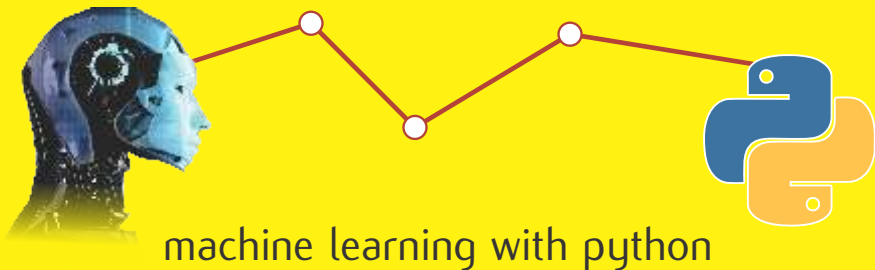




machine learning with python

Regd. Off. Plot A-40, Unit No.
207-301, 2nd & 3rd Floor,
I-Thum Tower A, Sector-62, Noida 201309
Nearest Metro Station Noida Electronic City

Website: www.trainingbasket.in
E-mail: support@trainingbasket.in
Helpline: +91-9015887887



Machine Learning with Python Course

Python With Machine Learning Training

Machine learning is the science of getting computers to act without being explicitly programmed. In the past decade, machine learning has given us self-driving cars, practical speech recognition, effective web search, and a vastly improved understanding of the human genome. Python is mainly stated as high-level, general-purpose programming language, which emphasizes code readability.

Machine Learning Basics

- Converting business problems to data problems
- Understanding supervised and unsupervised learning with examples
- Understanding biases associated with any machine learning algorithm
- Ways of reducing bias and increasing generalisation capabilities
- Drivers of machine learning algorithms
- Cost functions
- Brief introduction to gradient descent
- Importance of model validation
- Methods of model validation
- Cross validation & average error

Generalised Linear Models In Python

- Linear Regression
- Regularisation of Generalised Linear Models
- Ridge and Lasso Regression
- Logistic Regression
- Methods of threshold determination and performance measures for classification score models

Tree Models Using Python

- Introduction to decision trees
- Tuning tree size with cross validation
- Introduction to bagging algorithm
- Random Forests
- Grid search and randomized grid search
- Extra Trees (Extremely Randomised Trees)
- Partial dependence plots

Boosting Algorithms Using Python

- Concept of weak learners
- Introduction to boosting algorithms
- Adaptive Boosting
- Extreme Gradient Boosting (XGBoost)



Support Vector Machines (svm) & Knn In Python

- Introduction to idea of observation based learning
- Distances and similarities
- k Nearest Neighbours (kNN) for classification
- Brief mathematical background on SVM/li>
- Regression with kNN & SVM

Unsupervised Learning In Python

- Need for dimensionality reduction
- Principal Component Analysis (PCA)
- Difference between PCAs and Latent Factors
- Factor Analysis
- Hierarchical, K-means & DBSCAN Clustering

Artificial Neural Networks In Python

- Introduction to Neural Networks
- Single layer neural network
- Multiple layer Neural network
- Back propagation Algorithm
- Neural Networks Implementation in Python

Text Mining In Python

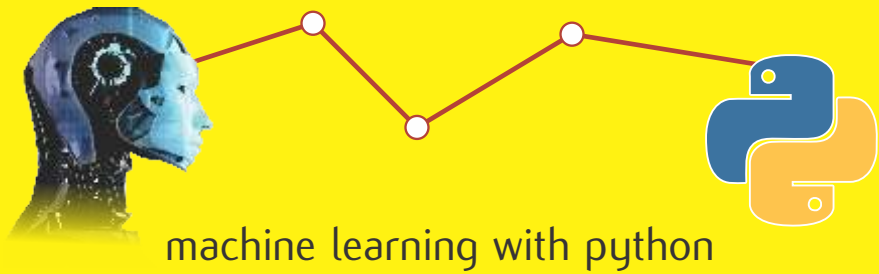
- Gathering text data using web scraping with urllib
- Processing raw web data with BeautifulSoup
- Interacting with Google search using urllib with custom user agent
- Collecting twitter data with Twitter API
- Naive Bayes Algorithm
- Feature Engineering with text data
- Sentiment analysis

Version Control Using Git And Interactive Data Products

- Need and Importance of Version Control
- Setting up git and github accounts on local machine
- Creating and uploading GitHub Repos
- Push and pull requests with GitHub App
- Merging and forking projects

Open CV

- Basic of Computer Vision & Open CV
- Images Manipulations
- Image Segmentation
- Object Detection



- Face, People and Car Detection
- Face Analysis and Filters
- Machine Learning in Computer Vision
- Motion Analysis & Object Tracking

Case Study

- Automate lender & borrower matching through prediction of loan interest rates
- Classify customers based on revenue potential for a wealth management firm
- Capture risks associated with micro loans
- How do the tech specifications of a vehicle impact its emissions?
- Save lives by predicting health issues in diabetics:
- Predicting annual income based on census data
- Understanding impact of cash assistance programs in New York
- Car Survey Data
- Pricing wines based on chemical properties
- Customer spend data at a retail chain
- Predicting annual income based on census data



Q: Why should I choose Training Basket over other training providers?

Ans. Training Basket provides a unique amalgamation of quality, convenience, flexibility and cost. Training Basket has some of the best trainers in the industry. Our trainers excel not just in depth and width of knowledge, but also in their patience and ability to explain difficult concepts in simple terms.

Training Basket has made serious investments with long-term vision for ensuring good environmental factor for studies by first buying their own suites in the prestigious iThum Towers in NOIDA, Sec-62. This lets us configure our labs and classroom suited best to our student's comfort and focused studies.

Q: What is the criterion for availing the Training Basket job assistance program?

Ans: All Training Basket students who have successfully completed their training in any of our courses are directly eligible for placement assistance.

Q: Which are the companies that Training Basket has placed students in the past?

Ans: We have exclusive tie ups with MNC's like Ericsson, Cisco, Cognizant, Tech Mahindra, MEON, Bingo, Genpact etc.

Q: Do I need a prior industry experience in getting an interview opportunity?

Ans: There is no need to have prior opportunity for getting an interview call. The successful completion of any industry level technology training at Training Basket is like an industry experience. This training makes you confident to clear interviews and we also conduct in-house mock interviews on our online assessment platform where we assess our student's skills by testing their code online or industry specific assessment before sending them for interviews.

Q: How does Training Basket assist in placement?

Ans: You will be guided on creating an attractive template based resume. You will get opportunity to attend free personality development program and mock interviews conducted by our SME's to boost your confidence for real interviews. Plus you will be given our level assessment platform where we assess our student's skills by testing their code online or industry specific assessment.

Q: If I don't clear in first attempt, will I get another chance?

Ans: Yes, for sure. Your resume will be active on our job portal and will be visible to all our associates and clients. Training Basket will continue to send your resume to future job requirements matching your profile till you land a job.

Q: Does Training Basket Guarantee job through its job assistance program?

Ans: Training Basket does not guarantee job placement but it will continue to assist you on best efforts basis to place you in its affiliated companies' network.

COMPANIES WHERE OUR STUDENTS ARE PLACED

**Tech
Mahindra**



 **Source Soft Solutions**
We only believe in the best

 **Chi Networks™**

ADS-eVER

 **MEON**
DELIVERING GREAT SURFACES

BioMax™



Bingo
Change • Innovate • Lead

 **Dimensions**
Nine Dimensions Infotech

 **WTS Webtech Solutions**

HCL

IBM

Infosys

accenture

 **HUAWEI**

 **Reliance**
Jio Infocomm

pinga™ solutions

 **DATA BRIDGE**
MARKET RESEARCH

 **CoreIP**
Technology Pvt Ltd

 **iSOURCE**

 **network
solutions**



 **Shailers**
Solutions...for your need



SAMSUNG

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Solutions