

# Data Engineering Road Map(Links Are Underlined)

THINGS YOU SHOULD BE LEARNING ALONG THE WAY

CI/CD, Logging and Monitoring Tools, Debugging Tools(and the general skill set)

## 2.BUILD YOUR FIRST PROJECT

Build A basic Flask API. If you want you can connect it to a front-end or just use it for testing out responses.

## 4. BUILD YOUR SECOND PROJECT

1. Scrape an online source
2. Store encrypted data into SFTP
3. Create dimensional model
4. Pull data from SFTP and load into Data Warehouse(Don't worry too much about Workflows just yet)

## 1.CODING BASICS

1. [SQL](#)
2. [Python](#)
3. [Linux](#)(Also it wouldn't be bad to learn some server concepts like SFTP, Firewalls, etc)

## 3.LEARN ABOUT DATA WAREHOUSES

1. [Read Kimball's Data Warehouse Guide](#)
2. [Take The Basics To Data Warehousing Udemy](#)
3. [Read An Introduction: Is Data Engineering For You](#)

## 5.START LEARNING ABOUT TESTING

Unit testing, Integration Testing, etc  
[Check out TDD Course Like Unit TDD For Python](#)

## 5.LEARNING ABOUT SOME WORKFLOW TOOLS

[Launch Airflow with Docker.](#) This will allow you to get a high-level understanding of Docker while learning Airflow.

## 6.LEARN ABOUT CLOUD AND NOSQL

1. [Cloud Data Warehouses and ETLs using Googles Data Certificate or Azure's](#)
2. [Check Out FreeCodeCamps - Database Systems - Cornell University Course \(SQL, NoSQL, Large-Scale Data Analysis\)](#)

## 7. LEARN ABOUT STREAMING AND DISTRIBUTED SYSTEMS

1. [Consider checking out Andrea's videos Why Learn Kafka](#)
2. [Take Frank Kane's Course on Spark and Hadoop](#)
3. [Check Out StartDataEngineerings Projects](#)

## 8.START STUDYING FOR INTERVIEWS

[Start practicing some DS&A as well as SQL and data warehousing questions](#)

## 9.BUILD YOUR THIRD PROJECT

[Use a Cloud Managed Service like AWS Kinesis to stream data and pair it with a batch ETL tool that pulls from a second source.](#)

[You can store all the data in BigQuery and create some form of Data viz. This will also help you learn the next step](#)

## 10.LEARN ENOUGH UI/UX AND DASHBOARDING

[Pick 1 dashboarding tool and learn how it function. Also learn a little about dashboarding UI/UX.](#)

## 11.PICK SOME OF YOUR OWN

At this point, you probably have found some personal favorites in terms of tool types. Why not learn a little more about them?

If you liked Docker, learn about Kubernetes, if you liked Dashboarding, pick a different tool, if you like the cloud, then why not learn a new cloud stack?

## DOCUMENT YOUR WORK

[Check out Felipe Hoffa For Some Great Examples Of Documentation](#)

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