

1. Introduction to Python
  - a. OOP concept
  - b. Numpy,pandas,sklearn,matplotlib
  - c. Datetime
  - d. Lambda,map functions
  - e. Regular expressions
2. Exploratory Data Analysis
  - a. Basic hypothesis
  - b. Statistics - central tendency,dispersion etc
  - c. Missing value handling
  - d. Outlier handling
  - e. Statistical analysis
  - f. Data quality check
3. Machine Learning
  - a. Regression
    - i. Linear Regression
    - ii. Random Forest Regressor
    - iii. XG Boost Regressor
    - iv. SVM
  - b. Classification
    - i. Logistic Regression
    - ii. Random Forest Classifier
    - iii. XG Boost Classifier
    - iv. SVC
    - v. Ada boost
    - vi. GBM
    - vii. KNN
    - viii. Naive Bayes
  - c. Clustering
    - i. KMeans
  - d. Dimensionality Reduction
    - i. PCA
  - e. Natural Language Processing
    - i. NLTK
  - f. ML Pipeline
4. Deep Learning
  - a. Computer vision
  - b. OCR
  - c. Back propagation
  - d. CNN
  - e. RNN
  - f. Transfer Learning - AlexNet,VGG16,VGG19,Mobile Net
5. Data visualization and Business Intelligence
  - a. Tableau
6. Tasks and Assignments
  - a. Assignment on EDA
  - b. Project on Machine Learning (Regression or Classification)
  - c. Assignment on OCR+Computer Vision

- d. Project on Deep Learning(CNN+backpropagation)
- 7. Agile Methodologies
  - a. Write up daily during the projects
  - b. Project estimation
  - c. Project breakdown
- 8. Git
  - a. Repo Creating
  - b. Commits
  - c. Push/pull