Certified Machine Learning Master (CMLM)

GSDC's Certified Machine Learning Master certification offers a deep understanding of Machine Learning practices. Machine learning is a subset of Artificial Intelligence that is based on the study of computer algorithms that has the ability to improve automatically through experience.

Certified Machine Learning Master (CMLM)

ABOUT CERTIFICATION

Machine learning algorithms make a model with sample data or training data for prediction and decision making without being programmed to do so.
Certified Machine Learning Master certification doesn't only clear your concept about the basics of Machine Learning but gives you a detailed picture of all the modules of supervised learning, Apriori Algorithm, Market Basket Analysis, ARIMA analysis and many more. After the completion of Machine Learning Master certification, you will be able to worth all the machine learning models and use every Machine Learning approaches.

OBJECTIVES

Certified Machine Learning Master certification shares a deep understanding of:
1. The basics of Machine Learning
2. The best practices of machine learning
   3. Various machine learning modules
4. Machine learning approaches
5. Different Machine learning algorithms
6. Future scopes and to trends of machine learning

Our Accreditation:

The Global Skill Development Council (GSDC) is the leading third-party, Vendorneutral, international credentialing and certification organization. The Global Skill Development Council (GSDC) is proud to be ANSI Accredited Member.
The American National Standards Institute (ANSI) is a private, non-profit organization that administers and coordinates the U.S. voluntary standards and conformity assessment system.

The Global Skill Development Council (GSDC) is the leading third-party, vendor-neutral, Intern-ational credentialing and certification organization. The Global Skill Development Council (GSDC) is proud to be ABICB accredited member.Accreditation Board For Inter- national Certification Bodies's accrediation is globally recognized as the highest certificati- on for training institutes as it is an independent autonomous body

COURSE SYLLABUS

1. Introduction to Python Programming

- Overview of Python
- History of Python
- Python Basics: variables, identifiers, indentation
- Data Structures in Python (list, string, sets, tuples, dictionary)
- Statements in Python (conditional, iterative, jump)
- OOPS concepts
- Exception Handling
- Regular Expression

2. Introduction to various packages and related functions

- Numpy, Pandas and Matplotlib
- Pandas Module
- Series
- Data Frames
- Numpy Module
- Numpy arrays
- Numpy operations
- Matplotlib module
- Plotting information
- Bar Charts and Histogram
- Box and Whisker Plots
- Heatmap
- Scatter Plots

3. Data Wrangling using Python

- NumPy: Arrays
- Data Operations (Selection, Append, Concat, Joins)
- Univariate Analysis
- Multivariate Analysis
- Handling Missing Values
- Handling Outliers

4. Introduction to Machine Learning with Python

- What is Machine Learning?
- Introduction to Machine Learning
- Types of Machine Learning
- Basic Probability required for Machine Learning
- Linear Algebra required for Machine Learning

5. Supervised Learning: Regression

- Simple Linear Regression
- Multiple Linear Regression
- Assumptions of Linear Regression
- Polynomial Regression
- R2 and RMSE

6. Supervised Learning: Classification

- Logistic Regression
- Decision Trees
- Random Forests
- SVM
- Naïve Bayes
- Confusion Matrix

7. Dimensionality Reduction

- PCA
- Factor Analysis
- LDA

8. Unsupervised Learning: Clustering

- Types of Clustering
- K-means Clustering
- Agglomerative Clustering

9. Additional Performance Evaluation and Model Selection

- AUC / ROC
- Silhouette coefficient
- Cross-Validation
- Bagging
- Boosting
- Bias v/s Variance

10. Recommendation Engines

- Need for recommendation engines
- Types of Recommendation Engines
- Content-Based
- Collaborative Filtering

11. Association Rules Mining

- What are Association Rules?
- Association Rule Parameters
- Apriori Algorithm
- Market Basket Analysis

12. Time Series Analysis

- What is Time Series Analysis?
- Importance of TSA
- Understanding Time Series Data
- ARIMA analysis

13. Reinforcement Learning

- Understanding Reinforcement Learning
- Algorithms associated with RL
- Q-Learning Model
- Introduction to Artificial Intelligence

14. Artificial Neural Networks and Introduction to Deep Learning

- History of Neural Network
- Perceptron
- Forward Propagation
- Introduction to Deep Learning
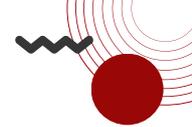
GSDC Technical Advisory Board :

The GSDC is the leading certification association which brings together innovative organizations and founding thought-leaders as Technical Advisors from over 40 countries to design curriculum on Blockchain, Devops, Six Sigma & Agile Certifications.

Our Future Information

Target Audience

- IT Professionals
- Software Developers
- Process Managers
- Application Developers
- Project Managers
- Data Analysis Professionals
- Web Developers

Pre-requisites

There are no pre-requisites for getting certified as a Machine Learning Master. Although, basic knowledge and working knowledge of programming and statistics will be required.

Find out more online at
www.gsdcouncil.org