A Bayesian-analysis app

for prediction, hypothesis testing, bias examination, and more

with "small data"

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A *p*-value, or statistical significance, does not measure the size of an effect or the importance of a result.

By itself, a *p*-value does not provide a good measure of evidence regarding a model or hypothesis.

it is time to stop using the term "statistically significant" entirely. Nor should variants such as "significantly different," "$p < 0.05$," and "nonsignificant" survive, whether expressed in words, by asterisks in a table, or in some other way.

Bayesian general-purpose app

✓ *Any combination of continuous & categorical quantities*

✓ *Directly interpretable predictions* *(eg "75% of the full population will have value X")*

✓ *Uncertainty quantification*

✓ *Any kind of conditional predictions,* *eg* $P(X \mid Y, Z)$ *or* $P(Z \mid X, Y)$ *or* $P(X \mid Y)$ *or* $P(X)$

⇒ *Bias examination*

✓ *Only meaningful input from user* *("Which dependencies are you interested in?")*

✓ *Non-parametric*

✓ *No need of training/validation/test splits or cross-validation*

✗ *Only 'small data'* *(#quantities^2 × #data ~ 10 000)*

✗ *Not appropriate for 2D/3D kind of data* *But ✓OK with time-dependent data*