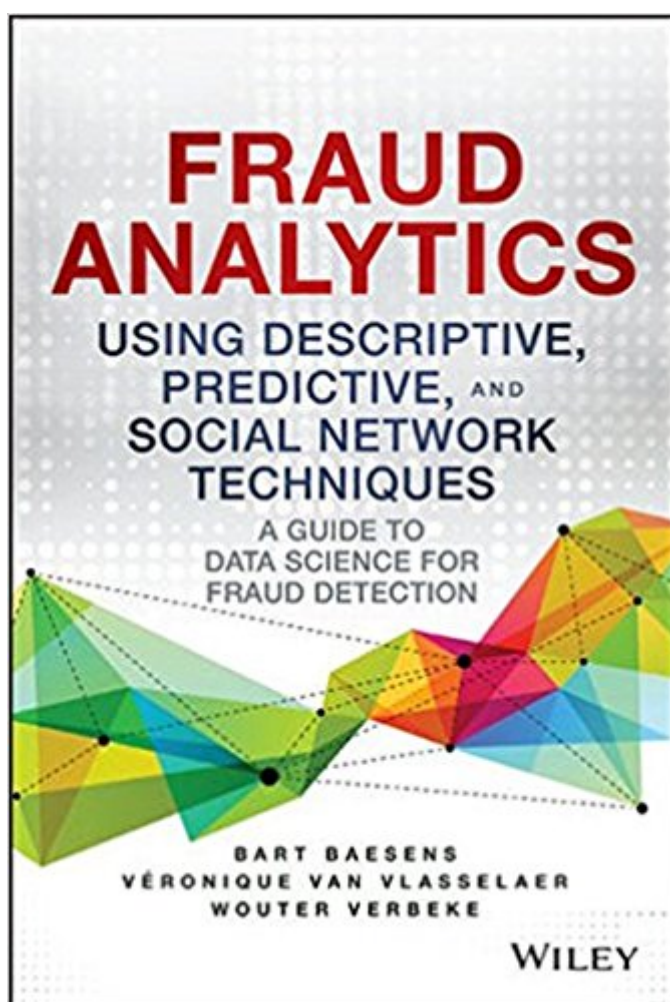The book was found

Fraud Analytics Using Descriptive, Predictive, And Social Network Techniques: A Guide To Data Science For Fraud Detection (Wiley And SAS Business Series)

Synopsis

Detect fraud earlier to mitigate loss and prevent cascading damage Fraud Analytics Using Descriptive, Predictive, and Social Network TechniquesÃ Â is an authoritative guidebook for setting up a comprehensive fraud detection analytics solution. Early detection is a key factor in mitigating fraud damage, but it involves more specialized techniques than detecting fraud at the more advanced stages. This invaluable guide details both the theory and technical aspects of these techniques, and provides expert insight into streamlining implementation. Coverage includes data gathering, preprocessing, model building, and post-implementation, with comprehensive guidance on various learning techniques and the data types utilized by each. These techniques are effective for fraud detection across industry boundaries, including applications in insurance fraud, credit card fraud, anti-money laundering, healthcare fraud, telecommunications fraud, click fraud, tax evasion, and more, giving you a highly practical framework for fraud prevention. It is estimated that a typical organization loses about 5% of its revenue to fraud every year. More effective fraud detection is possible, and this book describes the various analytical techniques your organization must implement to put a stop to the revenue leak. Examine fraud patterns in historical data Utilize labeled, unlabeled, and networked data Detect fraud before the damage cascades Reduce losses, increase recovery, and tighten security The longer fraud is allowed to go on, the more harm it causes. It expands exponentially, sending ripples of damage throughout the organization, and becomes more and more complex to track, stop, and reverse. Fraud prevention relies on early and effective fraud detection, enabled by the techniques discussed here. Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques helps you stop fraud in its tracks, and eliminate the opportunities for future occurrence.

Book Information

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Customer Reviews

The sooner fraud detection occurs the better—as the likelihood of further losses is lower, potential recoveries are higher, and security issues can be addressed more rapidly. Catching fraud in an early stage, though, is more difficult than detecting it later, and requires specific techniques. Packed with numerous real-world examples, Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques authoritatively shows you how to put historical data to work against fraud. Authors Bart Baesens, VÃƒÂ©ronique Van Vlasselaer, and Wouter Verbeke expertly discuss the use of unsupervised learning, supervised learning, and social network learning using techniques across a wide variety of fraud applications, such as insurance fraud, credit card fraud, anti-money laundering, healthcare fraud, telecommunications fraud, click fraud, and tax evasion. This book provides the essential guidance you need to examine fraud patterns from historical data in order to detect fraud early in the process. Providing a clear look at the pivotal role analytics plays in managing fraud, this book includes straightforward guidance on: Fraud detection, prevention, and analytics Data collection, sampling, and preprocessing Descriptive analytics for fraud detection Predictive analytics for fraud detection Social network analytics for fraud detection Post processing of fraud analytics Fraud analytics from an economic perspective Read Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques for a comprehensive overview of fraud detection analytical techniques and implementation guidance for an effective fraud prevention solution that works for your organization.

THE DEFINITIVE GUIDE TO THE DETECTION AND PREVENTION OF FRAUD THROUGH DATA ANALYTICS Catch fraud early! Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques shows you how with a thorough overview of how to prevent losses and recover quickly as well as the security issues you need to address now. Exploring how auditors, corporate security prevention managers, and fraud prevention professionals can stay one step ahead of cyber criminals, this book addresses the different types of analytics in detecting fraud, including descriptive analytics, predictive analytics, and social network analysis. Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques offers a current, state-of-the-art detection

and prevention methodology, describing the data necessary to detect fraud. Taking you from the basics of fraud detection data analytics, through advanced pattern recognition methodology, to cutting-edge social network analysis and fraud ring detection, this book presents essential coverage of: The fraud analytics process model Big data Break point/peer group analysis Anomaly detection Linear/logistic regression Neural networks Ensemble methods Social network metrics Bipartite graphs Community mining Visual analytics Model monitoring and backtesting Insightful and clearly written, this hands-on guide reveals what you need to know about fraud analytics and the secret to putting historical data to work in the fight against fraud.

I've written reviews for several books on , and not until I reviewed this book were any of my reviews ever rejected. This is my second attempt to review this book.Contrary to the review by Gerard Meester (who from his dearth profile appears may have an affiliation with one or more of the authors), this is far from "the best book" available to practitioners in fraud detection and prevention using Big Data. The best book in this area is hands downÃ Â Financial Forensics Body of Knowledge (Wiley Finance), which covers hundreds of analytical techniques for fraud detection in a manner understandable to most people with a modicum of educationTo its credit, the book does cover some rather esoteric statistical fraud detection methods not covered in other texts, but it provides only brief coverage of these advanced statistical techniques, apparently for those already learned in the data sciences.To its detriment, the book does not provide a clear presentation of the application of the advanced formulae in a manner that is understandable to the uninitiated. It would be very nice to see the authors provide this material in a manner that is more detailed so that the reader can work through the methods without the need to resort to the plethora of references at the end of each chapter in order to gain an understanding of the material.

Great book - very detailed in the applications of fraud analytics.

Great book!

I work as a Data Scientist for a government organisation in the field of law enforcement.This is the best book I read so far targeted to practioners in fraud detection and prevention using Big Data.It is very well written, and contains both chapters on predictive datamodelling and on social network analysis.And the way these both techniques can be combined to predict fraud. I specially liked the chapter on Social Network Analysis.It is applicable in my field, with networks containing both

possibile fraudulent companies and individiuals responsible for the behaviour of the companies they are involved in as employers.The book contains a very practical chapter on descriptive analysis and the way outliers can be analysed to discover possible fraudulent subjects.I enjoyed the chapter about post-processing. In my organisation we are still finding out what is the best way to evaluate the strength of our predictive models, and this chapter is very helpful. It gives for example advice how to backtest a model which is already used in practice.The book is written in a way that people without a heavy mathematical background can understand it. At the same time it is challenging and introducing a lot of the latest techniques in the field of fraud detection.I recommend this book to everybody who is interested in making sense of big datasets to discover fraud. The next editions deserves a colour print in my opinion.

Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques: A Guide to Data Science for Fraud Detection (Wiley and SAS Business Series) Analytics: Data Science, Data Analysis and Predictive Analytics for Business (Algorithms, Business Intelligence, Statistical Analysis, Decision Analysis, Business Analytics, Data Mining, Big Data) Analytics: Business Intelligence, Algorithms and Statistical Analysis (Predictive Analytics, Data Visualization, Data Analytics, Business Analytics, Decision Analysis, Big Data, Statistical Analysis) Data Analytics: Applicable Data Analysis to Advance Any Business Using the Power of Data Driven Analytics (Big Data Analytics, Data Science, Business Intelligence Book 6) Data Analytics: What Every Business Must Know About Big Data And Data Science (Data Analytics for Business, Predictive Analysis, Big Data Book 1) Data Analytics and Python Programming: 2 Bundle Manuscript: Beginners Guide to Learn Data Analytics, Predictive Analytics and Data Science with Python Programming Big Data For Business: Your Comprehensive Guide to Understand Data Science, Data Analytics and Data Mining to Boost More Growth and Improve Business - Data Analytics Book, Series 2 Fraud Data Analytics Methodology: The Fraud Scenario Approach to Uncovering Fraud in Core Business Systems (Wiley Corporate F&A) Analytics: Data Science, Data Analysis and Predictive Analytics for Business Credit Risk Analytics: Measurement Techniques, Applications, and Examples in SAS (Wiley and SAS Business Series) Data Analytics For Beginners: Your Ultimate Guide To Learn and Master Data Analysis. Get Your Business Intelligence Right Ã¢â ¬â œ Accelerate Growth and Close More Sales (Data Analytics Book Series) Survey of Big Data Analysis Using Predictive Analytics Algorithms and Its Use Network Marketing: Go Pro in Network Marketing, Build Your Team, Serve Others and Create the Life of Your Dreams - Network Marketing Secrets Revealed, ... Books, Scam Free Network Marketing Book 1) Data Science and Big Data Analytics: Discovering, Analyzing,

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