

Basics of Statistics and Probability

🕒 430 Min

✅ Completed

Revisit Course

Statistical thinking plays a central role in data science. Data scientists use statistical thinking to design data collection, derive insights, obtain supporting evidence for making decisions, and to construct models for predicting future trends. This course provides a foundation for understanding the relationship between data and solving data problems.

TOPICS

PRE-REQUISITES

✓ Statistics and Probability

✓ Statistics and Data

✓ Permutations and Combinations

✓ Statistics - Scenarios

✓ Probability and Essentials

✓ Rules of Probability

✓ Random Variables

✓ Expected Value and Variance

✓ Discrete Distribution

✓ Continuous Distribution

✓ Naive Bayes Theorem

✓ Hypothesis Testing

✓ General Hypothesis Testing

Basics of Statistics and Probability - Course Overview

Welcome to the course on Basics of Statistics and Probability. This course delves into the following concepts:

- Statistics
- Probability and Essentials
- Rules of Probability
- Random Variables
- Expected Value and Variance
- Distribution Function
- Hypothesis Testing

✓ Chi-squared Test

✓ Course Summary - Statistics and Probability

✓ Final Assessment - Statistics and Probability

Statistics and Probability Katabasis

✓ Completed

🕒 130 Min

Revisit Course

Statistical thinking plays a central role in data science. Data scientists exercise statistical thinking to design data collection, derive insights, obtain supporting evidence for making decisions, and construct models for predicting future trends. This course will provide a foundation for understanding the relationships in data and solving data problems.

TOPICS

PRE-REQUISITES

- ✓ Reconnoitre Statistics
- ✓ Delve into Probability
- ✓ Rules and Theorem
- ✓ Random Variables Expedition
- ✓ Expected Value and Variance of Random Variables
- ✓ Endeavor in Python
- ✓ Statistics and Probability Katabasis - Course Summary
- ✓ Statistics and Probability Katabasis - Final Assessment

Statistics and Probability Katabasis - Course Overview

Living in an information era where we can access information and knowledge easily, Statistics keep us updated about the happenings in the world around us.

Statistics is the grammar of Science.

Join us and enjoy the odyssey to Statsville!

Advanced Statistics and Probability

✓ Completed

🕒 140 Min

Revisit Course

We are advancing to the world of voice operated personal assistants and self driving vehicles! Certainly behind these newly emerging technologies are the fields of computer science where we discuss about Artificial Intelligence and Machine Learning. The concepts of Statistics and Probability are very much important when exploring these domains! Hence, we will discuss about concepts which comes from statistical background and are very useful while learning Machine Learning!

TOPICS

PRE-REQUISITES

- ✓ Multivariate Data Analysis
- ✓ Multivariate Data Analysis - Methods
- ✓ Cumulative Distribution Function
- ✓ Kernel Density Estimation
- ✓ Prior and Posterior Probability
- ✓ Markov Process
- ✓ Advance Statistics and Probability Summary
- ✓ Advanced Statistics and Probability - Final Assessment

Advanced Statistics and Probability - Course Overview

Kernels are like small functions known as "window functions" whose value can be found only within the interval. Outside the interval, its value becomes "zero".

It is used in non parametric density estimation for kernel density estimation to estimate random variables density functions!