



# **DADI INSTITUTE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E., New Delhi & Affiliated to JNTUK, Kakinada)

**A NAAC Accredited Institute**

An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution  
NH-5, Anakapalle – 531002, Visakhapatnam, A.P.

Mobile: +91 9963981111, Website: [www.diet.edu.in](http://www.diet.edu.in), E-mail: [info@diet.edu.in](mailto:info@diet.edu.in)

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## **CIRCULAR**

Anakapalle

Dt:10/8/2020

Department of Computer Science Engineering is hereby informed that, in view of the feedback received from IV B.Tech. CSE students regarding skill enhancement and to improve the expertise of students in WEB APPLICATION DEVELOPMENT, HOD is advised to depute a faculty from CSE to design and develop a suitable course structure in line with advanced topics develop the skill in Creating dynamic web pages for working on real time applications to IV B.Tech. CSE students with over 30 working hours. Please ensure that this Add-on course helps them to provide knowledge in connecting PHP programs with Mysql databases. Make arrangements to deliver the course from next week onwards.

**PRINCIPAL**

**Dadi Institute of Engineering & Technology, Anakapalle**

# Dadi Institute of Engineering & Technology

Approved by AICTE & Permanently Affiliated to JNTUK  
NAAC Accredited Institute & Inclusion under Section 2(f) & 12(B) of the UGC Act  
NH-16, Anakapalle, Visakhapatnam, Andhra Pradesh  
9963694444, 9963981111, [www.diet.edu.in](http://www.diet.edu.in), [info@diet.edu.in](mailto:info@diet.edu.in)



## Department of Computer Science & Engineering

Presents  
**A Six Week Training  
Program  
on**

**"Machine Learning Using Python  
Library"**

**20/8/2020 to 25/9/2020  
(Twice a Week)**

**Course Instructor**  
**Mr. Ch. Dinesh,**  
**Assistant Professor, Dept. of CSE**

**Venue:**  
Computer Lab 1, 1<sup>st</sup> Floor, DIET





## About the Institute

Dadi Institute of Engineering & Technology is a top ranked Engineering and Management College affiliated to Jawaharlal Nehru Technological University, Kakinada. The Institute is NAAC Accredited, ISO Certified and also associated with many professional bodies in the field of Engineering, Technology and Management. It strives to promote the highest standards among the students and enable them to Build a New World. Dadi Institute of Engineering & Technology is distinctive among institutions of higher learning. Founded in 2006 by Sri Dadi Veerabhadra Rao, an academician and former Minister as the first multicultural and co-educational college in Anakapalle which admits only academically promising students.

## About CSE Department

The Department of Computer Science and Engineering was established in the year 2006, since inception of the college, with an annual intake of 60 students for B.Tech. programme and subsequently the intake was enhanced to 120 in the year 2007 and to 180 in 2012. As on date the department intake for undergraduate (B.Tech.) is 180 and from the academic year 2020-2021 the department is offering undergraduate courses in trending specializations like Artificial Intelligence & Machine Learning (AI & ML) and Data Science. Department also offers M.Tech. programme namely M.Tech. (CSE) with an annual intake of 18 seats in the year 2011 and the intake has been enhanced to 24 in 2014.

## About the course

Students are learning basics of machine learning in the course curriculum. However they need to learn some advanced topics for working on real time applications. The course covers all basic algorithms of Machine learning.



# Department of Computer Science Engineering

## MACHINE LEARNING USING PYTHON LIBRARY

### Course Instructor :

Mr. Ch. Dinesh  
Assistant Professor, CSE Department  
Dadi Institute of Engineering & Technology

### Duration :

6 Weeks : 20/8/20 to 25/9/20 — Twice a Week

### Overview & Need for the Course:

Students are learning basics of machine learning in the course curriculum. However they need to learn some advanced topics for working on real time applications. The course covers all basic algorithms of Machine learning.

### Course Objectives:

- To introduce students to the basic concepts and techniques of Machine Learning.
- To develop skills of using recent machine learning software for solving practical problems.
- To gain experience of doing independent study and research.

### Course Outcomes:

Students will be able to:

- Recognize the characteristics of machine learning that make it useful to real-world problems.
- Characterize machine learning algorithms as supervised, semi-supervised, and unsupervised.
- Effectively use machine learning toolboxes.
- Be able to use support vector machines.
- Be able to use regularized regression algorithms.
- Understand the concept behind neural networks for learning non-linear functions.
- Understand and apply unsupervised algorithms for clustering.



- Understand the foundation of generative models.
- Understand the inference and learning algorithms for the hidden Markov model.
- Understand the learning algorithm for hidden Markov model with latent variables.
- Understand algorithms for learning Bayesian networks.
- Understand reinforcement learning algorithms.

## Requirements

- ❖ Basics Knowledge on Python.
- ❖ Basics Knowledge on preprocessing

## Course Contents

- Module 1 – Introduction to Machine Learning
- Module 2 – Supervised Learning and Linear Regression
- Module 3 – Classification and Logistic Regression
- Module 4 – Decision Tree and Random Forest
- Module 5 – Naïve Bayes and Support Vector Machine
- Module 6 – Unsupervised Learning
- Module 7 – Natural Language Processing and Text Mining
- Module 8 – Introduction to Deep Learning
- Module 9 – Time Series Analysis.

Week 1	Week 2	Week 3
Introduction to ML	Linear Regression	Linear Discriminant Analysis
Reinforcement Learning	Multivariate Regression	Linear Classification
Unsupervised Learning	Partial Least Squares	Logistic Regression
Supervised Learning	Shrinkage Methods	Project

Week 4	Week 5	Week 6
Support Vector Machines	Artificial Neural Networks	Regression Trees
Hinge Loss Formulation	Training and Validation	Decision Trees
Perceptron Learning	Parameter Estimations	Decision Trees Examples





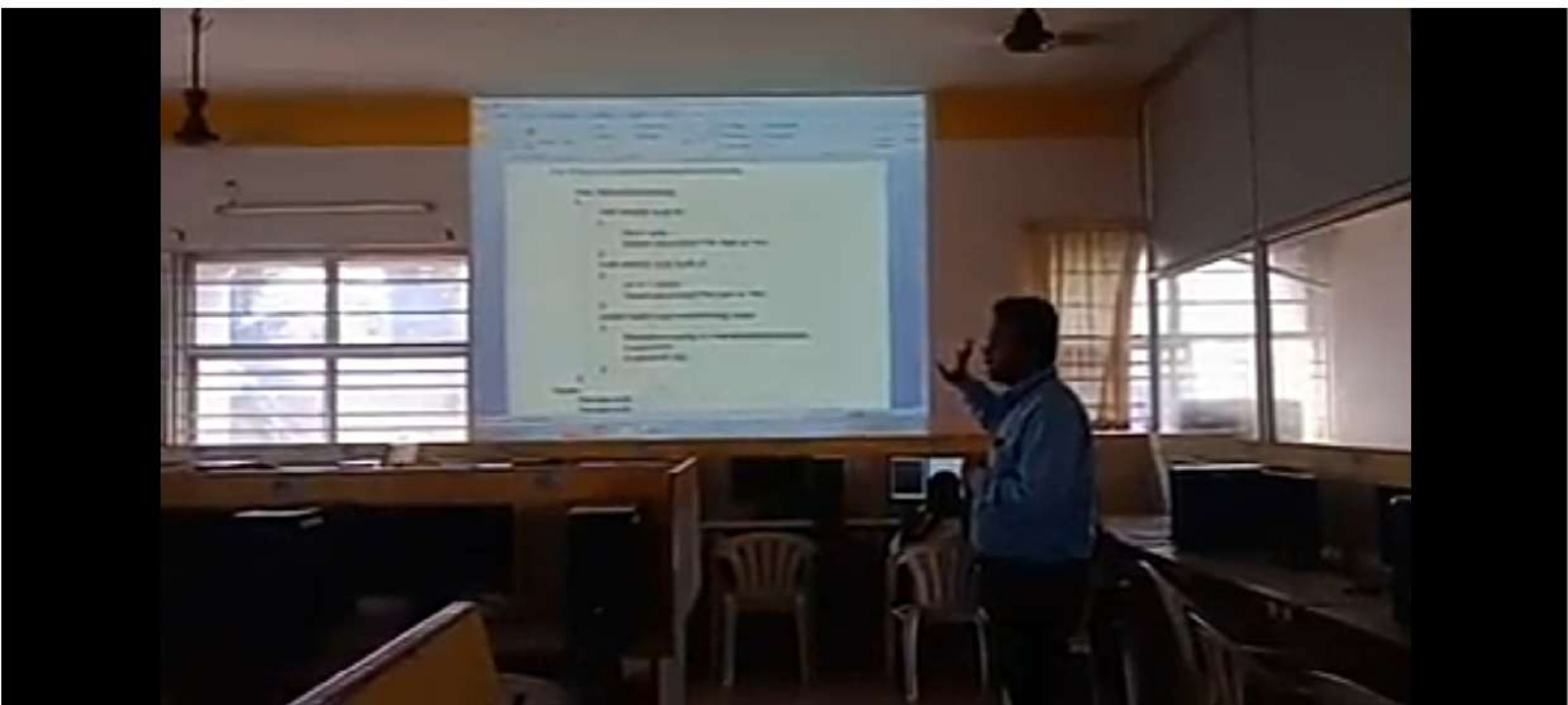
















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## COURSE COMPLETION CERTIFICATE

This Certificate is given to

# BODDEDA REECHHA



For the successful completion of 6-week course on MACHINE LEARNING

USING PYTHON LIBRARY from 20/08/2020- 25/9/2020

Mr.Ch Dinesh

Course Instructor

Dr. Ch Narasimham

Principal

Mr. Dadi Ratnakar

Chairman





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## COURSE COMPLETION CERTIFICATE

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# GAMINI NIVAS



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Mr.Ch Dinesh

Course Instructor

Dr. Ch Narasimham

Principal

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## COURSE COMPLETION CERTIFICATE

This Certificate is given to

# KAILAGGA PRIYA



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Mr.Ch Dinesh

Course Instructor

Dr. Ch Narasimham

Principal

Mr. Dadi Ratnakar

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## COURSE COMPLETION CERTIFICATE

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# SARRIDI SOWMYA



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Course Instructor

Dr. Ch Narasimham

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# WUJI SRUJANA



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Mr.Ch Dinesh

Course Instructor

Dr. Ch Narasimham

Principal

Mr. Dadi Ratnakar

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## STUDENT FEEDBACK FORM

Dear Candidate,

Your feedback is critical for the Institute to ensure that we are meeting your educational needs. We would appreciate if you could take a few minutes to share your opinions with us so that we can serve you better.

Title of the Activity: Machine Learning using python library

Date/Duration: 6W (20/8/20 - 28/9/20) Instructor/Coordinator: Ch. Dinesh

- |   |   |   |   |   |     |
|---|---|---|---|---|-----|
| 1. The content was as described in Publicity Material                                       | 1 | 2 | 3 | 4 | (5) |
| 2. The program was helpful in practical understanding                                       | 1 | 2 | 3 | 4 | (5) |
| 3. I will recommend this course/workshop program to relevant conservators across our campus | 1 | 2 | 3 | 4 | (5) |
| 4. The program was well placed within allotted time   | 1 | 2 | 3 | 4 | (5) |
| 5. The instructor was an effective communicator   | 1 | 2 | 3 | 4 | (5) |

Feedback Suggestions  
Needs to improve the explanation part in time to cover all the topics.

Please return this form to the Course Instructor/Organizer/Coordinator at the end of the workshop/add-on course/Training Program



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|---|---|---|---|---|-----|
| 1. The content was as described in Publicity Material                                       | 1 | 2 | 3 | 4 | (5) |
| 2. The program was helpful in practical understanding                                       | 1 | 2 | 3 | 4 | (5) |
| 3. I will recommend this course/workshop program to relevant conservators across our campus | 1 | 2 | 3 | 4 | (5) |
| 4. The program was well placed within allotted time   | 1 | 2 | 3 | 4 | (5) |
| 5. The instructor was an effective communicator   | 1 | 2 | 3 | 4 | (5) |

Feedback Suggestions  
Learned and implementation of programme in different aspects.

Please return this form to the Course Instructor/Organizer/Coordinator at the end of the workshop/add-on course/Training Program