THE ULTIMATE LEARNING PATH

TO BECOMING A DATA SCIENTIST IN 2019

Expected effort: 8-10 hours per week

The path to becoming a machine learning expert is a marathon journey, not a sprint to the finish. It's a diverse space with an ever-changing landscape.
But to become an expert, you need to begin from the ground-up. So where should you start? What are the essential techniques and concepts you should learn before jumping into more advanced machine learning topics?
This learning path has been curated with these questions in mind.

January

Understanding Data Science and getting started with Python

- Understanding data science
- What does a data scientist do?
- Setting up the System
- Getting Started in Python
- Why is statistics important?
- Statistics: Descriptive
- Introduction to Pandas/ Numpy

February

Mathematics and Statistics

- Introduction to Probability
- Statistics: Inferential
- Exploratory Data Analysis (EDA)
- Projects on EDA
- Linear Algebra Basics

Start joining Data Science Communities

March

Machine Learning Tools and Techniques (Basics)

- Understanding Data Science Pipeline
- Linear Regression
- Logistic Regression
- Decision Tree Algorithm
- Naive Bayes
- Support Vector Machines (SVM)
- Classification Project
- Regression Project
- Unsupervised Learning
- Unsupervised Learning Project

Get Familiarized with Linux Command Line

April

Machine Learning Tools and Techniques (Advanced)

- Understanding Ensemble Learning
- Random Forest
- Boosting Algorithms (XGBoost, LightGBM, Catboost)
- Time Series
- Time Series Project

May

Machine Learning Tools and Techniques (Hyperparameter Tuning & Validation)

- Validation strategies
- Hyperparameter tuning
- Feature Engineering
- Ensemble Learning
  - Stacking & Blending

Subscribe to Data Science Newsletters

June

Machine Learning Tools and Techniques (Recommender Systems)

- Matrix Algebra
- SVD and PCA
- Working with different types of Data
- Recommender Systems
- Recommender Systems Project

July

Getting Started with Neural Networks/ Deep Learning

- Setting up the System for Deep Learning
- Introduction to Deep learning (MLP)
- Introduction to Keras

Start Profile & Resume Building
- Participate in Competitions
- Learn Github
- Write Blogs

August

Computer Vision

- Understanding DL Architectures - I (CNN)

September

Computer Vision

- Projects on Computer Vision
- CV Course (Sponsored)

October

Natural Language Processing

- Understanding DL Architectures - II (RNN, LSTM, GRU)
- Text Preprocessing/Cleaning
- Text Classification

Start solving guesstimates, puzzles, case studies
- Strategic Thinking Project
- Solve Case studies & Puzzles

November

Natural Language Processing (Advanced)

- Topic Modelling
- Text Summarization
- Word Embeddings
- NLP Project
- NLP Course

December

Applying for Internships/Jobs

- Jobs and Internships
- Up Level your Data Science Resume Course
- Ace Data Science Interviews Course
- Way Forward

You can find the content along with the projects in the course specially created for you at our trainings portal by clicking here

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