

Testing Reasoning Software. A Bayesian Way

Bertil Rolf

School of Management

Blekinge Institute of Technology, Ronneby, Sweden

www.athenasoft.org; <mailto:bro@bth.se?subject=Athens>

Abstract

Is it possible to supply strong empirical evidence for or against the efficiency of reasoning software?

There seems to be a paradox concerning such tests. On the one hand, acceptance of reasoning software is slow. There seems to be room for skepticism among decision makers and stakeholders concerning its efficacy. On the other hand, teachers-developers of such software (the present author being one of them) think the effects of such software is obvious.

In this paper, I will show that these two strands are compatible. Both extremes can be true, namely if we assume (1) that the testing methods differ, (2) that the facilities of observation differ and (3) that the testing relies on contextual assumptions. In particular, I will show that developers of reasoning software can, in principle, know the efficacy of certain design solutions while other decision makers find themselves lacking evidence for efficacy.