

Day 01	Python Programming Basics <ul style="list-style-type: none"> • Variable Types • Operators (Arithmetic, Relational, Assignment, Logical.Bitwise) • Decision Making • Repetition (Loops) • Data Structures (Lists, Tuples, Dictionaries) • Functions 	Quiz from Python Programming Basics
Day 02	Python Modules and Contributed Modules (Matplotlib, Numpy and Pandas) for data handling and preprocessing <ul style="list-style-type: none"> • Introduction to python modules and application • Inbuilt essential python modules (datetime, math, os and etc) • Creating own customized modules 	Exercise from numpy for data processing
Day 03	Image Processing with OpenCV <ul style="list-style-type: none"> • Pixelwise Operations • Drawing Functions • Color Spaces • Point Processing and Operations • Thresholding • Color Segmentations • Neighborhood Operations and Filters • Morphological Operations • Video Loading and Processing • Image Transformations • Geometric Transformations • Contour Operations 	Plan Height Detection using color segmentation and contour operations
Day 04	Machine Learning with Scikit Learn <ul style="list-style-type: none"> • Introduction to Machine Learning, Supervised Machine 	Character Recognition using K Nearest Neighbor Algorithm

	<p>Learning</p> <ul style="list-style-type: none"> • Identifying Features and Labels • Classification and Regression Problems • Machine Learning Algorithms in detail (Regression, Classification, Clustering, Dimensionality Reduction Algorithms) • Introduction to K Nearest Neighbor Classifier • Euclidean Distance • Choosing the optimal K value 	
Day 05	<p>Web framework development with Flask</p> <ul style="list-style-type: none"> • Introduction to Python Web-frameworks • Introduction to Python Backend development with Flask • Flask Routes, URL bindings and HTTP Methods • Template Rendering and Static Files • Request Objects, Data Transfer, and File uploading • Loading the trained Neural Network models and Machine Learning Models into the backend • Deployment of Python backends in local server 	Character Recognition Web App using Flask

- Lifetime Access to Recorded Lectures and resources
- Certificate Of Completion
- Starting on 4th January (5Days Live Workshop) 6-9 PM
- Link to enroll - instamojo.com/digitaltanmay

