Statistics

How to Learn Statistics for Data Science As A Self Starter

Basics Stats

Probability

- 1. Introduction to Basic Terms
- 2. Variables
- 3. Random Variables
- Population, Sample, Population Mean, Sample Mean
- 5. Population Distribution, Sample Distribution and Sampling Distribution
- 6. Mean, Median , Mode
- 7. Range
- 8. Measure Of Dispersion
- 9. Variance
- 10.Standard Deviation
- 11. Gaussian/Normal Distribution

Intermediate Stats

- 12. Standard Normal Distribution
- 13. Z score
- 14. Probability Density Function
- 15. Cumulative distribution function
- 16. Hypothesis Testing
- 17. Many different plotting graphs
- 18. Kernel Density Estimation
- 19. Central Limit Theorem
- 20. Skewness of Data

Covariance

Pearson Correlation Coefficient

Spearman Rank Correlation Coefficient

Importance of Correlation

Hypothesis Testing

Null Hypothesis

Alternative Hypothesis

Understanding Hypothesis testing

(T-test,Chi square test, p values)

Advanced Stats

- 21. Q-Q plot
- 22. Chebyshev's inequality
- 23. Discrete And Continuous Distribution
- 24. Bernoulli And Binomial Distribution
- 25. Log Normal Distribution
- 26. Power Law Distribution
- 27. Box Cox Tranform
- 28. Poisson Disstribution
- 29. Application Of Non Gaussian Distribution