

Channel link:

<https://www.youtube.com/watch?v=LcWFedjaR4Q&list=PLfFghEzKVmjvII5ZcBnFWQOUjtUVdDnmo>

Course name : Complete machine learning course using Python

Duration : 60 hours

Creator : Details can be found in every video's description

Topics covered:

Part 1	Module 1: Machine Learning - Basic Module 2: Python basics for machine learning Module 3 : Python libraries for ML (numpy, pandas, matplotlib, seaborn) Module 4: Data collection as pre-processing
Part 2	Part 2 Module 5: Mathematics for machine learning 5.1. Linear algebra (Vector as Matrices) 5.2. Statistics 5.3. Probability Module 6: Machine learning model 6.1 Working on ML models 6.2 Model selection 6.3 Overfitting to under-fitting 6.4 Log function as model evaluation 6.5 Model parameters and hyperparameters 6.6 Gradient descent
Part 3	Module 7: Building Machine learning models from scratch 7.1 Linear Regression 7.2 Logistic Regression 7.3 Support vector machine 7.4 Lasso regression
Part 4	Module 8: Machine learning model optimization 8.1 Cross-validation 8.2 Hyperparameter tuning 8.3 Model selection 8.4 Model evaluation
Part 5	Machine Learning Model Deployment: 1. Replay the machine learning model of the streamlit web app 2. Multiple Disease Prediction System - web app 3. Public web App - Streamlit cloud 4. Public web APP - Heroku

	5. Replay ML model as on the API 6. ML model as Public API-Heroku
--	--

Projects completed in (part 1 to 4 using machine learning concept):

1. Rocks vs Mine Prediction
2. Diabetes Prediction
3. Spam mail prediction
- 4.Heart disease prediction
- 5.Boston house price prediction
- 6.Loan approval prediction
7. Bigmart Sales prediction
8. Breast cancer prediction
9. Calories burnt prediction
10. Movie recommendation system
11. Customer segmentation in a shopping mall using clustering

Projects completed(from basic deep learning concept):

1. Breast cancer classification using neural networks
2. Processing image data - Python implementation
3. MNIST digit classification using Neural networks

Dataset availability: All the datasets have been downloaded from Kaggle. Also, it can be found in the video's description.

Programming medium: 1.google colab(used in all cases)

2. Anaconda Navigator has been used with other required editors for model deployment.

(Project google colab file link):

https://drive.google.com/drive/folders/1XxSCyf7EpiFomsBDoT1Ft-w9ZUEDj_F?usp=sharing

My talks: *I learned the concept from the video and recreated the project here. It is very similar to the video, but I have added many comments in the coding part to help me understand it easily when I review it after completing it for the first time.*