

## About MSRCASC

Dr. M S Ramaiah, a visionary and philanthropist established "Gokula Education Foundation (GEF)", in the year 1962, to deliver education and healthcare for the betterment of mankind. Under the tutelage of GEF, Ramaiah college of Arts, Science and Commerce (RCASC) was established in 1994. RCASC is Re-accredited with "A" Grade by NAAC, permanently affiliated to Bangalore University (BU) and Bengaluru Central University and approved by AICTE.

## About the Guest Lecture

With the increasing use of artificial intelligence and machine learning, Electronic Development Applications are being developed to enable smarter decision-making and to automate many of the processes involved in the development of electronic solutions.. AI and ML is enabling the development of connected devices and systems that can communicate with each other and with the internet, and Electronic Development Applications are being developed to support this connectivity..It can make the tasks amatter by optimization of parameters

### Organized by:

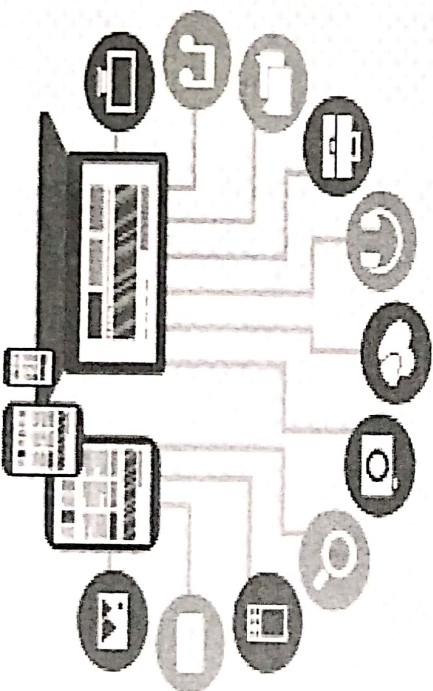
Department of Electronics under DBT star College  
Scheme in association with IQAC Department  
M S Ramaiah college of Arts, Science and Commerce,  
Bangalore - 560054



## Guest Lecture

On

“Grow Smarter, Not Harder: Optimizing Farms  
with AI and ML”



on 04/09/2024

All BSc EMCS I, II, III

year students

Time: 11:00 am

Venue: Abdul Kalam

Auditorium

### Faculty in charge:

Mrs. Rithu R  
Assistant professor  
Department of Electronics  
MSRCASC





**RAMAIAH**

College of Arts, Science  
& Commerce - Autonomous

MSRCASC/ELE\_GL/2024-25/01

Dated: 28/08/24

## CIRCULAR

The Department of Electronics is organizing a **Guest Lecture** under **DBT Star College Scheme** in association with **IQAC, MSRCASC** on **“Grow Smarter, Not Harder: Optimizing Farms with AI and ML”** on 04/09/2024 B.Sc.EMCs first, second and third year students in Abdul Kalam Auditorium from 11 am onwards. The Resource person for the Guest Lecture is Dr Rajeshwari S B, Assistant Professor, Department of ISE, Ramaiah Institute of Technology, Bangalore. Attendance is mandatory for all the students.

*Signature*  
HOD 21/9/24  
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**GUEST LECTURE ON “GROW**

**SMARTER, NOT HARDER: OPTIMIZING FARMS WITH AI AND ML”**

Resource Person:-

Dr Rajeshwari S B,  
Assistant Professor,  
Department of ISE,  
Ramaiah Institute of  
Technology,  
Bangalore.

Date: 04/09/2024

Time: 11:00 am to 1:00 pm

Venue: Dr. APJ Abdul Kalam Auditorium, MSRCASC

The Department of Electronics under DBT Star College Scheme in association with IQAC had organized a Guest Lecture on “Grow Smarter, not harder: optimizing farms with AI and ML” on 4<sup>th</sup> September 2024 at 11.00 am at Dr. APJ Abdul Kalam Auditorium, MSRCASC. The Resource Person was Dr Rajeshwari S B, Assistant Professor, Department of ISE, Ramaiah Institute of Technology, Bengaluru. It was conducted for all semester BSc Electronics Students.

The Objectives of the Guest Lecture was:-

1. To introduce the concept of Artificial Intelligence (AI) and Machine Learning (ML) applications in agriculture.
2. To educate the audience on the benefits and potential of precision farming using AI/ML.
3. To showcase successful case studies and best practices in AI/ML adoption in agriculture.
4. To understand the role of AI/ML in enhancing crop yields, reducing waste, and promoting sustainable agricultural practices.
5. To learn about automated farming systems, including drones, robotics, and autonomous tractors.
6. To explore the potential of computer vision, natural language processing, and IoT in agriculture.

The guest lecture, "Grow Smarter, Not Harder: Optimizing Farms with AI and ML," highlighted the transformative potential of Artificial Intelligence (AI) and Machine Learning (ML) in agriculture.

Dr Rajeshwari shared expertise on leveraging technology to enhance farm productivity, efficiency, and sustainability.

The guest lecture highlighted the transformative potential of Artificial Intelligence (AI) and Machine Learning (ML) in agriculture, showcasing how precision farming can increase crop yields by up to 20% and reduce water and fertilizer usage by 30-40%. Automated farming systems, including drones and robotics, can enhance labor efficiency and reduce costs.

Data analytics informs climate-resilient agricultural practices, and collaboration between farmers, researchers, and industry experts is crucial for successful AI/ML adoption. The guest lecture, "Grow Smarter, Not Harder: Optimizing Farms with AI and ML," explored the potential of Artificial Intelligence (AI) and Machine Learning (ML) to transform agriculture.

The speaker discussed how AI/ML can enhance crop yields, reduce waste, and promote sustainable practices through precision farming, automated systems, and data-driven decision-making. Real-world examples illustrated the benefits of AI-powered drones, robotics, and soil analysis, while highlighting challenges and limitations. The lecture also emphasized the importance of interdisciplinary collaboration and policy support for widespread AI/ML adoption. By leveraging AI and ML, farmers can optimize resource allocation, predict yields, and adapt to climate change, ultimately creating a more efficient, resilient, and sustainable food system.

The lecture demonstrated the vast potential of AI and ML in revolutionizing agriculture. By embracing technology, farmers can optimize resources, reduce waste, and promote sustainable practices.

Dr Rajeshwari S B inspired the audience to explore innovative solutions for a more efficient and resilient food system.

**Outcome:-**

1. It was a knowledgeable guest lecture for our students as they had lot of take aways.
2. It gave an overview of AI/ML applications in agriculture, precision farming: yield prediction, crop monitoring, and soil analysis
3. Awareness of Automated farming systems: drones, robotics, and autonomous tractors, data-driven decision-making for optimized resource allocation
4. How to focus on Future directions: integrating computer vision, natural language processing, and IoT.

**Faculty in charge:**  
(Mrs. Rithu R)




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**DBT Star College Scheme  
Coordinator**



**Principal**  
24/9/2024

M.S. Principal Science &  
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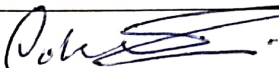
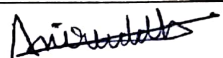

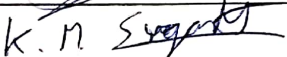


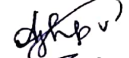
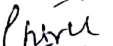

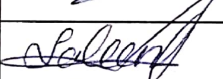
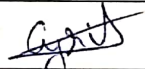
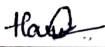

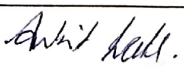

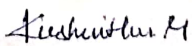
Guest Lecturer

"Grow Smarter, Not Harder: Optimizing Farms with AI and ML"

Participants

Date: 4<sup>th</sup> September 2024

COURSE: BSc EMCs 1<sup>st</sup> Semester

Sl. NO.	UUCMS Reg. NO.	NAME	Signature
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2	U18MB24S0059	ANIRUDDH B	
3	U18MB24S0060	MEHAGH K	
4	U18MB24S0061	K M SUGANTH	
5	U18MB24S0062	S TANZIYA KHANUM	
6	U18MB24S0081	MANOGNA S RAO	
7	U18MB24S0082	ASWATHI P V	
8	U18MB24S0083	CHIRANTHANA S	
9	U18MB24S0088	MANJUNATH U	
10	U18MB24S0089	SALEEM M	
11	U18MB24S0090	CYRIL WARREN NICHOLAS	
12	U18MB24S0091	HARINI H V	
13	U18MB24S0092	EMANUEL SHAW	
14	U18MB24S0185	HEMANTH GOWDA S	← AB →
15	U18MB24S0186	ANKIT PATEL	
16	U18MB24S0187	SPANDHANA VENKATESH	← AB →
17	U18MB24S0188	N MOHAMMED AMEENUDDIN	
18	U18MB24S0189	KUSHMITHA M	
19	U18MB24S0190	PRITHVI M	← AB →

**COURSE: BSc EMCs 3<sup>rd</sup> Semester**

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3	U18EV23S0103	NAVEEN.B	Naveen B.
4	U18EV23S0154	AYESHA PATEL	Ayesha
5	U18EV23S0076	GUGUDU VANDANA	← AB →
6	U18EV23S0384	SANIYA SOOSAN BINU	
7	U18EV23S0161	DIWAKAR REDDY.P	
8	U18EV23S0074	VISMAY RAO BN	← AB →
9	U18EV23S0164	T S ANJAN KUMAR	Anjan kumar
10	U18EV23S0070	DHRUV JOSHI	← AB →
11	U18EV23S0178	GOWTHAM	Gowtham
12	U18EV23S0111	AYUSH	Ayush. m
13	U18EV23S0104	M SIREESHA	← AB →
14	U18EV23S0072	ABHISHEK SUTHAR	
15	U18EV23S0095	DEEPAK RAJ M	
16	U18EV23S0075	ARYAN KAUSHAL	Aryan Kaushal
17	U18EV23S0190	VISHALROY NAMCHOOM	← AB →
18	U18EV23S0181	SMIRTI KUMARI	Smirti Kumari
19	U18EV23S0107	VARUN N G	Varun n g
20	U18EV23S0179	NISHMETHA	Nishmetha
21	U18EV23S0167	CHAYA RANI A V	
22	U18EV23S0176	ANANYA PANDEY	Ananya
23	U18EV23S0093	HEMILA M	← AB →

24	U18EV22S0039	ABHINANDAN THAKUR	← AB →
25	U18EV22S004	JEEVITHA R	← AB →
26	U18EV22S0040	NIKHIL MAHANTESH MELVANKI	<i>[Signature]</i>
27	U18EV22S0042	SAMANWITHA SHARMA B G	<i>[Signature]</i>
28	U18EV22S0043	AMRUTHANYA K P	← AB →
29	U18EV22S0047	G LAKSHMI PRIYA	<i>[Signature]</i>
30	U18EV22S0049	DEBASHIS PAUL	← AB →
31	U18EV22S0233	PRANAVI MANOHARAN	<i>[Signature]</i>
32	U18EV22S0241	DIVYA KARAN	← AB →
33	U18EV22S0243	AFAN KASIM K	← AB →
34	U18EV22S0302	BURHANUDDIN MARSHAL	← AB →
35	U18EV22S0342	AKSHARA S	<i>[Signature]</i>
36	U18EV22S0344	ARUNIMA VIJESH V	<i>[Signature]</i>

37 U18EV22S0375

Kankana Manna

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38 U18EV22S0368

Sai Keethana

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39 U18EM22S0085

Rahul D Rao

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40 U18EV23S0190

Vishalraj Nanchaou

*[Signature]*

Faculty in charge:  
(Mrs Rithu R) *[Signature]*

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DBT Star College Scheme  
Coordinator

*[Signature]*  
Principal

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