

Certificate in Data Science and Machine Learning VS-1703



Certificate in Data Science and Machine Learning

Data science is a field that studies data and how to extract meaning from it, whereas machine learning is a field devoted to understanding and building methods that utilize data to improve performance or inform predictions. Machine learning is a branch of artificial intelligence.

Why should I take this certification?

The primary objective of this certification course is to provide a comprehensive understanding of data science and machine learning principles using Python.

At first glance, the various sections of this course may appear to stand alone, but in reality, they are interconnected and follow a nearly sequential order. At the end of every subsection, you are assigned homework to further strengthen your learning.

Each of these assessments builds upon the concepts and methodologies you've previously acquired. Many of these assessment tasks will involve coding, as our primary goal is to advance your proficiency in practical implementations.

Upon completing this course, you will possess the capability to confidently address realworld challenges, paving the way for continuous career advancement. You will also have a firm grasp of all the fundamental concepts required for success in the field of data science.

* Note: This course is exclusively available online (videos), and no hard copies are provided.

What you will learn from this certification course:

- Data understanding and data visualization with Python
- Explore probability and statistics in Python
- Learn feature engineering and dimensionality reduction with Python
- Cover artificial neural networks with Python
- Cover CNN and RNN with Python
- Build your own AI applications

How will I benefit from this certification?

Acquiring skills in data science and machine learning can open up numerous career opportunities. Many industries, including finance, healthcare, technology, and marketing, are actively seeking professionals with expertise in data science and machine learning.

Data science and machine learning professionals are often well-compensated due to the high demand for their skills. Completing a course can lead to a significant increase in your earning potential.

Test Details

- **Duration:** 60 minutes
- No. of questions: 50
- Maximum marks: 50, Passing marks: 25 (50%)

There is no negative marking in this module.

Fee Structure

Rs. 3,999/- (Excludes taxes)*

*Fees may change without prior notice, please refer http://www.vskills.in for updated fees

Companies that hire Data Science and Machine Learning Professionals

Vskills Certified Candidate will find employment in Top MNC's like Tech Mahindra, Akamai, Mphasis, Cognizant, HCL, Accenture, TCS.

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7. Convolutional Neural Networks with Python

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- 7.4 Image Processing: RGB Images

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7.22 Object Detection: HOG Features

7.23 Object Detection: Hand Engineering Versus CNNs

7.24 Object Detection: Object Detection Activity

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8. <u>Recurrent Neural Networks with Python</u>

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- 8.91 Project II_ Stock Price Prediction: RNN Model Training and Evaluation
- 8.92 Project II_ Stock Price Prediction: Activity

Sample Questions

1. What does a gradient descent algorithm do?

- A. Determines the model error
- B. Determines the least squares cost
- C. Determines the minimum
- D. Determines the maximum

2. What is the definition of supervised machine learning?

- A. Learning a model based on a set of unlabeled examples
- B. Learning a model based on a set of labeled examples
- C. Assigning a meaningful placement of an element
- D. Given an input, an estimation of a parameter is provided

3. Which Python command is used to load the tree module?

- A. From tree import sklearn
- B. Import sklearn from tree
- C. Tree import from sklearn
- D. From sklearn import tree

4. What does MSE calculate?

- A. Classification
- B. Entropy
- C. Bias
- D. Error

5. Which of the following is not a neural network layer?

- A. Hidden layer
- B. Input layer
- C. Neural network layer
- D. Bias layer

Answers: 1 (C), 2 (B), 3 (D), 4 (D), 5 (D)

Certifications

Accounting, Banking & Finance

- Certified GSTProfessional
 Certified AML-KYC Compliance Officer
- Certified Business Accountant
- Certified BASEL III Professional
- Certified GAAP Accounting Standards Professional
- Certified Treasury Markets Professional

≻Big Data

- Certified Hadoop and Mapreduce Professional

➤Cloud Computing

- Certified Cloud Computing Professional

➤Design

- Certified Interior Designer

▶Digital Media

- Certified Social Media Marketing Professional
- Certified Inbound Marketing Professional
- Certified Digital Marketing Professional

▶Foreign Trade

- Certified Export Import (Foreign Trade) Professional

Health, Nutrition and Well Being

- Certified Fitness Instructor

➤Hospitality

- Certified Restaurant Team Member (Hospitality)

▶Human Resources

- Certified HR Compensation Manager
- Certified HR Staffing Manager
- Certified Human Resources Manager
- Certified Performance Appraisal Manager

➤Office Skills

- Certified Data Entry Operator
- Certified Office Administrator

▶ Project Management

- Certified Master in Project Management
- Certified Scrum Specialist

▶Real Estate

- Certified Real Estate Consultant

►Marketing

- Certified Marketing Manager

➤Quality

- Certified Six Sigma Green Belt Professional
- Certified Six Sigma Black Belt Professional
- Certified TQM Professional

▶ Logistics & Supply Chain Management

- Certified International Logistics Professional
- Certified Logistics & SCM Professional
- Certified Supply Chain Management Professional

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- Certified Labour Law Analyst
- Certified Business Law Analyst
- Certified Corporate Law Analyst

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- Certified IT Support Professional
- Certified PHP Professional
- Certified Selenium Professional

Mobile Application Development

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- Certified iPhone Apps Developer

➤Security

- Certified Ethical Hacking and Security Professional
- Certified Network Security Professional

▶Management

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- Certified Leadership Skills Professional

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