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Use of Machine Learning in Financial Fraud Detection: A Review

Sumukh Uday Rabade

Student, Department of Computer Engineering NBN Sinhgad School of Engineering, Pune, Maharashtra, India sumukhrabade@gmail.com

Abstract: Financial factors are manipulated to produce fraudulent financial activities, which are produced by overvaluing revenues, assets, sales, and profits while undervaluing costs, liabilities, or losses. Traditional approaches, such as manual auditing and inspections, are expensive, inaccurate, and timeconsuming for detecting such bogus statements. Auditors can analyse several financial statements with the use of intelligent methods. In this paper, we thoroughly analyse and summarise the body of knowledge on detecting intelligent fraud in corporate financial accounts. The exploration of machine learning and data mining techniques, as well as the many datasets under investigation for financial fraud detection, is the specific emphasis of this paper. This study provides insight on selecting appropriate approach with different types of datasets while taking into consideration the trade-offs of speed, accuracy, and cost.

Keywords: Fraud detection, financial statement, machine learning, literature survey, machine learning algorithms.

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