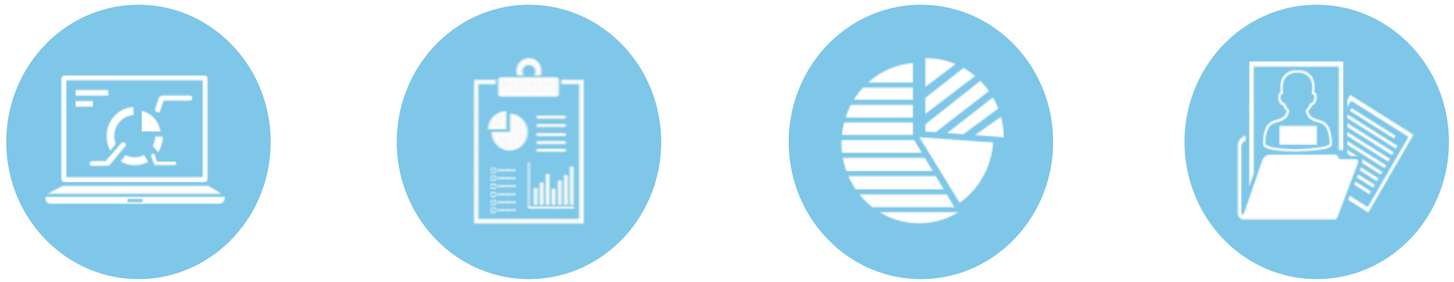
# Machine Learning Certification Training

Lesson 0: Course Introduction



# Course Objectives

By the end of this course, you will be able to:

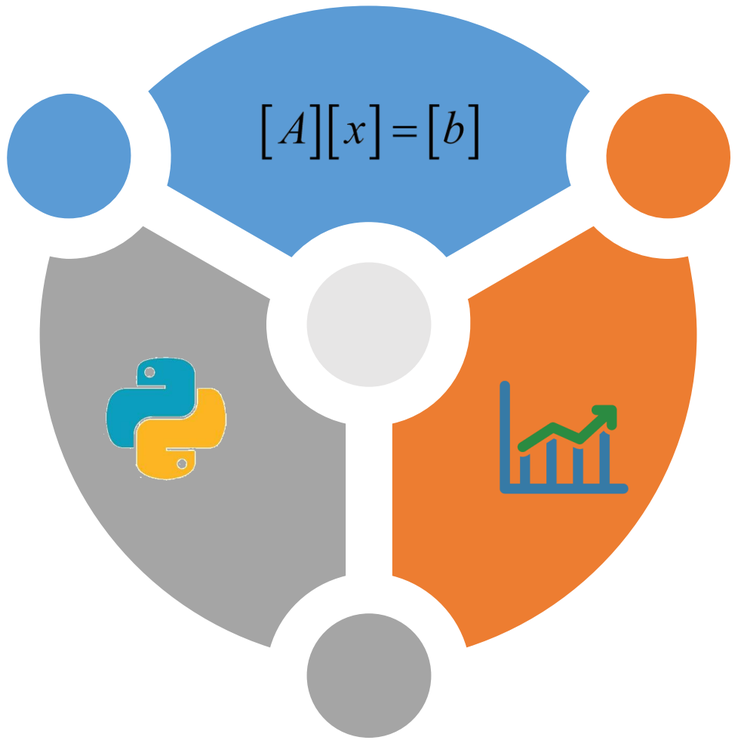
- Programmatically download and analyze data
- Learn data visualization
- Master the art of data analysis by using Ipython notebooks
- Gain insight into the role of a machine learning engineer
- Explain machine learning
- Work with industry-based data
- Learn the tools and techniques for predictive modeling
- Discuss machine learning algorithms and their implementation
- Validate machine learning algorithms
- Demonstrate time series and its related concepts

# Course Outline

1. Introduction to Artificial Intelligence and Machine Learning
2. Data Wrangling and Manipulation
3. Supervised Learning: Regression
4. Feature Engineering
5. Supervised Learning: Classification
6. Unsupervised learning
7. Time Series Modelling
8. Ensemble Learning
9. Recommender Systems
10. Text Mining

# Prerequisites

Prior knowledge of the following domains and technology is helpful:




**Linear Algebra**

**Statistics**

**Python**

## Skills Covered

1. Numerical Analysis
2. Machine Learning Algorithms
3. Text Analysis
4. Data Visualization Techniques
5. Data Wrangling
6. Scalable Machine Learning Models

# Project Highlights


Arrive at an income qualification model for Inter-American Development Bank with respect to some of the world's poorest families


Develop auto-access models for amazon’s employee access challenge


Design algorithm for Uber that will tell the fare to be charged on the passenger of taxi

Tackle the curse of dimensionality and reduce the time that cars spend on the test bench of Mercedes Benz

# Thank You