**Machine Learning A – Z: Hands-On Python & R**

**Welcome to the Course!**

**Data Preprocessing**

**Regression**

Simple Linear Regression

Multiple Linear Regression

Polynomial Regression

Support Vector Regression (SVR)

Decision Tree Regression

Random Forest Regression

Evaluating Regression Models Performance

**Classification**

Logistic Regression

K-Nearest Neighbors (K-NN)

Support Vector Machine (SVM)

Kernel SVM

Naïve Bayes

Decision Tree Classification

Random Forest Classification

Evaluating Classification Models Performance

**Clustering**

K-Means Clustering

Hierarchical Clustering

**Association Rule Learning**

Apriori

Eclat

**Reinforcement Learning**

Upper Confidence Bound (UCB)

Thompson Sampling

**Machine Learning A – Z: Hands-On Python & R (continued)**

**Natural Language Processing**

**Deep Learning**

Artificial Neural Networks

Convolutional Neural Networks

**Dimensionality Reduction**

Principal Component Analysis (PCA)

Linear Discriminant Analysis (LDA)

Kernel PCA

**Dimensionality Reduction**

Principal Component Analysis (PCA)

Linear Discriminant Analysis (LDA)

Kernel PCA

**Model Selection & Boosting**

Model Selection

XGBoost

**Bonus Lectures**