

Machine Learning 101 for Non Programmers and Non Stat Audience

If you have attended any class before with us then you might qualify for a discount!

Machine learning is going to disrupt a lot of industries in the next decade. Whether it be driverless cars, cashierless shops, personal assistant or AI physicians, the effect of machine learning will be pervasive.

Prepare for the next big disruption. This class assumes you don't have any programming background. However, it is recommended to have a basic understanding in Python. Understanding of Pandas Python Library will help a lot.

You will know when to run supervised or unsupervised learning for your data, whether to use classification or regression model, how to handle categorical vs continuous data. After the data is ready you will learn how to split the data and analyze the final results. We will use a lot of images to delineate different terms and topics used in Machine Learning. Although we would use classical datasets like IRIS, Titanic, etc but you will be able to scale and use your data for the models learned in the session.

Takeaways include developing basic vocabulary for:

1. Run machine learning models on your data using the setup
1. Supervised vs Unsupervised Learning
2. Regression vs Classification models
3. Categorical vs Continuous feature spaces
4. Python Scikit-learn Library
5. Modeling Fundamentals: Test-train split, Cross validation(CV), Bias–variance tradeoff, Precision and Recall, Ensemble models
6. Interpreting Results of Regression and Classification Models
7. Parameters and Hyper Parameters
8. Dimension Reduction
9. SVM, K-Nearest Neighbor, Neural Networks

Projects for the session (Python):

1. Understanding and Interpreting results of Regression and Logistic Regression using Google Spreadsheets and Python
2. Calculating R-Square, MSE, Logit manually in excel for enhanced understanding
3. Understanding features of Popular Datasets: Titanic, Iris and Housing Prices
4. Running Logistic Regression on Titanic Data Set
5. Running Regression, Logistic Regression, SVM and Random Forest on Iris Dataset

Post Session Assessment:

1. Top 20 machine learning interview question

2. Small Project for Github
3. Make data ready, choose and configure the correct model for your data
4. Interpret results of your machine learning algorithm

Check the calendar of events at:

<https://www.meetup.com/New-York-Python-SQL-Bootcamp-Data-Science-Analytics/>