



Advanced Certification Course in Machine Learning

- Practical Training
- Training From Expert Trainer

- Interview Preparation
- Complete Placement Assistance



www.infobytecomputers.com



CERTIFICATIONS OPTIONS AVAILABLE









<u>ABOUT US</u>

Infobyte Computers offers a high-quality learning experience in the field of IT training **soudention** on brand new technologies and train them to deliver the desired results with commercially relevant and re-organized technical skills.

The probability of achieving your dream job will keep on increasing day by day once you complete a course in **Infobyte Computers**. We also focus on improving soft skills in terms of communication, leadership, teamwork, external appearance, and attitude which helps everyone to be professional in all the aspects of their career.



ABOUT ML CERTIFICATION

Machine Learning Course provided by Infobyte will help the candidate to be Computer able learn the different techniques and concepts, including mathematical heuristic aspects, hands-on and modelling to develop the algorithm and to ultimately prepare you for the job of machine learning engineer. Machine Learning is a quick and easy method to analyze a vast amount of complex data. The future of learning appears to be machine learning.



BENEFITS OF ML CERTIFICATION

- Career Growth Higher Pay & Position
- Encourages professional Development
- Enriches self-image and Reputation
- Enhances professional Credibility.
- Abundant Job Opportunities
- Used In Many Industries
- Global Recognition
- Secure and Flexible
- 50+ Case Studies
- 50+ Projects



MACHINE LEARNING

1. Introduction of Statistics

- Descriptive statistics: Measure of Central Tendency, Measure of Dispersion, Measure of Shape
- Probability and sampling: Conditional probability, Bayes theorem
- Probability Distribution
- Hypothesis Test

2. Introduction to Machine Learning

- Introduction to Machine Learning
- Types of Machine learning
- Application of Machine Learning

3. Packages of Machine Learning

- Numpy
- Pandas
- Matplotlib
- Seaborn

4 Linear Regression

- Introduction to Linear Regression
- Understanding Ordinary Least Squares
- Cost Functions
- Gradient Descent
- Implementation with Scikit Learn
- Residual Plots
- Model Deployment and Coefficient Interpretation
- Bias Variance
- Regularization Overview
- Feature Scaling
- Introduction to Cross Validation
- Linear Regression Capstone Project

5 Logistic Regression

- Introduction to Logistic Regression
- The logistic Function
- Linear to Logistic
- Linear to Logistic Math
- Best fit with Maximum Likelihood
- Logistic Regression EDA and Model training
- Confusion Matrix and accuracy
- Classification Matrix Precision, Recall, F1 Score
- ROC Curves
- Logistic Regression Performance Evaluation
- Multiclass classification with Logistic Regression
- Logistic Regression Capstone Project

6. K-Nearest neighbours

- K-Nearest Neighbors
- Concept and theory
- Distance functions: Euclidean, Minkowski
- Why should we use KNN?
- Mathematical approach
- Dataset with problem description
- Practical application on Python
- KNN Capstone Project

7. Support Vector Machine

- Introduction to Support Vector Machine
- Hyperplanes and Margins
- Kernel Intuition
- Kernel trick and Mathematics
- SVM implementation Classification
- SVM implementation Regression
- SVM Capstone Project

8 Decision Tree

- Introduction to Tree based methods
- History and terminology
- Understanding Gini impurity
- Constructing Decision Tree with Gini impurity
- Implementation of Decision Tree
- Decision Tree Capstone Project

9. Random Forest

- Random Forest Introduction
- Random Forest Key Hyper parameters
- Number of Features and Estimators in Subset
- Bootstrapping and Out-of-Bag Error
- Classification using random forest on Python
- Regression using Radom forest on Python
- Random Forest Capstone Project

10. Boosting Methods

- Introduction to Boosting
- Boosting Methods
- AdaBoost theory and implementation
- Gradient Boosting theory and implementation

11. Naive Bayes

• 19 Supervised Learning Capstone Project - Cohort Analysis and Tree Based Methods

12. Naive Bayes Classification and Natural Language Processing (Supervised Learning)

- Introduction to NLP and Naive Bayes Section Theory of classification
- Naive Bayes Algorithm Part One Bayes Theorem
- Naive Bayes Algorithm Part Two Model Algorithm
- Capstone Project

13. Clustering

- Introduction of clustering
- K-mean clustering
- K-Means Clustering Implementation
- K-Means Color Quantization
- K-Means Capstone Project
- Hierarchical Clustering Implementation
- Hierarchical Clustering Capstone Project

14. DBSCAN - Density-based spatial clustering of applications with noise

- Introduction to DBSCAN
- DBSCAN Vs K Means Clustering
- DBSCAN Hyper Parameter
- DBSCAN Hyperparameter Tuning Methods
- DBSCAN Capstone Project

15. Time Series Analysis

- Introduction to time series
- Components of Time Series: Trend, Seasonal, Cyclical
- Types of Forecasting methods: Autoregressive Model, Moving Average Model, Autoregressive Integrated Moving Average Model, Seasonal Autoregressive Integrated Moving Average Model
- Practical application on Python

16. Principal Component Analysis and Manifold Learning

- Introduction to PCA
- Manual Implementation
- PCA Scikit Learn

WHO CAN LEARN ?

- Anyone who wants to build a career in Data Science
- Anyone who wish to gain knowledge about Programming Students
- who are currently in college or university



CAREER OPPORTUNITIES

- ML Engineer
- Data Scientist
- Al Engineer
- Business Intelligence Developer
- Human Centered ML Designer
- Software Engineer/Developer

And Many More....



OUR RECRUITERS



PROCESS FOR SUCCESS

GET PLACED

GET TRAINED



FACILITIES OFFERED

- Practical Training on Live Projects
- Complete Placement Assistance
- Interview Preparation
- Global Certification
- Fully functional labs
- Online / Offline Training
- Study Materials
- Expert Level Industry Recognized Training

