

STATISTICS: NOT JUST FOR ACADEMICS ANYMORE



Jaya Ghosh

Have you ever thought that ‘Statistics’ is only meant for scientists or students trying to get good grades?

If so, think again.

‘Statistics’ is all around you and plays a bigger role in your daily life than you think. From morning news reports to the latest poll numbers to the chance of rain in the weather forecast to your favourite baseball player's batting average, statistics shape our understanding of the world.

While the topic may seem boring in high school math classes, statistics is anything but boring or irrelevant. Once you know what to look for, you'll find the impact of statistics everywhere. **So get ready to become a master of detecting statistics - your new superpower of detecting statistics is about to awaken!**

‘Statistics’ are used to analyze data and identify patterns that aid decision-making. Companies use statistics to determine the best prices for items, find target customers, and make data-driven decisions. Statistics also help governments allocate resources and make policy decisions.

In your own life, you probably consider statistics when making a variety of decisions, big and small, like –

- Compare nutritional information to choose healthier cereals.
- Check the weather forecast to decide what to wear.
- Check ratings and reviews to choose new TV shows to watch.
- When deciding to move or travel, consider statistics like the cost of living or crime rates.





Resources to Improve Your Statistical Skills

Online Video Courses

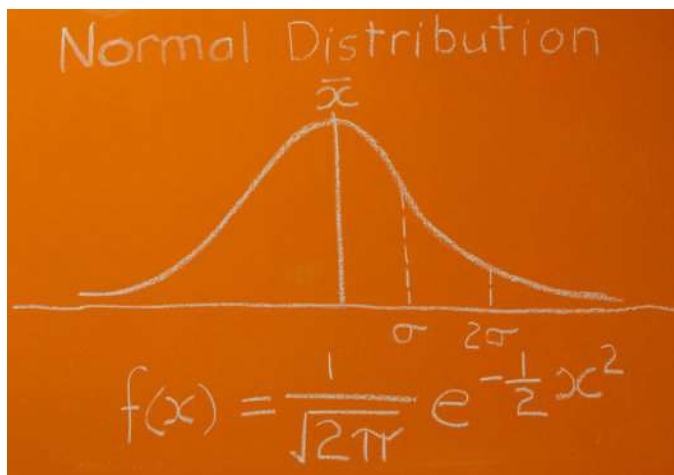
Platforms like Khan Academy, Coursera, and EdX offer video courses on statistics and data analysis. Many of them can be completed at your own pace and are free. In these interactive courses, you'll learn statistical concepts and methods through examples and exercises. Short videos break down complex topics into easy-to-understand explanations.

Infographics

An infographic is a visual representation of data or statistics designed to convey information clearly and quickly. Sites like Visual Capitalist, Information is Beautiful, and Our World in Data offer stunning infographics on business, health, technology, and more. Infographics make statistics easy to understand and even fun to explore. Studying how to visualize data is an education in itself.

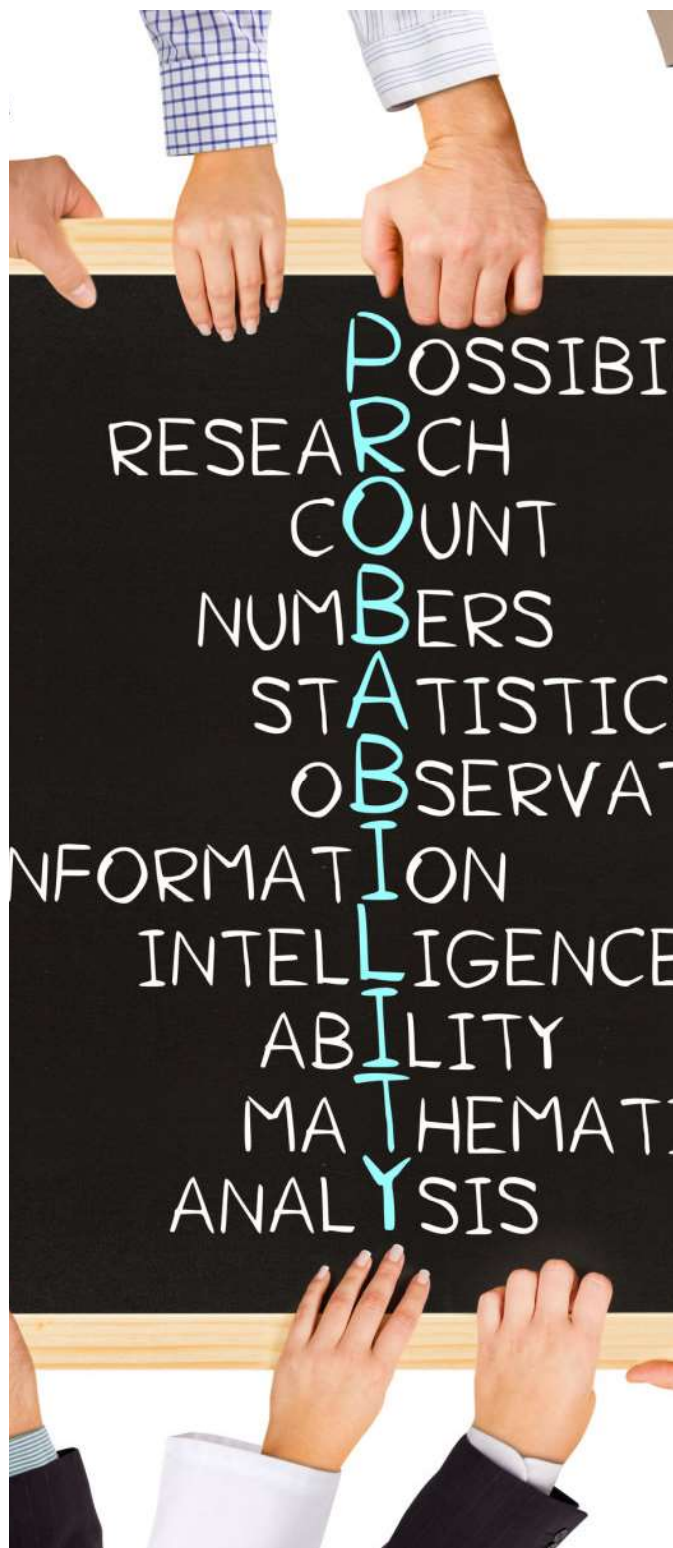
Data Journalism

Many news outlets now have data journalism teams that analyze statistics and trends to discover and explain stories. Follow publications like FiveThirtyEight, The New York Times' The Upshot, and The Guardian's Data Blog. Not only will you learn statistical methods and critical thinking, but you'll also understand important issues through the lens of data.



Online Courses

For those who want a more structured course, Massive Open Online Courses (MOOCs) offer in-depth courses in statistics, data analysis, and visualization. Top universities such as Harvard, MIT, and Cornell offer MOOCs covering everything from basic statistics to machine learning. Although the courses are more demanding, they provide a comprehensive education in statistics that you can complete at your own pace.





Industries with the highest demand for statisticians and data scientists include:

- Technology companies to analyze user data and build recommendation algorithms.
- Healthcare organizations for study of disease patterns, evaluate treatments, and improve patient outcomes.
- Financial Services to detect fraud, predict economic trends, and optimize investment strategies.
- Retail and e-commerce for understanding customer behaviour, personalize the shopping experience, and increase sales.
- Government Agencies for making policy decisions, track demographic indicators, and enhance national security.



Conclusion:

So, there you have it. After all, statistics aren't just for academics and number crunchers.

Whether you want to determine the best time to avoid traffic, choose the safest mode of transportation, find the most reliable product reviews, or make good financial investments, statistics can help you. It's time now to go ahead and embrace your inner statistician. The world is full of data—you just have to open yourself up to it. With ample resources at your disposal, you no longer have an excuse not to improve your statistical skills. Choose the resources that fit your needs and learning style, and start building your statistics skills today. Your ability to understand and question the numbers behind the news will be invaluable.



Note: In the next issue, we will explore the key skills and training required to become a statistician. We will also explore career opportunities for statisticians.

The author is an educationist and Maths Curriculum Consultant who has acquired 16+ years of experience in the education sector. She has worked on national (CBSE and ICSE) and international (Singapore, USA, Australia and IB boards etc.) school curriculum development, collaborating with renowned educational publishers and Edtech companies. Her bestselling book "Maths Olympiad for IMO Aspirants" is just one of her many accomplishments. Additionally, she is a Mathematics Educator on YouTube with a passion for inspiring children and instilling a love for mathematics. Contact jaya.malik@gmail.com to learn more.

Link: <https://www.youtube.com/@jayaghoshmaths>