

# Diving into Data & AI

A Guide for Aspiring Data Scientists






1

# Learn the fundamentals of mathematics and statistics.

Start with the basics of mathematics and statistics. If you want to be good at your job, there are no shortcuts. Understanding the fundamentals of probability theory, algebra, statistics and optimization is key!





2

# Learn Programming

Study and practice a relevant programming language. I recommend starting with Python, focusing on libraries like Pandas, NumPy, scikit-learn, TensorFlow, and PyTorch.<sup>3</sup> There are plenty of free online courses available, but starting your own project is the most fun!






3

# Master dealing with data and get familiar with cloud concepts

Learn to clean, manipulate, and store data effectively. Do online courses on data fundamentals in the cloud. Microsoft offers free online courses and a free trial to try things out, but there are plenty of other courses and material available. Coursera has a diverse offering and generally good quality.






4

# Get your hands dirty!

Apply your knowledge to real-world projects. Build a portfolio that showcases your skills and share them on platforms like GitHub and LinkedIn.





5

# Continuous Learning

Stay updated with the latest advancements and trends. Participate in webinars, conferences, and workshops to broaden your knowledge and skills. And most importantly, try to learn from others around you!

