First of all, thank you for being a part of Kolkata's first Google Cloud Study Jam. It was indeed DSC-NSEC's honor to bring an event like this to you. We hope it continues in the near future as well. During the event, we saw a good number of hands raised in favor of learning Data Science, Machine Learning and related disciplines. That is why we thought it would be beneficial for you if we can present you with a list of resources which can help you get started quickly.

Data science is not just about applying machine learning to your data and getting predictive statistics out of it. It involves a series of other things in the pipeline and together the pipeline is often referred to as CRISP-DM (cross-industry process for data mining). Before you feed the data to your favorite machine learning algorithm, you will have to give your data a proper shape for being able to apply machine learning. This requires wrangling the data which further includes cleaning it, preprocessing it and so on. But what if you do not have the data to proceed? In that case, you will have to collect the data from whatever resources available to you.

So you see, data science is more of a journey than just discovering patterns from the data. This article attempts to present you some resources (free and sometimes a little bit paid) which can help you get started with this journey in no time. The resources presented here are going to be of three types - Courses, Blogs, YouTube videos/channels. So, without further ado, let's begin.

Note: We have tried to not make the list programming language specific and we assume you already have the knowledge of basic Python.

Courses:

As mentioned earlier, data science comprises many things and there are a lot of good resources on the internet covering each and one of them. But the problem here is the resources are scattered and for a beginner, it can be quite challenging to get hold of something that is suitable for him(s). So, it will be a good idea for a beginner to begin with something that is well-accepted by the community and something which has most of the things in place in a friendly way.

Data Science

- Data Analyst with Python by DataCamp (free if offered via DataCamp Online Classroom)
- Data Scientist with Python by DataCamp (free if offered via DataCamp Online Classroom)

- [Applied Data Science with Python Specialization](#) by Coursera (free via Financial Aid)
- [Practical Data Science](#) by CMU (free course)
- [Intro to Data Science](#) by Udacity (free course)
- [Intro to Data Analysis](#) by Udacity (free course)
- [Data Visualization](#) by Kaggle Learn (free course)

Machine Learning and Deep Learning

- [Machine Learning](#) by Coursera (free via Financial Aid)
- [Machine Learning Crash Course](#) by Google (free course)
- [Introduction to Machine Learning for Coders](#) by Fast.ai (free course)
- [Machine Learning](#) by Kaggle Learn (free course)
- [Intro to Machine Learning](#) by Udacity (free course)
- [Deep Learning Specialization](#) by Coursera (free via Financial Aid)
- [Practical Deep Learning for Coders](#) by Fast.ai (free course)
- [Intro to Deep Learning with PyTorch](#) by Udacity (free course)
- [Deep Learning](#) by Kaggle Learn (free course)

Blogs:

- Machine Learning Mastery - https://machinelearningmastery.com
- Analytics Vidhya - https://analyticsvidhya.com
- KDNuggets - https://www.kdnuggets.com
- Towards Data Science - https://towardsdatascience.com
- DataCamp Community - https://www.datacamp.com/community/tutorials
- Data Science Central - https://www.datasciencecentral.com/
- Christopher Olah's blog - http://colah.github.io
- Sebastian Ruder's blog - http://ruder.io/
- Sebastian Raschka's blog - https://sebastianraschka.com/
- Andrew Trask's blog - https://iamtrask.github.io/

YouTube:

Siraj Raval - https://www.youtube.com/channel/UCWN3xxRkmTPmbKwht9FuE5A

Luis Serrano - https://www.youtube.com/channel/UCgBncpylJ1kiVaPyP-PZauQ

Brandon Rohrer - https://www.youtube.com/user/BrandonRohrer

Data School - https://www.youtube.com/user/dataschool

Khan Academy - https://www.youtube.com/user/khanacademy

Bonus!

If you are someone who is more comfortable with books then you can refer to this compilation by FloydHub which does a pretty great job of enlisting all the books that are relevant for Data Science and Machine Learning. Some of them are freely available and some of them come with a little price.

We hope the resources mentioned above serve their purpose to the fullest and we sincerely hope to see you in our next events.

Happy developing!
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