

Machine Learning Internship Program In Collaboration with Microsoft Technology Association

1. About Machine Learning

Machine Learning has stemmed from the roots of Artificial Intelligence and overspreading to the domain of Data Analysis. The basic idea of Machine Learning is for the machine to access input, evaluate it and learn from it. This ability is achieved by building efficient and comprehensive algorithms even without explicit programming. ML stands strong on the foundations of languages such as C, C++, Python; necessary Statistical Concepts of Central Tendency, Probability, Hypothetical Testing ; Regression and Classification etc.

2. Modules Of Program

2.1 Introduction to Python

- 2.1.1 Difference Between Python 2 and Python 3
- 2.1.2 Print function and strings
- 2.1.3 Math function and programming basics
- 2.1.4 Variables and Loops introduction
- 2.1.5 Loops detailed
- 2.1.6 Functions and Function Parameters
- 2.1.7 Global and Local Variables
- 2.1.8 Packages and Modules with PIP

2.2 Basics of Python

- 2.2.1 Writing/Reading/Appending to a file
- 2.2.2 Common pythonic errors
- 2.2.3 Getting user Input
- 2.2.4 Stats with python
- 2.2.5 Module Import
- 2.2.6 List and Multidimensional lists
- 2.2.7 Reading from CSV
- 2.2.8 Multi Line Print
- 2.2.9 Dictionaries
- 2.2.10 Built in functions
- 2.2.11 Built in Modules

2.3 Python advanced for ML enthusiasts

- 2.3.1 Matplotlib intro
- 2.3.2 Numpy

2.4 Data Analysis with Pandas

- 2.4.1 Introduction to pandas
- 2.5.2 pandas basics
- 2.4.3 concatenating and appending data frames
- 2.4.4 Joining and merging data frames

2.5 Introduction to Machine Learning and its tools

- 2.5.1 What is Machine Learning
- 2.5.2 Difference between a rule based algorithm and a machine learning algorithm
- 2.5.3 Supervised vs Unsupervised learning
- 2.5.4 Classification vs Regression
- 2.5.5 Practical Machine Learning
- 2.5.6 Training and testing Data
- 2.5.7 Features and labels

2.6 Machine Learning algorithms

- 2.6.1 Linear Regression
- 2.6.2 Logistic Regression
- 2.6.3 K-NN classification
- 2.6.4 Support Vector Machines
- 2.6.5 K-Means Clustering
- 2.6.6 Random Forest

2.7 Machine Learning Implementation

- 2.7.1 Implementation of all the algorithms using SKlearn

2.8 Natural Language Processing

- 2.8.1 Introduction to NLTK
- 2.8.2 Stopwords
- 2.8.3 Stemming
- 2.8.4 Lemmetization
- 2.8.5 Text classification
- 2.8.6 Part of speech tag

3. FAQs

- 3.1 How will the training be imparted?
Training will be imparted through live online interactive sessions and the duration will be as per the Module-wise Schedule.
- 3.2 What are the software and hardware requirements?
You need to have a stable and speedy internet for live streaming, Headphones and Microphone.
- 3.3 What should I do if there are any technical difficulties?
If you experience any technical snag, contact support@verzeo.in or call on +91 8360682123 or 6362391201.
- 3.4 What will be the course timings?
The course timings will be scheduled and informed to you regularly. Typically, you will need to dedicate 4hrs/week.

3.5 What are the prerequisites for the course?

There are no specific prerequisites. Nevertheless, having basic skills in accordance to the course would be a good starting point.

3.6 How do you communicate with the mentor?

You cannot engage in any verbal communication while the session is going on. There is a provision of sending in your queries via Chat Box preferably at the end of the session.

3.7 What should I do if I cannot attend a live session?

If you miss any session for any reason, the recorded session will be mailed to you. If you have any queries, you can raise them in the next live session.

3.8 Can the students download contents of the course?

No, there will not be circulation of any course content to the students.

3.9 Will there be any project at the end of the course?

Yes. There will be a minor project(individual) and a major project(Group of 10) at the end of the course.

3.10 Whom will I be doing my project with?

There will be a Minor Project that you will do individually. Additionally, a Major Project done in groups. Groups of 10 will be created and a mentor will be assigned to each group who will guide the group and clear their doubts. Exclusive sessions(8 hrs) will be provided for the same.

3.11 Will I be provided with any Certificate?

You will be provided with valuable certifications on successful completion of course.

Please check website for specifics
www.verzeo.in