Tools mentioned repeatedly

The "Must-Haves"

- **Python:** You need to be solid with **Pandas** and **NumPy**. It's the industry standard.

- **SQL:** Almost every job description mentions this. You have to know how to JOIN and GROUP BY.

- **Dashboards:** Static charts aren't enough. Learning **Tableau** or **Power BI** shows you can build tools for others to use.

- **Excel:** Don't ignore it. Many teams still rely on **Pivot Tables** and XLOOKUP.

Required skills

Core Skills

- **Data Cleaning:** This is 80% of the job. Show you can fix messy, broken datasets.

- **Stats:** You need to understand **P-values**, **Hypothesis Testing**, and distributions.

- **Machine Learning:** Know your way around **Scikit-Learn** (Regression, Classification, and Clustering).

- **Git:** Knowing how to commit and push properly is a basic requirement for any dev team.

- **A/B Testing:** This is huge for product roles—figuring out if a change actually worked.

The Extras (To stand out)

- **Cloud:** Getting some experience with **AWS** or **Google Cloud** helps a lot.

- **Big Data:** Understanding **Spark** or **Databricks** makes you look more senior.

- **Communication:** Being able to explain a technical chart to a non-technical manager is a major "soft skill" recruiters look for.