

Introduction

Statistics is a **key component** of a data scientist's toolbox. Unfortunately, courses and books on basic statistics rarely cover the topic from a data science perspective. The idea behind this series of lessons is to provide you a practical guide for understanding the statistical concepts that should be at the fingertips of every good data scientist.

In the data visualization lessons, we saw that we can easily obtain insights about the data using various types of plots. So where does statistics fit in?

At a high-level, statistics is about performing a *mathy* technical analysis of the data. It helps us build on the insights gained from our visualizations by giving us the ability to perform a fine-grained and in-depth data analysis. It helps us understand the structure of our data. Having this kind of understanding is important because we can then choose and apply data science techniques that are the best fit for that shape of data. This means we let the data to do the talking; we reach conclusions that are thorough and thought out instead of based on guess work.

Without further ado, let's dive into the world of statistics!



