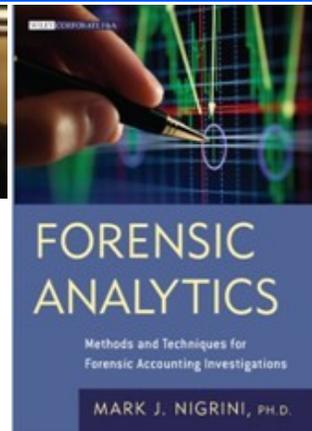# Forensic Analytics:
Methods and Techniques for Forensic Accounting Investigations

One-day workshop. Overview

Do you want?

⇒ An energetic and enthusiastic instructor?

⇒ A lesson with insights into Benford's Law?

⇒ To see Access 2007 used in a forensic setting?

⇒ To see forensic tests and techniques run in Excel 2007?

⇒ Skills to make you the "go-to" person for continuous monitoring of trans-actional data?

⇒ An interpretation of real-world fraud cases and the implications for you?

⇒ To put the theory into practice as soon as you get back to work?

Do you need to buy software to do all of the above?

No! With Excel 2007/2010 and the Nigrini templates you are ready to go. The new row count of Excel (1,048,576) has now made it a viable tool for large data sets. Access can also be used for the *Forensic Analytics* tests.

Main topics

⇒ Benford's Law, the fun, the facts, and the future.

⇒ The Nigrini Cycle of forensic tests.

⇒ Continuous monitoring, methods, successes, and techniques.

⇒ Lessons learned from real-world fraud cases.

⇒ Why companies need effective and proactive anti-fraud measures.

Deliverables: A dynamic, enthusiastic and mildly entertaining presentation by Mark Nigrini, Ph.D.
1 copy of *Forensic Analytics* http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470890460.html

The key to 45 files with data and templates on the companion website for *Forensic Analytics*.

The key to the PowerPoint slides, and end-of-chapter questions and cases for *Forensic Analytics*.

Audience:

Internal auditors in the private and public sector that would like to use organizational data to effectively and efficiently create value.

External auditors that would like novel and new effective tools to assist in the external audit and also to create consulting revenues.

Valuation accountants and security analysts that want to gain a competitive advantage with proprietary tools to evaluate data authenticity.

Corporate controllers that would like to introduce their staff responsible for internal controls to the power and efficiency of forensic analytics.
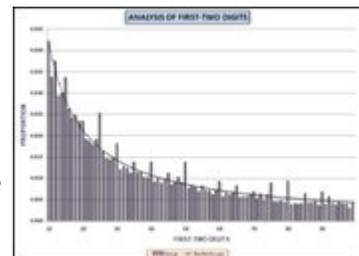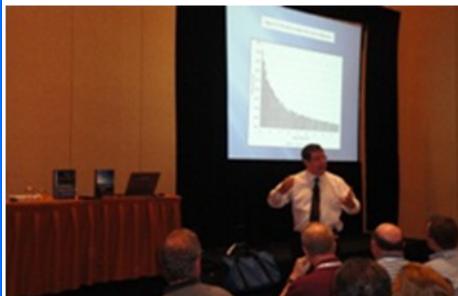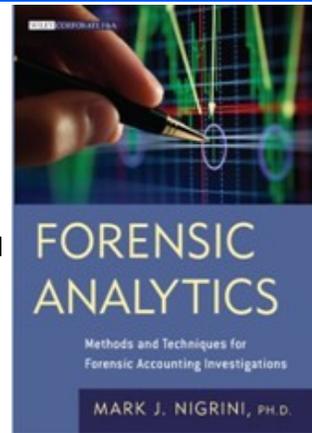
Forensic Analytics:
Methods and Techniques for Forensic Accounting Investigations

One-day workshop. Details

This workshop draws on the topics covered in *Forensic Analytics* by Mark Nigrini. Forensic analytics is the procurement and analysis of electronic data to reconstruct, detect, or otherwise support a claim of financial fraud. Other goals include the detection of errors, inefficiencies, and biases where people tends towards certain behaviors (perhaps favoring specific numbers or number ranges) to influence decision makers or to circumvent actual or perceived internal control thresholds. The main steps in forensic analytics are data collection, data preparation, data analysis, and reporting.

This workshop is a special opportunity to learn about Benford's Law and other forensic analytic tools and techniques. The workshop includes real-world value-added case-studies and demonstrations of running the tests in Excel and Access. The workshop is aimed at accountants and analysts with a general day-to-day familiarity with obtaining and importing transactional data. No prior forensic knowledge is assumed. The main topics are listed below:

Benford's Law: The fun, the facts, and the future. An informative and engaging session on the primary, advanced, and associated Benford-based tests.

Corporate payments case study: An interesting real-world case demonstrating the high-level forensic overview tests, the Nigrini Cycle tests, and then moving on to the highly focused forensic tests designed specifically to identify small groups of anomalous and suspect transactions.

Continuous Monitoring: A reflection on preventive and detective controls and the concept of risk-scoring forms the foundation for this session. The discussion walks through real-world innovative applications using correlation and leading-edge examples of monitoring using time-series analysis.

Fraud and tax evasion examples: This fascinating session discusses the Corley fraud, the Susan Thompson fraud, and the Richard Hatch tax evasion drama, and the lessons that can be learned from these three engaging cases.
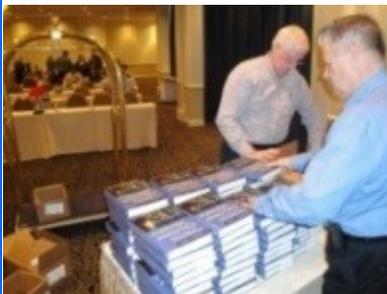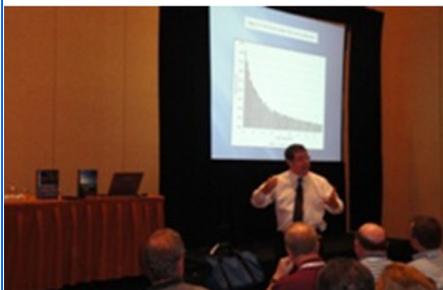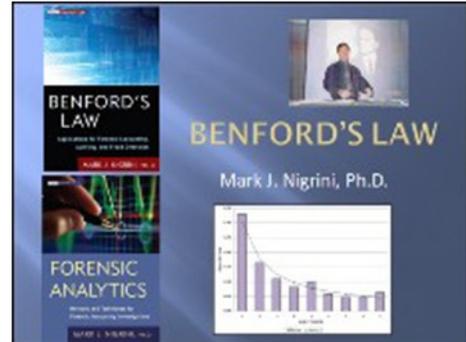
The energetic **conclusion** looks at various aspects of the legal environment that play a role in the prosecution of fraud cases and makes a compelling case for effective internal controls and an efficient, capable, and competent proactive fraud detection regime.
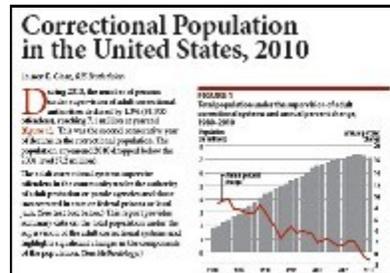
Workshop Instructor: Mark J. Nigrini

Brief Bio

Mark J. Nigrini, PhD, is a professor at The College of New Jersey where he teaches managerial accounting, auditing, and forensic accounting. Benford's Law has been his research passion since his days as a Ph.D. student at The University of Cincinnati. In the 1930s, Frank Benford, a physicist, discovered that there were predictable patterns to the digits in lists of numbers. His research showed that the digits were not expected to be equally used in tabulated data. The smaller digits are expected to occur more often in scientific and financial data. Discovering Benford's Law is like discovering a secret. Until 30 years ago this was a rather well kept secret. Since then the secret has slowly but surely made itself known to more and more people (mainly auditors in their quest to uncover fraud and anomalies in corporate data). Nigrini's current research addresses advanced theoretical work on Benford's Law, applications of forensic analytics to contemporary topics such the detection of Ponzi schemes, financial statement fraud, LIBOR manipulations, and the legal framework of fraud convictions.

Nigrini is the author of *Forensic Analytics* (Wiley, 2011) which describes analytic tests to detect fraud, errors, estimates, and biases in financial data. He is also the author of *Benford's Law* (Wiley, 2012) which is the seminal work on applications of Benford's Law. His next book *Losing the War against Fraud* will be published in 2013. His work has been featured in national media including The Financial Times, New York Times, and The Wall Street Journal and he has published papers on Benford's Law in accounting academic journals, scientific journals, and pure mathematics journals, as well as professional publications such as Internal Auditor and Journal of Accountancy. His radio interviews have included the BBC in London, and NPR in the United States. His television interviews have included an appearance on NBC's Extra. He was interviewed in July for a television program on fraud for the Investigation Discovery Channel. He regularly presents professional seminars for accountants and auditors in the U.S. and Canada, Europe, and Asia with recent events in Singapore, Malaysia, and New Zealand.