Statistical Inference

In the previous video there is a example fitting a distribution and using that fit to make probability statements. Although simple, this is a powerful tool at your disposal to communicate important aspects of the data. This concept can be extended to conditional probability statements as well.

We also introduce the notion of the bootstrap as a tool to provide confidence intervals around an estimate. The notion of confidence in an estimate is extended in Bayesian estimation example. An <u>analytical solutions</u>, approach is used in the example via a <u>conjugate prior</u>. This A/B testing example when viewed through the Bayesian lens is closely related to solutions to the <u>multi-armed bandit problem</u>.

To learn more about Bayesian solutions th multi-armed bandit problem