**Resources**

### **Why a minimum sample of 30?**

* [**Central Limit Theorem (CLT)**](https://www.investopedia.com/terms/c/central_limit_theorem.asp): This article by Investopedia explains the Central Limit Theorem and briefly describes how it can apply to an analysis of a stock index.
* [**Sample Size Formula**](https://www.statisticssolutions.com/dissertation-resources/sample-size-calculation-and-sample-size-justification/sample-size-formula/): This article by Statistics Solutions provides a little more detail about why some researchers use 30 as a minimum sample size.

**Statistical Power:**

[**A Gentle Introduction to Statistical Power and Power Analysis in Python**](https://machinelearningmastery.com/statistical-power-and-power-analysis-in-python/)

**Open vs Public Datasets:**

[**Towards Data Science article**](https://towardsdatascience.com/is-there-a-difference-between-open-data-and-public-data-6261cd7b5389)

### **Business impact of dirty data**

* **Banking:** Inaccuracies cost companies between 15% and 25% of revenue **(**[**source**](https://sloanreview.mit.edu/article/seizing-opportunity-in-data-quality/)**).**
* **Digital commerce:** Up to 25% of B2B database contacts contain inaccuracies **(**[**source**](https://www.demandgen.com/dirty-data-what-is-it-costing-you/)**).**
* **Marketing and sales:** 8 out of 10 companies have said that dirty data hinders sales campaigns **(**[**source**](https://www.dqglobal.com/2011/05/04/obsolete-or-dirty-data/)**).**
* **Healthcare:** Duplicate records can be 10% and even up to 20% of a hospital’s electronic health records **(**[**source**](https://searchhealthit.techtarget.com/feature/Hospitals-battle-duplicate-medical-records-with-technology)**)**

**Cleaning Data**

* [**Top ten ways to clean your data**](https://support.microsoft.com/en-us/office/top-ten-ways-to-clean-your-data-2844b620-677c-47a7-ac3e-c2e157d1db19)**:** Review an orderly guide to data cleaning in Microsoft Excel.
* [**10 Google Workspace tips to clean up data**](https://support.google.com/a/users/answer/9604139?hl=en#zippy=)**:** Learn best practices for data cleaning in Google Sheets**.**

**Workflow automation:**

* **Towards Data Science’s** [**Automating Scientific Data Analysis**](https://towardsdatascience.com/automating-scientific-data-analysis-part-1-c9979cd0817e)
* **MIT News’** [**Automating Big-Data Analysis**](https://news.mit.edu/2016/automating-big-data-analysis-1021)
* **TechnologyAdvice’s** [**10 of the Best Options for Workflow Automation Software**](https://technologyadvice.com/blog/information-technology/top-10-workflow-automation-software/)

**SQL:**

* **LearnSQL’s blog,** [**What Is a SQL Dialect, and Which One Should You Learn?**](https://learnsql.com/blog/what-sql-dialect-to-learn/)
* **Software Testing Help’s article,** [**Differences Between SQL Vs MySQL vs SQL Server**](https://www.softwaretestinghelp.com/sql-vs-mysql-vs-sql-server/)
* **Datacamp’s blog,** [**SQL Server, PostgreSQL, MySQL... what's the difference? Where do I start?**](https://www.datacamp.com/community/blog/sql-differences)
* **Note that there is an error in this blog article. The comparison table incorrectly states that SQlite uses subqueries instead of window functions. Refer to the** [**SQLite Window Functions**](https://sqlite.org/windowfunctions.html) **documentation for proper clarification.**
* **SQL Tutorial’s tutorial,** [**What is SQL**](https://www.sqltutorial.org/what-is-sql/)

**Query and Filter in Sheets:**

[**Google support page for the QUERY function**](https://support.google.com/docs/answer/3093343?hl=en)

[**Google support page for the FILTER function**](https://support.google.com/docs/answer/3093197?hl=en)

## **What is CareerCon?**

Kaggle’s CareerCon is an annual and free digital event whose aim is to help new data analysts land their first job in the field. Recorded sessions from CareerCon offer tons of firsthand knowledge and expert advice from top data analysts and hiring managers through seminars, coding workshops, and resume advice.

## **CareerCon 2019 resources**

Browse the [f**ull sessions for CareerCon 2019**](https://www.youtube.com/playlist?list=PLqFaTIg4myu-npFrYu6cO7h7AI6bkcOlL).

Be sure to check out [**Portfolio and resume analysis with data science hiring managers**](https://www.youtube.com/watch?v=cBbYhhH399c&list=PLqFaTIg4myu-npFrYu6cO7h7AI6bkcOlL&index=8)**:** A panel of hiring managers discusses what they are seeking in candidates and how they examine different resumes submitted by job seekers like you. Learn from the mistakes of others and get ahead of the curve by adapting your resume/portfolio to avoid the noted mistakes and capitalise on what others have done well in their resumes.

## Highlights from CareerCon 2018

[**How to build a compelling data science portfolio and resume**](https://www.youtube.com/watch?v=xrhPjE7wHas&list=PLqFaTIg4myu-dNobDHQZPrD2wH27PthCG)**:** A hiring manager from Quora reviews actual resumes from data science candidates and gives candid feedback on areas of improvement. Learn what to include and omit from your resume and portfolio as well as formatting tips. This offers a great first hand look into what hiring managers are seeking when reviewing your resume and portfolio.

[**Overview of the Data Science Interview Process**](https://www.youtube.com/watch?v=X6orAXDIrds&list=PLqFaTIg4myu-dNobDHQZPrD2wH27PthCG&index=5): Hiring managers at Google discuss typical data science interviews, including the soft and hard skills you will want to prioritize. You will get a better sense of the interview process from both sides, and better prepare yourself for what to expect when interviewing for a data science role.

[**Live Breakdown of Common Data Science Interview Questions**](https://www.youtube.com/watch?v=aXUsrKPTBvY&list=PLqFaTIg4myu-dNobDHQZPrD2wH27PthCG&index=6)**:** Watch a mock interview to see how a Kaggle data scientist answers questions during a data science interview. The video also includes live coding! This video is great preparation for some of the most commonly asked data science interview questions.

[**Am I a Good Fit? Identifying Your Best Data Science Job Opportunities**](https://www.youtube.com/watch?v=0W0Zrc-m5r8&list=PLqFaTIg4myu-dNobDHQZPrD2wH27PthCG&index=2)**:** Ever wonder where you will fit in for your future career? This chat with Jessica Kirkpatrick, an intelligence manager, gives you a great breakdown of the different types of categories within the data science job market, the different types of job opportunities you may notice, and how you can frame previous work and skills from another career to fit into the data science job market.

[**Real Stories from a Panel of Successful Career Switchers**](https://www.youtube.com/watch?v=iP0Fxg4oqUQ&list=PLqFaTIg4myu-dNobDHQZPrD2wH27PthCG&index=8)**:** Are you switching careers? Awesome! Learn from people who were in the same position as you and successfully switched their careers into data science. This panel discusses the different experiences in their careers and life that shifted them into the data science field