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How to break into Data Engineering in 2023



Let's look into
Actionable
Tips



Idea is **NOT** to learn
All the tools

But to build a base toolkit



If we demonstrate
good, **workable**
knowledge

Its a good indicator
that we will **Learn** other
tools / tech with the
Job



Learn the tools in given Sequence



1. Python and Git

Duration: ~1 month

1. Python is a interpreted, Object Oriented Programming Language
2. Git is a distributed version control System
3. We will use Python to **write** and **schedule** batch Data Pipelines.
4. As a **Proof of work**, publish code on Github so that we have something tangible to show in resume.



2. MySQL and SQL

Duration: ~ 1-2 month

1. We need a Data Store to **Read** data from and to **Write** data to. Workable understanding of a Database is really helpful
2. SQL is used to Query the Database
3. Learn the basic DDL, DML Operations in MySQL / Postgres.
4. Later you may add one NoSQL database to the mix e.g. Cassandra or MongoDB



3. Spark

Duration: ~ 2-3 month

1. Spark is a Distributed **Compute Technology** which provide APIs to transform data on a single or group of machines.
2. We can use Spark to write **Scalable / fault tolerant** Data Pipelines.
3. While Learning Spark, you're writing code in **Python**, using **SQL** for transformation (as spark SQL) and Pushing code in **GitHub**. So those Skills are still getting Practiced.



4. Airflow

Duration: ~ 1 month

1. Airflow is used to Develop, Schedule and Monitor **Batch Oriented workflows**
2. We will use Airflow to schedule Data Pipelines written on **Spark**
3. In Airflow we write DAGs, which are writing in **Python**.
4. Continue pushing code to **GitHub**



After 6 - 7 months, we are good
to start appearing for **interviews**



What about cloud e.g. AWS / Azure?

I will still say, we're good to appear
for Interviews



While giving interviews **identify the gaps** in what you know and what's being asked and work on it.

Optionally, you may start with AWS but it should not pause your interviews



All the BEST



Let me know in **Comments**, if you
have any questions
or you disagree



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That's a Wrap

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