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Title: What is the error margin of your signature analysis?

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Case Report

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Highlights

- Assigning a likelihood ratio in a discipline where there are no tabulated data.
- Practical way of addressing the question of error margin in a given case.
- Example of how one can present the Bayesian approach at a Court hearing.

Abstract

In our experience, it seems to become more and more common for mandating authorities or parties to ask forensic signature examiners to quantify the degree of certainty of their conclusion regarding a signature analysis. This paper reports the likelihood ratio approach followed by examiners to answer such a question, in a case where the Court asked whether a questioned signature was written, or not, by Mr Jones. The Court also required an assessment of the error margin of the signature analysis. This question was answered using Bayes' theorem (i.e., a full Bayesian approach) and this paper seeks to show that such an approach can be used despite the popular belief that Bayes' theorem is beyond what courts may accept.

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