From Data to Knowledge*

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Abstract

In this talk, we address several aspects around the question of how to interpret data. We start by recalling the logic of research and its defining demarcation line: replicability. We discuss why research may not be replicable and how to navigate past or future replication crises.

We emphasize the importance of quantification and how to properly use p-values. Finally, an odds form of Bayes' theorem, which is more intuitive and easier to apply than the original formulation, allows us to incorporate new data into our existing knowledge with relative ease.

Declaration on Generative AI

The author has not employed any Generative AI tools.

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