

## Organizing Committee

Convener : **Dr. D.R. Kathiriya,**  
**Principal & Dean,**  
**CAIT, AAU, Anand**

Organizing Secretary : **Dr. R. S. Parmar**

Joint Organizing Secretary : **Dr. X.U. Shukla**  
**Mr. U.S. Rathod**

## About the AAU

Anand Agricultural University (AAU) was established in 2004 at Anand with the support of the Government of Gujarat, Act No. (Guj 5 of 2004). Carved out of the erstwhile Gujarat Agricultural University (GAU), the dream institution of Sardar Vallabhbhai Patel and Dr. K. M. Munshi, the AAU was set up to provide support to the farming community in three facets namely education, research, and extension activities in Agriculture, Horticulture, Agricultural Engineering & Technology, Food Technology, Agricultural Information Technology, Home Science, Basic Science & Humanity and Agri. Business Management. AAU's overall mission is to promote sustainable growth and economic independence in rural society. AAU aims to do this through education, research, and extension education. Thus, AAU works towards the empowerment of the farmers.

## Venue

Seminar Hall, College of AIT, AAU, Anand

## Further Correspondence to be addressed to:

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## About the College

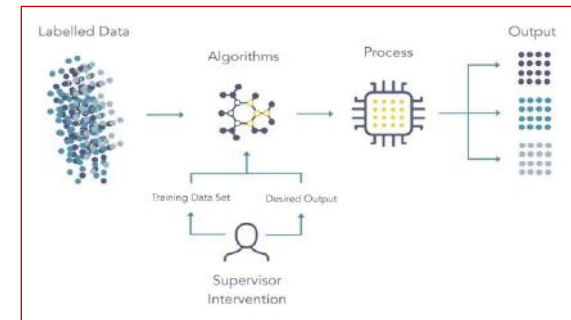
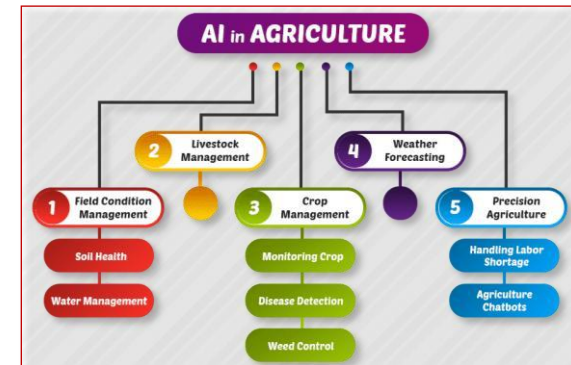
**College of Agricultural Information Technology** was established in the year 2009 under the aegis of Anand Agricultural University. The CAIT offers 4 years **B.Tech. (AIT)** and 2 years **M.Tech. (AIT)** and 1 year **Post Graduate Diploma in Data Science** programs. The college aims to cater to the upcoming demands of the Agrarian Economy by the generation of a young workforce skilled with knowhow of future-ready Information and Communication Technology and imparting the same in the Agricultural sector. The College building is surrounded by a lush green natural environment with enough resources such as well-ventilated lecture halls with an audio-visual facility, computer labs, scientific types of equipment, Wi-Fi Internet access, library, sports, project and placement cell, etc. The curriculum of B.Tech. (AIT) is a blend of Agricultural Science and ICT to harvest the potential of both sectors and we are looking forward to introducing innovative practices of automation and information using ICT in the sparsely charted agriculture and allied sectors to bridge the gap between the skills of the technocrat and the farmer.

## One Day Workshop

on

## Artificial Intelligence (AI) and Its Applications Using MATLAB

October 10, 2023



**College of Agricultural Information Technology**  
**Anand Agricultural University**  
**ANAND – 388 110 ● GUJARAT ● BHARAT**

## About the Training

Artificial Intelligence (AI) in this era of globalization has accentuated new modes of knowledge transformation and communication patterns. AI has opened up uncommon opportunities for developing countries in terms of providing low-cost access to information. This is the fastest-growing tool of communication. AI is transforming institutions, and learning processes and creating innervates systems. Nowadays AI has become a powerful tool to carry out empirical investigation, and collection of qualitative and quantitative data for further analysis. Eliciting reliable data facilitates the planning process to be more systematic. Whereas, monitoring and evaluation exercises throw better insights into the functioning of the schemes/programs at every stage. In this context, applications of AI, IoT, Machine Learning, and Big Data Learning in Agriculture will aid the end-user to infer the results in a simple and orderly manner to make quick decisions. The list of the Content to be covered under the training program is as follows

- Introduction to Artificial Intelligence, Machine Learning, and Big Data
- Artificial Intelligence and Machine Learning Techniques
- Selecting Artificial Intelligence and Machine Learning Models
- Artificial Intelligence and Machine Learning Tool (MATLAB)

## Objectives

- To understand AI and how to measure and review errors in your algorithms
- To learn how to use big data for agricultural growth
- To understand how to work with data and take advantage of the power of AI
- To describe the application of the AI tool of MATLAB in data analysis

## Eligibility

Interested candidates preferably; Masters – Doctor Students and Faculties are requested to apply through the online registration process.

## Registration

- No fee is to be paid for registration
- The selected participants will be informed through email only.
- Certificates will be provided to the registered participants.
- Accommodation will be provided as per availability

## Number of Participants

A total of 50-60 participants would be selected from the nominations received

## Methodology

Lecture, discussion, and demonstration

## Training Outcome

The one-day workshop on Artificial Intelligence (AI) and Its Applications Using MATLAB will be helpful in capacity building of the Faculty, Scientists, Research Associates, and Research Scholars of the university and other personnel to design the data analysis plan for surveys and evaluation studies.

## Contents

- Introduction: AI, IoT, Machine Learning, and Big Data Learning in Agriculture
- Machine Learning vs. Data Science vs. AI
- How leading companies are harnessing the power of Data Science with MATLAB?
- Different phases of a typical Analytics/Data Science project and the role of MATLAB
- Regression vs. Classification
- Features, Labels, and Class
- Data Manipulation and Pre-processing –Cleansing
- Data Analysis – Visualization using MATLAB
- Linear Regression
- Logistic Regression
- Random Forest and Decision Tree Algorithms
- Neural Networks

## Registration link

<https://forms.gle/JcRhWhrW9niyhTAT9>

