1. Record Nr. UNINA9910548176803321 Autore Sekar Maris **Titolo** Machine learning for auditors: automating fraud investigations through artificial intelligence / / Maris Sekar Pubbl/distr/stampa New York, New York: ,: Apress Media LLC, , [2022] ©2022 **ISBN** 1-4842-8051-2 Edizione [[First edition].] Descrizione fisica 1 online resource (241 pages) Disciplina 657.0285631 Soggetti Auditing, Internal - Data processing Corporations - Accounting - Data processing Fraud - Prevention Machine learning Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Part I. Trusted Advisors -- 1. Three Lines of Defense -- 2. Common Audit Challenges -- 3. Existing Solutions -- 4. Data Analytics -- 5. Analytics Structure & Environment -- Part II. Understanding Artificial Intelligence -- 6. Introduction to Al. Data Science, and Machine Learning -- 7. Myths and Misconceptions -- 8. Trust, but Verify -- 9. Machine Learning Fundamentals -- 10. Data Lakes -- 11. Leveraging the Cloud -- 12. SCADA and Operational Technology -- Part III. Storytelling -- 13. What is Storytelling? -- 14. Why Storytelling? -- 15. When to Use Storytelling -- 16. Types of Visualizations -- 17. Effective Stories -- 18. Storytelling Tools -- 19. Storytelling in Auditing -- Part IV. Implementation Recipes -- 20. How to Use the Recipes -- 21. Fraud and Anomaly Detection -- 22. Access Management -- 23. Project Management -- 24. Data Exploration -- 25. Vendor Duplicate Payments -- 26. CAATs 2.0 -- 27. Log Analysis -- 28. Concluding Remarks. Sommario/riassunto Use artificial intelligence (AI) techniques to build tools for auditing your organization. This is a practical book with implementation recipes that

> demystify AI, ML, and data science and their roles as applied to auditing. You will learn about data analysis techniques that will help

you gain insights into your data and become a better data storyteller. The guidance in this book around applying artificial intelligence in support of audit investigations helps you gain credibility and trust with your internal and external clients. A systematic process to verify your findings is also discussed to ensure the accuracy of your findings. Machine Learning for Auditors provides an emphasis on domain knowledge over complex data science know how that enables you to think like a data scientist. The book helps you achieve the objectives of safeguarding the confidentiality, integrity, and availability of your organizational assets. Data science does not need to be an intimidating concept for audit managers and directors. With the knowledge in this book, you can leverage simple concepts that are beyond mere buzz words to practice innovation in your team. You can build your credibility and trust with your internal and external clients by understanding the data that drives your organization. What You Will Learn Understand the role of auditors as trusted advisors Perform exploratory data analysis to gain a deeper understanding of your organization Build machine learning predictive models that detect fraudulent vendor payments and expenses Integrate data analytics with existing and new technologies Leverage storytelling to communicate and validate your findings effectively Apply practical implementation use cases within your organization Who This Book Is For Al Auditing is for internal auditors who are looking to use data analytics and data science to better understand their organizational data. It is for auditors interested in implementing predictive and prescriptive analytics in support of better decision making and risk-based testing of your organizational processes.