

Forensic Firearm Identification: A Comparative Study of Human Judgment vs. Machine Algorithms

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Introduction

Writing surveys and studies that consolidate previous research is essential for gaining a deeper understanding of a specific field and identifying areas that require further exploration. References for these literature reviews are typically sourced from databases such as Scopus, PubMed, Google Scholar, or Web of Science. The use of these databases as repositories for academic papers has grown significantly in recent years. However, one unintended consequence of the increasing number of publications on specific topics is the challenge of managing this vast amount of information in a way that fosters a deep, interconnected understanding of the field. A possible solution to this issue is to analyze the entire body of research and outcomes within a particular area using bibliometric and scientometric methods [1].

Description

Logical ordering began in the mid-1900s with for instance the principal distribution of the Substance Modified works in 1907 by the American Synthetic Culture, and with nonstop development in the quantity of examination yields, different requesting and grouping techniques was accordingly evolved. The most generally utilized connections incorporate; Lotka's law of logical efficiency, Zipf's law of word event and Bradford's law of dispersing. The utilization of these and different strategies have prompted the meaning of terms presently connected with the investigation of the writing and the data it incorporates. One such term is bibliometrics, frequently credited to Pritchard, who depicted it as "the use of numerical and measurable strategies to books and different media of correspondence". Another notable term commonly introduced as an equivalent of bibliometric is scientometric, and further verifiable conversation on the expression "scientometric" can be found in. Bibliometric and scientometric techniques are firmly related and frequently vague as the two of them follow similar ideas; in any case, they contrast by the way they are credited: bibliometrics is ascribed to library and archive science while scientometric is ascribed to the study of science [2].

Many examinations have detailed research measurements for various data sets and the choice to choose one explicit data set to play out a bibliometric investigation might be because of the exploration point, discipline, the mentioned data, or the openness of the examination distributions. Albeit a few distinct data sets give data on the records they contain, there is no widespread response concerning which reference data set to use for distribution searches and investigation of some random point. The most usually known reference data sets are Scopus, Web of Science, Google Researcher and PubMed, and a few examination studies have been accounted for considering them

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in contrast to one another; see for instance Falagas et al. or Harzing and Alakangas. Other reference data sets were assessed by Gusenbauer and Haddaway. As well as extending available materials, the substance of the information bases can likewise be discipline explicit. PubMed essentially centers around biomedicine and wellbeing science while Scopus, Web of Science, and Google Researcher are multidisciplinary. While the subject inclusion is a fundamental calculate settling on the choice of a reference data set, the product limit of the outcomes is likewise of importance as this can be a restricting component while managing enormous datasets. PubMed grants to download the subtleties for a limit of 10,000 references on the double, Scopus permits a full commodity for up to 2000 references while for Web of Science it is only 500 references [3].

In scientific science, the choice of a reference data set to recover data is directed by the openness of the distributions. Scholarly scientists by and large approach distributions through their establishments' memberships while criminological science and other space pertinent specialists might embrace writing searches and see a more restricted scope of materials. To work with and share the most recent progressions in measurable exploration, reports from the INTERPOL Worldwide Criminological Science Administrators Discussion (IFSMS) frame and sum up significant areas important to scientific science experts across the INTERPOL part nations. The data contained in the INTERPOL IFSMS reports should be visible as corresponding to, for instance, reference data sets, however their broad items remain introduced as writing surveys and these are trying to handle data from, see for instance [4].

The utilization of distribution measurements, presently not notable inside the criminological science space, is acquiring interest with the turn of events and improvement of reference data sets and specifically is being seen as basic devices in the investigation of connections across the writing. The utilization of a scientometric way to deal with the logical writing offers more objectivity than a conventional writing survey. This work expands on these establishments and spotlights on filaments created from materials and pieces of clothing, utilizing a bibliometric way to deal with review the pertinent scientific science writing where the pursuit results of both Scopus and Web of Science are joined to produce a more exhaustive rundown of references [5].

Conclusion

The current concentrate additionally uncovered that the scientometric approach is a valuable device for distinguishing patterns in filaments in criminological science yet additionally recognizing holes in information to assist researchers with making new exploration projects. The blend of references from two data sets (i.e., Scopus and Web of Science) exhibited a significant cross-over in the specific subject yet in addition uncovered contrasts in ordering, concerning model some criminological science diaries were listed in both reference data sets however not really similarly addressed. The outcomes showed that cross-referring to yield information from different data sets is of advantage in creating an exhaustive dataset.

Acknowledgement

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Conflict of Interest

None.

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