

ARTIFICIAL INTELLIGENCE

technovalley
SOFTWARE CONSULTING



advanced
knowledge
services



TechnoValley is a global technology company leveraging the potential of Information Technology for creating best opportunities for businesses and individuals across the world. We are a Foreign Direct Investment Company, and incorporated with a vision to facilitate our varied high technology services to many locations across the Globe.

TechnoValley is a milestone in the ever-changing global IT scenario. From unrivaled services, ranging from Strategy Consulting to Technical Education and undeniably the best resources ranging from experienced manpower to well-equipped infrastructure, we strive to be the best in the IT consulting & service landscape in India. TechnoValley is a milestone in the ever-changing global IT scenario.

At TechnoValley, We believe in technology Innovation. We are dedicated to provide the latest state-of-the-art technology solutions to our Clients and Organizations Across varied business domains.

TechnoValley is spear-headed by the Board of Directors, who are highly experienced and successful in multiple domains. All of them have set inspirational benchmarks on their own turfs, and this drives our vision.



Strategic Partners



Basics of Python Language [15 hrs]

- ◆ Setting up the environment
- ◆ Variables and data types
- ◆ Operators
- ◆ Conditional statements
- ◆ Looping
- ◆ Control statements
- ◆ Functions

1 - SCIENTIFIC LIBRARIES IN PYTHON [30 Hrs]

- ◆ Numpy
- ◆ Pandas
- ◆ Matplotlib
- ◆ Scikit-learn library

2 - MATHEMATICS FOR MACHINE LEARNING [10 hrs]

- ◆ Linear Algebra
- ◆ Calculus
- ◆ Statistics & Probability
- ◆ Linear Regression
- ◆ Optimization and its techniques/types

3 - DATA PREPROCESSING [10 hrs]

- ◆ Feature Selection
- ◆ Feature Selection
- ◆ Principal Component Analysis(PCA)
- ◆ Discriminant Functions
- ◆ Linear Discriminant Analysis(LDA)
- ◆ Exploratory Factor Analysis(EFA)



135
HOURS

4 - SUPERVISED LEARNING [20 hrs]

- ◆ Classification
- ◆ K-Nearest Neighbours
- ◆ Decision Tree
- ◆ Naive Bayes
- ◆ Logistic Regression
- ◆ Regression
- ◆ Single Linear Regression
- ◆ Multiple Linear Regression

5 - UNSUPERVISED LEARNING [10 hrs]

- ◆ Introduction to Unsupervised Learning
- ◆ Spherical K-Means and Incremental Clustering
- ◆ K-Means Clustering
- ◆ Hierarchical Agglomerative Clustering and DBSCAN
- ◆ Mean-shift Clustering

6 - BASICS OF ARTIFICIAL INTELLIGENCE [10 hrs]

- ◆ Introduction To Artificial Intelligence
- ◆ Introduction to AI Tools and frameworks-
 - ◆ TensorFlow
 - ◆ Keras
 - ◆ PyTorch
- ◆ Image Processing using Scikit

7 - NEURAL NETWORKS [15 hrs]

- ◆ Perceptron
- ◆ Multilayer Perceptron
- ◆ MLP: Backpropagation and Applications
- ◆ K-NN and RBF, ANN
- ◆ Data Balancing Techniques And Applications
- ◆ Classification and Regression Trees
- ◆ Decision Trees and Random Forest
- ◆ Support Vector Machines (SVM)

8 - DEEP LEARNING [10 hrs]

- ◆ Introduction to Deep Neural Network
- ◆ Convolutional Neural Network
- ◆ Implementation of ConvNet/CNN from scratch
- ◆ Convolutional Neural Network

9 - SPEECH, VISION, NLP [20 hrs]

- ◆ Image Processing using OpenCV
- ◆ Signal Processing
- ◆ SciPy
- ◆ Introduction to Natural Language Processing (NLP)
- ◆ N-gram Language mode
- ◆ Vector Semantics
- ◆ Neural Models for NLP
- ◆ NLTK

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