

Artificial Intelligence Learning Roadmap Part 1

1. Basic of python and important libraries:

- i. TensorFlow
- ii. NumPy
- iii. Keras
- iv. Scipy

- v. pytorch
- vi. Scikit-learn
- vii. Matplotlib
- viii. Pandas

2. What is AI? History of AI?
3. Difference between Artificial Intelligence & Machine learning?
4. Difference between Supervised & Unsupervised & Reinforcement Learning?
5. Basic Algorithms of Supervised Learning:
 - i. Decision Tree
 - ii. Linear Regression
 - iii. K-nearest neighbor
 - iv. Logistic Regression
 - v. Artificial Neural Network
 - vi. Support Vector Machine (SVM)

Note: Explore each algorithm with some examples

6. Basic Algorithms of Unsupervised Learning:
 - i. K-Means
 - ii. Principal Component Analysis
 - iii. Multi-Layer Perceptron (MLP)

Note: Explore each algorithm with some examples

7. Detail of Reinforcement Learning?

Reference Material:

For implementation: --- Hands-on Machine Learning with Scikit-Learn, Keras & TensorFlow Concepts, Tools, and Techniques to Build Intelligent Systems By O'REILLY

For theory(optional): Machine Learning By tom Mitchells Introduction to Machine Learning Second Edition By Ethem Alpaydin.

