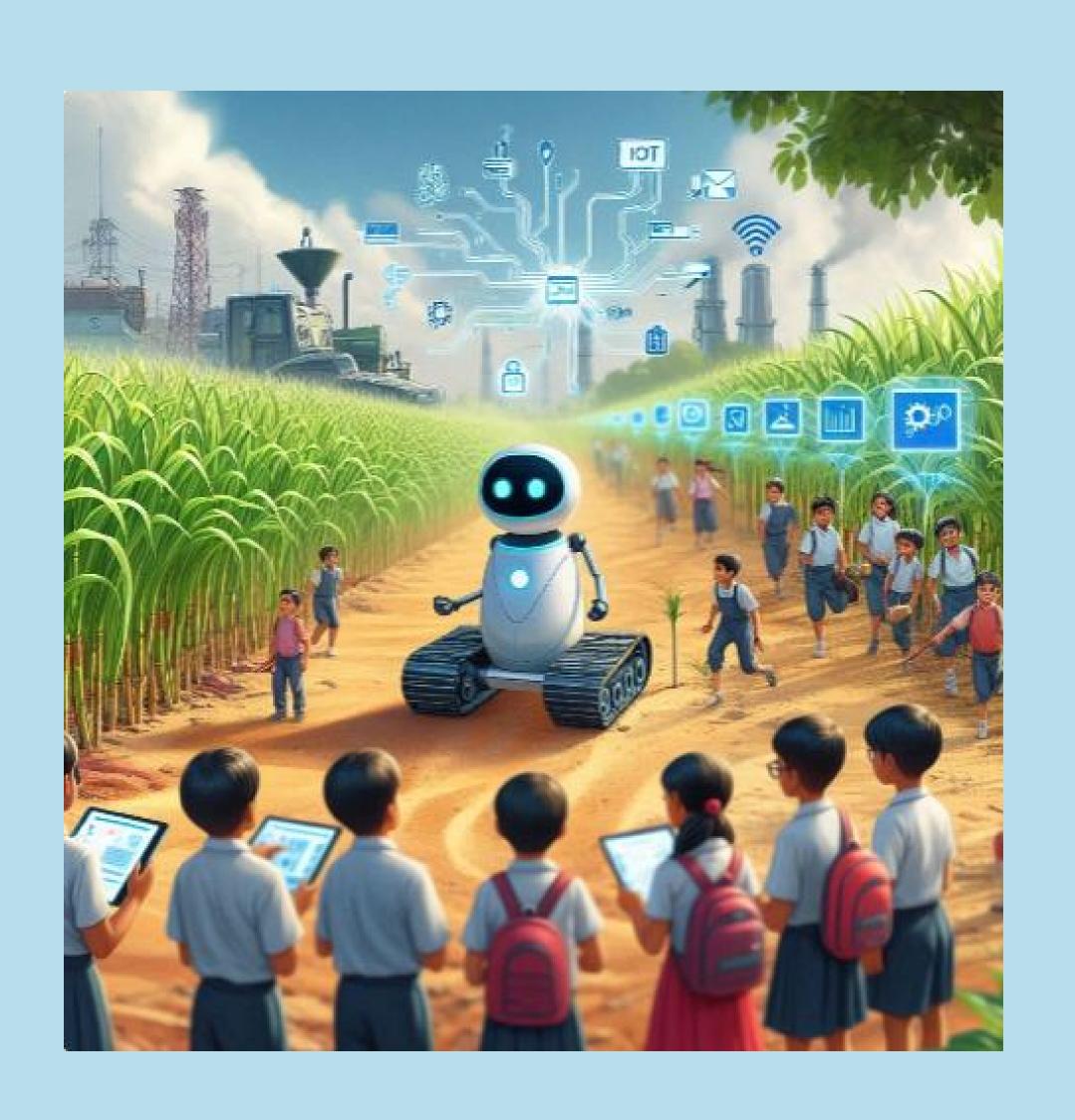
## **TOPICS COVERED:**

- 1 Introduction to Computer Fundamentals
- 2 Introduction to Artificial Intelligence (AI)
- 3 Introduction to Internet of Things (IoT)
- 4 Introduction to Smart Agriculture
- 5 Applications of Technologies in Sugarcane Farming



## INSTRUCTION TO THE PARTICIPANTS:

- ->Who can participate?
  - ---> School students from X, XI, XII standards
- -> Registration fee: Nil
- -> Participants must bring their school ID cards
- -> Students must bring their parental/guardian consent letter to attend the workshop
- -> Lunch and refreshments will be provided to all participants
- -> No accommodation will be provided



### Dates:

06.06.2024 (Thursday) 07.06.2024 (Friday)

Time: 9.00 AM to 5.00 PM Venue: VIT Vellore, India.

## **Resource Persons:**

Dr. P. Shunmuga Perumal VIT Vellore

Dr. Murugan V VIT Vellore

Dr. Ezhil Arasi V VIT Vellore

## For any queries, contact:

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