## **Introduction to Statistics**

Course Duration: 12<sup>th</sup> to 16<sup>th</sup> June, 2023

## A brief introduction of the course offered:

This course offers an easy introduction to the fundamentals of statistical analysis. It focuses on building an intuitive understanding of essential concepts such as the normal distribution, central limit theorem, hypothesis testing, p-values, parametric and non-parametric testing, and statistical tests such as t-tests and ANOVAs. Rather than a mathematical treatment, the course will use practical examples and simple explanations to maximize engagement and retention of key concepts among students with basic or no understanding of the subject.

## Take away message from the offered course:

- Prioritize intuitive and practical understanding of key concepts over mathematical formulations and proofs
- Understand why to use a particular statistical test instead of which one to use for any dataset
- Correct common misconceptions prevalent among students
- Thoroughly understand statistical analysis sections in research papers

## **Instructor bio:**



Ritayan Mitra is an assistant professor of Educational Technology at IIT Bombay. His research involves understanding learning processes in various online and offline environments. He investigates learning processes from an empirical perspective and uses both quantitative and qualitative data. He enjoys various art forms such as music, poetry, and photography.