Enhance LEARN

Shaping Talents

Shaping Future

JOIN US

Become a Certified
Technology Expert

ARTIFICIAL INTELLIGENCE AND DEEP LEARNING TRAINING

Artificial Intelligence and Deep Learning Training

About EnhanceLearn

EnhanceLearn offers you a complete career transition by providing training and placement programs for Students and Jobseekers looking for a Career Success. We provide best IT training and certification courses which is taken by professional certified experts. The training modules are designed as per the market requirement so that it helps student to conquer the Career Job Market and achieve their career goals with our placement assistance.

About the AI and Deep Learning Training Course

This comprehensive AI and Deep Learning training will help you to work on the pioneer of artificial intelligence. In this training program, you'll gain the knowledge of the various aspects of artificial neural networks – DNN and CNN , graph visualization, vectorization, Python for scripting machine learning applications, logistic regression with neural network, TensorFlow, binary classification, deep learning libraries, Keras & TFLearn API, GPU in deep learning, backpropagation, and hyper parameters through hands-on projects.

EnhanceLearn's AI and Deep Learning training and certification program is supervised under expert talented trainers helping you gain a solid understanding of the key concepts of Artificial Intelligence, Machine Learning and Deep Learning and master AI and Data Science.

Why Take AI and Deep Learning Training Course?

Artificial Intelligence nowadays is taking over each and every industry domain. Machine Learning and especially Deep Learning are the most vital aspects of AI that are being deployed everywhere from search engines to online movie recommendations. Taking this Deep Learning training will help professionals to make a solid career in a rising technology domain and find the best jobs in top organizations.

Artificial Intelligence with Deep Learning provides innovative solutions and is the most trending and futuristic career option.

AI certified professionals are one of the top salary holders in the job industry. According to Payscale.com, Machine Learning Engineer with Deep Learning Skills holds an approximate average payscale for about $117,073 per year.

Deep Learning Professional with expertise in AI can demand very high salaries with having jobs in big companies. Because AI and Deep Learning in majorly used by many large companies.

Get trained with our AI and deep learning course and Fast-track your career to take on more lucrative job roles and take your career to the next level.

Artificial Intelligence and Deep Learning Training

Course Content:

Module 1: Introduction to Deep Learning & Neural Networks

- Machine learning and its implications to the artificial intelligence sector
- Advantages of machine learning over other conventional methodologies
- Introduction to Deep Learning within machine learning
- Training the system with training data
- Supervised learning
    - Classification
    - Regression
- Unsupervised learning
    - Clustering
    - Association
- Introduction to AI
- Introduction to Neural Networks
- Supervised Learning with Neural Networks
- Concept of Machine Learning
- Probability distributions
- Hypothesis testing
- Hidden Markov Model

Module 2: Multi-layered Neural Networks

- Introduction to Multi-Layer Network
- Concept of Deep neural networks, Regularization
- Multi-layer perceptron, capacity, and overfitting
- Neural network hyperparameters, logic gates
- the various activation functions in neural networks like Sigmoid
- Hyperbolic functions
- Backpropagation, convergence
- Forward propagation, overfitting, hyperparameters

Module 3: Training of neural networks

- The various techniques used in training of artificial neural networks
- Gradient descent rule, perceptron learning rule, tuning learning rate
- A stochastic process, optimization techniques
- Regularization techniques, regression techniques
- Lasso L1, Ridge L2, vanishing gradients, transfer learning
- Xavier initialization, and vanishing gradients

Module 4: Deep Learning Libraries

- How Deep Learning Works
- Activation Functions
- Illustrate Perceptron
- Important Parameters of Perceptron
- Multi-layer Perceptron
- What is Tensorflow
- Introduction to TensorFlow open source software library for designing
- building and training Deep Learning models
- Python Library behind TensorFlow
- Tensor Processing Unit (TPU) programmable
- AI accelerator by Google
- Tensorflow code-basics
- Graph Visualization, Constants, Placeholders, Variables
- Step by Step – Use-Case Implementation, Keras

Module 5: Introduction to Keras API

- Keras high-level neural network for working on top of tensorflow
- Defining complex multi-output models
- Composing models using Keras
- Batch normalization
- Deploying Keras with tensorboard
- Neural network training process customization

Module 6: TFLearn API for TensorFLow

- Implementing neural networks using TFLearn API
- Defining and composing models using TFLearn
- Deploying TensorBoard with TFLearn

Module 7: DNN: Deep Neural Networks

- Mapping the human mind with Deep Neural Networks
- The various building blocks of Artificial Neural Networks
- Architecture of DNN
- Concept of reinforcement learning in DNN
- Activation functions and optimization algorithms in DNN

Module 8: CNN: Convolutional Neural Networks

- What is a Convolutional Neural Network
- Understanding the architecture of CNN
- Convolution and Pooling layers in a CNN
- Understanding and Visualizing a CNN
- Use cases of CNN
- Transfer Learning and Fine-tuning Convolutional Neural Networks
- Feature maps, Kernel filter, pooling
- Deploying convolutinal neural network in TensorFlow

Module 9: RNN: Recurrent Neural Networks

- Introduction to RNN
- Application use cases of RNN
- Modelling sequences
- Training RNNs with Backpropagation
- Recursive Neural Tensor Network Theory
- Long Short-Term Memory (LSTM)
- Recurrent Neural Network Model
- Basic RNN cell, unfolded RNN, training of RNN, and dynamic RNN
- Time-series predictions

Module 10: GPU in Deep Learning

- Introduction to GPUs and how they differ from CPUs
- the importance of GPUs in training Deep Learning Networks
- the forward pass and backward pass training technique
- the GPU constituent with simpler core and concurrent hardware

Module 11: Autoencoders & Restricted Boltzmann Machine (RBM)

- Introduction to RBM and autoencoders
- Deploying it for deep neural networks
- Collaborative filtering using RBM
- Features of autoencoders
- Applications of autoencoders

Module 12: Chatbots

- Automated conversation bots using one of the descriptive techniques
    - IBM Watson
    - Google API.AI
    - Microsoft's Luis
    - Amazon Lex
    - Generative
    - Open-Close Domain Bots
    - Sequence to Sequence model (LSTM)

Module 13: AI Deep Learning Projects