How to become a Data Scientist?

To become one, be one, from now on …

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Quiet a few folks ask me about how to be a Data Scientist, how to switch career to AI (Artificial Intelligence) and ML (Machine Learning).

Best thing to be someone is to start playing that role. If you wish to be a Data Scientist, start playing that role from today. Although specifics varied but my tone of the suggestion to everyone has been to start playing that coveted role by doing specific things.

And here are the specifics

- Build foundation by doing courses and assignments in necessary mathematics, programming, Machine Learning, Deep Learning
- Do Kaggle completions from various domains like NLP (Natural Language Processing), Image Processing, Time-Series etc.
- Go deep in one area, say NLP, and apply it to problems from various domains such as legal, medical, etc.

Once you have such portfolio on GitHub, it helps you:

- Assess your own liking and grasp
- Talk about it during interview
- Public demonstration of where you stand on technical abilities

That's it, to get started at least.

Bottomline: Proxies are False. Your education, Your hometown, Your gender, does not matter, what matters is your GitHub repo., that's the real resume.

Here's a more specific, concise, step-by-step 6-month plan to become a data scientist using online free resources:

Month 1: Learn the Basics

- Start with an introduction to Python programming language using resources like Codecademy or DataCamp.
- Familiarize yourself with key libraries for data analysis and manipulation, such as NumPy and Pandas.
- Gain a solid understanding of fundamental statistics and probability concepts.

Month 2: Dive into Machine Learning

- Begin with Andrew Ng's Machine Learning course on Coursera, which provides a comprehensive introduction to the field.
- Implement machine learning algorithms using scikit-learn, an easy-to-use Python library.
- Practice with real-world datasets and work on small projects to apply your knowledge.

Month 3: Explore Data Visualization and Exploratory Data Analysis

- Learn data visualization techniques using Matplotlib or Seaborn libraries.
- Study exploratory data analysis (EDA) techniques to gain insights from datasets.
- Apply EDA techniques to various datasets, using resources like Kaggle or UCI Machine Learning Repository.

Month 4: Build a Strong Foundation in Deep Learning

- Take the Deep Learning Specialization on Coursera by deeplearning.ai to understand neural networks, convolutional networks, and recurrent neural networks.
- Practice implementing deep learning models using TensorFlow or PyTorch frameworks.
- Explore pre-trained models and transfer learning to solve complex problems.

Month 5: Enhance Your Skills with Big Data and Cloud Computing

- Learn about big data concepts, distributed systems, and Apache Hadoop and Spark frameworks.

- Get hands-on experience with cloud platforms like AWS or Google Cloud Platform (GCP) by exploring their data analytics and machine learning services.
- Build projects that involve processing and analyzing large datasets using distributed computing.

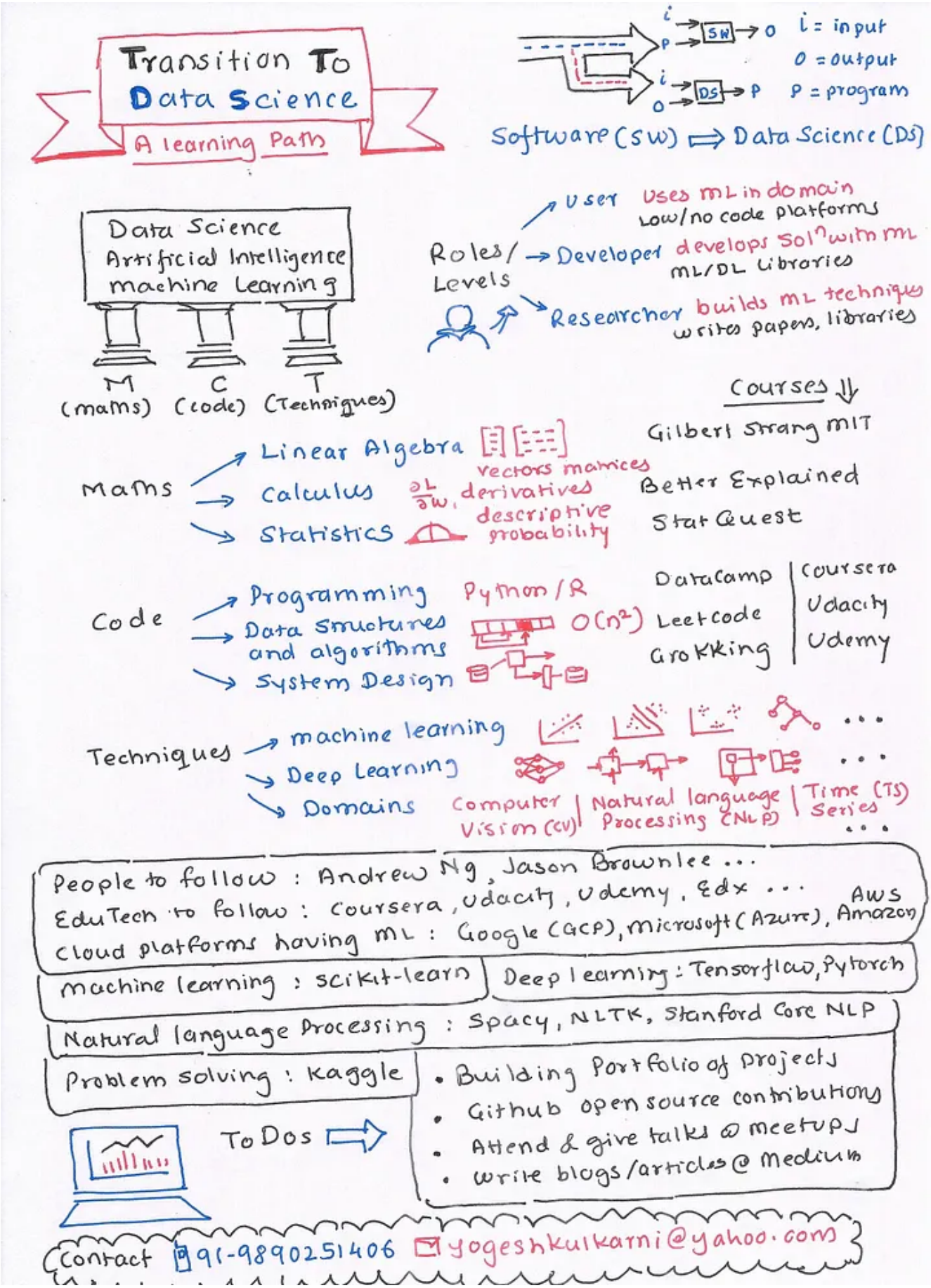
Month 6: Apply Your Knowledge and Build a Portfolio

- Work on a data science project from start to finish, showcasing your skills and problem-solving abilities.
- Participate in online competitions, such as Kaggle, to practice solving real-world data science problems.
- Create a personal website or a GitHub repository to showcase your projects and share your learning journey.

There are many online free resources available to learn data science. Some of the best resources include Codecademy, DataCamp, edX, Khan Academy, Coursera, Kaggle tutorials, and GitHub. Additionally, there are websites like Analytics Vidhya, Simplilearn and 365 Data Science that offer comprehensive courses and certifications in data science.

Remember to consistently practice coding, stay updated with the latest advancements in data science, and engage with the data science community through forums, blogs, and social media platforms.

Here is my sketchnote on the same topic



Sketchnote by the author

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