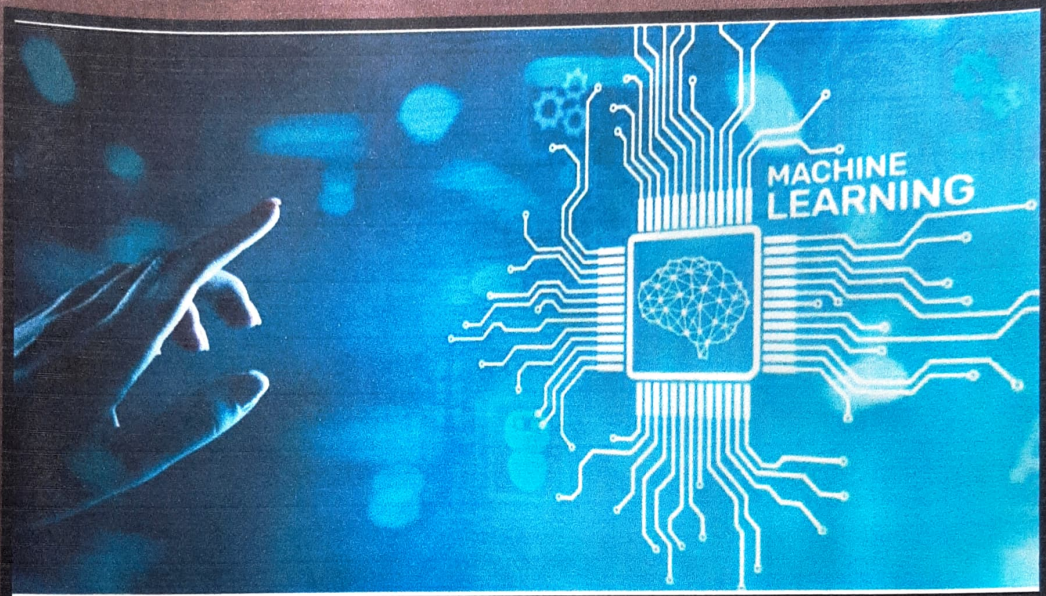


Hands on Training Programme

(Under DBT star College Scheme)

**“Machine learning and Deep learning
onramp”**



**From 16/10/2023 to 27/10/2023 for all BSc[ECs]
students.**

Organized by:

Department of Electronics

**M S Ramaiah college of Arts, Science and Commerce,
Bangalore - 560054**



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College of Arts, Science &
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MSRCASC/ELE_HT/2023-24/03

Date: 11/10/2023

CIRCULAR

The Department of Electronics is conducting hands on training program on **“Machine learning and Deep learning onramp”** for BSc ECs students from 16/10/2023 to 27/10/2023 at 301 computer lab under the DBT star College scheme. The interested candidates can register your name in the Electronics Department.


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HEAD OF THE DEPARTMENT
Department of Electronics
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M.S.R. Nagar, Bangalore-560 054.


DBT Star College
Coordinator
CO-ORDINATOR
DBT-STAR COLLEGE SCHEME
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Principal
Principal,
M.S. Ramaiah College of Arts, Science & Commerce
MSRIT Post, MSR Nagar
Bangalore - 560 054



Report on

Hands on training programme on “Machine learning and Deep learning onramp”

Date: 16/10/2023 to 27/10/2023

COURSE: BSc ECs

Resource person: Mrs ASHARANI R

Venue: 301 COMPUTER LAB

Objectives:

- Make students to learn the basics of machine learning and deep learning
- Make students to learn familiarise with applications of machine learning and deep learning
- Students are capable to understand the working and structure of deep learning and machine learning models for various applications

Department of electronics conducted a hands on training program on “Machine learning and Deep learning onramp” for all the BSc –ECs students as a part of DBT star college scheme.in this training program students are exposed to many of the machine and deep learning tools.

Mrs. Asharani R explains the basic concepts of machine learning and Deep learning. machine learning technique that learns the features and task directly from data. Inputs are run through neural networks. The basic elements of the Neural networks are the Nuerons.the Nueral networks have the many layers viz input layers, hidden and output layers. learning process of the Nueral Networks involves two methods Forward and Backword propagation.

The learning algorithm of Neural networks involves

- Initialize parameters with random values
- Feed input data to network
- Compare the predicted value with the expected value and calculate the loss back trough the network
- Update parameters based on the loss function



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- Iterate the parameters based on the loss function


She also explained some of the terminologies used in the neural networks like active function, step function, linear function, sigmoid function, Tanh function, ReLU function. Leaky ReLU function. The overview of classification of work flow involves the import data, organize and preprocess data, explore data and engineer the data based on the requirements, build model then evaluate model.


Importing and preprocessing of data involves that organizing data files, creating data stores and adding a data transformation. Engineering data features involves that types of signals, calculating summary statistics, finding peaks, computing derivatives, calculating correlations, automating feature extraction. Classification Models of machine learning involves training and testing data, machine learning models, training a model, making predictions, investigating misclassifications, improving the model.

In the deep learning session, she explained using pretrained networks consisting of identify objects in some images making predictions cnn architecture investigating predictions. managing collections of image data image datastores, preparing images to use as input, processing images in a datastore, create a datastore using subfolders. Performing transfer learning components needed for transfer learning, preparing training data, modifying network layers, setting training options, training the network, evaluating performance, transfer learning summary.

Outcome:

- Students acquired the basic knowledge of Machine learning and Deep learning onramp.
- Students learned about the significance of neural networks
- Students received the "Machine learning and Deep learning onramp" onramp certificate from mathwork.com


Faculty in charge:
(Mrs Asharani R)


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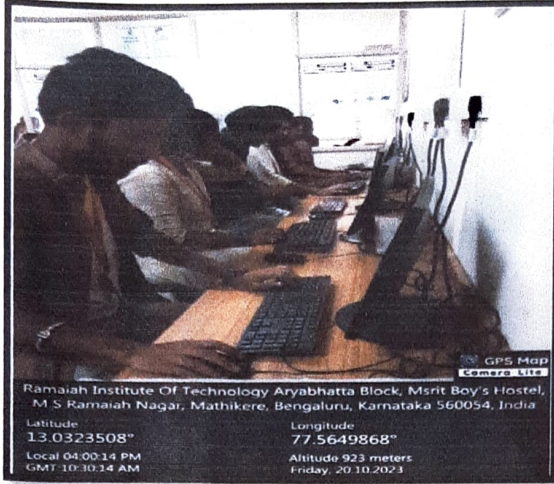
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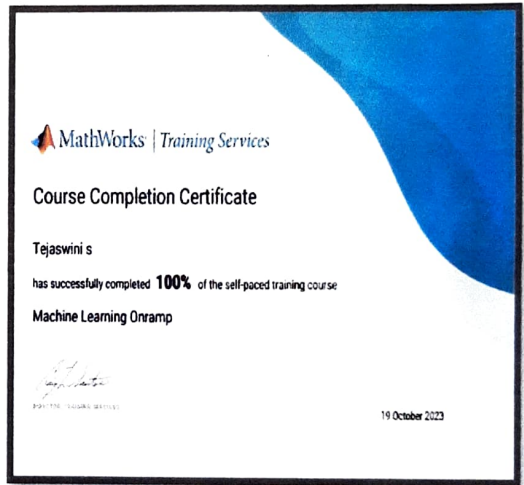
Photos of Hands on training programme on "Machine learning and Deep learning onramp"

DATE: 16/10/2023 to 27/10/2023

PLACE: 301 Computer Lab, MS Ramaiah College of Arts Science And Commerce.



Certificate:



Faculty incharge:
(Mrs Asharani R)

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coordinator

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Vatsalya

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**Hands on training programme on "Machine learning and Deep learning onramp"
 Participant list**

DATE: 16/10/2023 to 27/10/2023**PLACE: 301 Computer Lab, MS Ramaiah College of Arts Science And Commerce.**

SI No:	Register Number	Student name	Signature of the student
1	U18EV22S0064	Anusha R.	
2	U18EV22S0231	Ravindra .N	
3	U18EV22S0065	Thrishya .N	
4	U18EV22S0353	Sangeetha .R	
5	U18EV22S0372	Keesha Prabhakar K	
6	U18EV22S0063	Harshitha Bandu N	
7	U18EV22S0219	Hemanth .S	
8	11-0276	Shwathi Kumar .B	
9	U18EV21S0282	Lokesh .H .N	
10	U18EV21S0229	Bharath .U .S	
11	U18EV21S0200	Kiran .M	
12	U18EV21S0197	Abdullah Fahim	
13	U18EV21S0176	ANOO P R	
14	U18EV21S0223	TANMAY M MALLIK	
15	U18EV21S0213	PANKAJ S	
16	U18EV21S0237	YOUTHAM SINGH	
17	U18EV21S0103	Shreya .U	
18	U18EV21S0112	Shwetha SB	
19	U18EV21S0166	Preekshita H.U	
20	U18EV21S0125	Kavari Sahani	

Faculty in charge:
 (Mrs Asharani R)

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FEEDBACK FORM

DATE: 16/10/2023 to 27/10/2023

PLACE: 301 Computer Lab, MS Ramaiah College of Arts Science And Commerce.

Sl No:	Register Number	Student name	Feed Back	Signature of the student
1	U18EV02S0064	Anusha D.	Good.	
2	U18EV22S0231	PAVITHRA N	Good	Pavithra N.
3	U18EV22S0065	Thirisha N	Good	Thirisha
4	U18EV22S0353	Sajeetha R	Good	
5	U18EV22S0372	Kaarthi Prabal K	Very Good	
6	U18FU2S0063	Harshath Bouda	Very Good	
7	U18EV22S0219	Hemant S	Good	
8	— 11 — 0276	Shruthi Kumar B	Good	
9	U18EV21S0222	Lokesh M.N	Good	
10	U18EV21S0229	Bhagath. M.S	Good	
11	U18EV21S0200	Kirana M	Easy	
12	U18EV21S0197	Abululla Fikri	Good	
13	U18EV01S0176	ANoop R	Good	
14	U18EV21S0223	TANMAY MM	Good	
15	U18EV21S0213	PANKAJ S	Good	
16	U18EV21S0237	Goutham Singh	Good	
17	U18EV21S0103	Shreya. U	Good	
18	U18EV21S0112	Sumeetha S B	Good	
19	U18EV21S0166	Prekshita NN	Good	
20	U18EV21S0127	Kaveri sahani	good.	

Faculty Incharge:
(Mrs Asharani R)

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