Machine Learning Resources

Define Goal : PRODUCTS or ALGORITHMS

1. **Maths**
   - Linear Algebra (Matrix, Vector)
   - Statistics
   - Probability

2. **Learn Python & its Libraries**
   - Numpy
   - Pandas

3. **Learn ML Algorithms**
   - Supervised vs Unsupervised vs Reinforcement
   - Linear Regression, Logistic Regression, Clustering
   - KNN (K Nearest Neighbours)
   - SVM (Support Vector Machine)
   - Decision Trees
   - Random Forests
   - Overfitting, Underfitting
   - Regularization, Gradient Descent, Slope
   - Confusion Matrix

4. **Data Preprocessing (for higher accuracy)**
   - Handling Null Values
   - Standardization
   - Handling Categorical Values
   - One-Hot Encoding
   - Feature Scaling

5. **Learn ML libraries**
   - Scikit learn
   - Matplotlib
   - Tensorflow for DL

6. **Practice, Practice, Practice (Kaggle)**

*Explore projects on Github

Resources :

1. http://www.maths.qmul.ac.uk/~pjc/notes/linalg.pdf **(Maths)**
2. https://www.mathsbox.org.uk/twi/astats.pdf **(Maths)**
3. https://www.youtube.com/playlist?list=PLLy_2iUCG87D1CXFxE-SxCFZUiJzQ3IvE **(Maths)**
4. https://developers.google.com/machine-learning/crash-course **(ML by Google)**
5. https://www.datacamp.com/courses/intro-to-python-for-data-science **(Python Basics)**

9. https://scikit-learn.org/stable/ **(Scikit Learn)**
10. https://www.tensorflow.org/ **(Tensorflow)**
11. https://www.kaggle.com/ **(Kaggle)**