

Conan C. Albrecht

Vita

Current Position

Professor, Information Systems Department	780 TNRB
Marriott School of Business	Provo, UT 84602
Brigham Young University	doconix@gmail.com
	(801) 400-0494

Education

Doctor of Philosophy, Management
Management Information Systems Department
University of Arizona, 2000

Masters of Accountancy
School of Accountancy and Information Systems
Brigham Young University, 1997

Bachelors of Science
School of Accountancy and Information Systems
Brigham Young University, 1997

Research Focus

Fraud Detection: I focus on using computer algorithms and analyses to detect fraud and corruption in businesses, governments, and organizations.

Digital Learning Technologies: I research student learning and behavior within online, digital learning environments.

Publications

- [1] Greg Anderson, Mark Keith, Conan Albrecht, Alex Spruill, and Clayton and Pettit. "Optimizing Software Team Performance with Cultural Differences". In: *Proceedings of the 52nd Hawaii International Conference on System Sciences*. Jan. 2019.
- [2] Gove Allen, Randy Davies, Nicholas Ball, Conan Albrecht, and Nesrin and Bakir. "Using Educational Data Mining to Identify and Analyze Student Learning Strategies". In: *Proceedings of the 52nd Hawaii International Conference on System Sciences*. Jan. 2019, p. 9.
- [3] Chad O. Albrecht, Conan C. Albrecht, Andrew Sanford, and Victor Morales Rocha. "A Better Understanding of the Wells Fargo Fraud-Through The Lens of the Fraud Triangle". In: *Cost Management* (Nov. 2017).
- [4] Chad O. Albrecht, Conan C. Albrecht, W. Steve Albrecht, and Steven Hawkins. "Is There An Ethics Compromise Triangle?" In: *Internal Auditing* (July 2017).
- [5] Bret Crane, Chad Albrecht, Conan Albrecht, and Victor Morales Rocha. "Niger and UNICEF: A Partnership to End Child Marriage". In: *Journal of Business Education* 12 (2017).

- [6] James Stice, E. Kay Stice, and Conan Albrecht. “Study Choices by Introductory Accounting Students: Those Who Choose to Study by Reading Text Outperform Those Who Choose to Study by Watching Video Lectures”. In: *Proceedings of the AAA Conference: Western Region*. Ed. by American Accounting Association. 2016.
- [7] W. Steve Albrecht, Chad Albrecht, Jonathan El-Bakri, and Conan Albrecht. “How Fraud Affects Corporate Strategy: The Case of General Motors and John McNamara”. In: *Corporate Finance Review* 20 (Sept. 2015), pp. 5–13.
- [8] W. Steve Albrecht, Conan C. Albrecht, Chad O. Albrecht, and Mark Zimbelman. *Fraud Examination*. 5th ed. Cengage/SouthWestern Publishing, 2015.
- [9] Robert O. Briggs, Gwendolyn L. Kolfshoten, Gert-Jan de Vreede, Stephan G. Lukosch, and Douglas L. Dean. “Advances in Collaboration Systems”. In: ed. by J.F. Nunamaker, R.O. Briggs, and N. C. Ramano. Armock, NY: M.E. Sharpe, Jan. 2014. Chap. A Six-Layer Model of Collaboration.
- [10] Robert O. Briggs, Gwendolyn L. Kolfshoten, Gert-Jan de Vreede, Conan C. Albrecht, and Stephan G. Lukosch. “Facilitator-in-the-box: Packaging Collaboration Expertise with Collaboration Technology for Re-Use by Untrained Non-Experts”. In: *Journal of Management Information Systems* 29.4 (Spring 2013), pp. 159–194.
- [11] Conan C. Albrecht. “The Current State of Computerized Fraud Detection and Investigation”. In: *The Journal of Forensic Investigation and Accounting* (2013).
- [12] Ahmed Abbasi, Conan Albrecht, Anthony Vance, and James Hansen. “MetaFraud: A Meta-Learning Framework for Detecting Financial Fraud”. In: *Management Information Systems Quarterly* 36.34 (Dec. 2012), pp. 1293–1327.
- [13] David Whiting, James Hansen, James B. McDonald, Conan C. Albrecht, and W. Steve Albrecht. “Machine Learning Methods for Detecting Patterns of Management Fraud”. In: *Computational Intelligence* 28.2 (May 2012).
- [14] W. Steve Albrecht, Conan C. Albrecht, Chad O. Albrecht, and Mark Zimbelman. *Fraud Examination*. 4th. Cengage Learning, 2012.
- [15] Chad Albrecht, Conan C. Albrecht, and Shay Tzafrir. “How to protect and minimize consumer risk by identity theft”. In: *Journal of Financial Crime* 18.4 (Nov. 2011), pp. 405–414.
- [16] David G. Whiting, James V. Hansen, James B. McDonald, Conan C. Albrecht, and W. Steve Albrecht. “Enriched data representation for mining financial fraud with rule ensembles”. In: *Expert Systems with Applications* (Aug. 2011).
- [17] A Mametjanov, Douglas Kjeldgaard, Todd Pettepier, Conan C. Albrecht, Stephan Lukosch, and Robert Briggs. “ARCADE: Action-Centered Rapid Collaboration Development and Execution”. In: *The 44th Hawaii International Conference on System Sciences (HICSS)*. Kauai, Hawaii, Jan. 2011, pp. 1–10.
- [18] Conan C. Albrecht, Matthew L. Sanders, Daniel V. Holland, and Chad Albrecht. “Crime and Corruption in Organizations”. In: ed. by Ronald J. Burke, Edward C. Tomlinson, John Carroll, and Cary L. Cooper. UK: Gower, Dec. 2010. Chap. The Debilitating Effects of Fraud in Organizations, pp. 163–186.
- [19] Conan C. Albrecht and Kyle Matthews. “Learning 2.0 in the Information Systems Curriculum”. In: *Proceedings of the 42nd Hawaii International Conference on System Sciences (HICSS)*. Waikoloa, Hawaii, Jan. 2010, pp. 1–10.
- [20] Robert O. Briggs, Gwendolyn L. Kolfshoten, Gert-Jan de Vreede, Conan C. Albrecht, and Stephan G. Lukosch. “Facilitator in a Box: Computer Assisted Collaboration Engineering and Process Support Systems for Rapid Development of Collaborative Applications for High-Value Tasks”. In: *Proceedings of the 43rd Hawaii International Conference on System Sciences (HICSS)*. Kauai, Hawaii, Jan. 2010, pp. 1–10.
- [21] Conan C. Albrecht, Marshall Romney, Paul Benjamin Lowry, and Greg Moody. “The IS Core: An Integration of the Core IS Courses”. In: *Journal of Information Systems Education* 20.4 (2009), pp. 451–468.

- [22] Conan C. Albrecht. "Fraud and Forensic Accounting in a Digital Environment". In: *Institute for Fraud Prevention* (2009).
- [23] Conan C. Albrecht and Chad O. Albrecht. "Data-Driven Fraud Detection Using Detectlets". In: *Journal of Forensic and Investigative Accounting* 1.1 (2009), pp. 1–24.
- [24] Chad Albrecht and Conan C. Albrecht. "International Ethics, Fraud and Corruption: A Cross-Cultural Perspective". In: *Cross Cultural Management* 16.3 (2009), pp. 241–3.
- [25] Robert O. Briggs, Gwendolyn Kolfshoten, Gert-Jan de Vreede, Conan C. Albrecht, Douglas Dean, and Stephan Lukosch. "A Seven-Layer Model of Collaboration: Separation of Concerns for Designers of Collaboration Systems". In: *Proceedings of the 30th International Conference on Information Systems*. Phoenix, Arizona, Jan. 2009, pp. 1–14.
- [26] Lynn J. McKell, Gary Hansen, and Conan C. Albrecht. "Direct Assessment of IS Student Learning Using an Integrative Exercise". In: *Journal of Information Systems Education* 19.2 (June 2008), pp. 1–7.
- [27] Conan C. Albrecht. "Detectlets: A New Approach to Fraud Detection". In: *European Academy of Management Conference Proceedings*. Ljubljana, Slovenia. Apr. 2008, pp. 1–22.
- [28] Chad Albrecht, Conan C. Albrecht, Simon Dolan, and Ricardo Malagueno. "Financial Statement Fraud". In: *Internal Auditing* 23.2 (Mar. 2008), pp. 30–37.
- [29] W. Steve Albrecht, Chad Albrecht, and Conan C. Albrecht. "Current Trends in Fraud and its Detection". In: *Information Security Journal: A Global Perspective* 17.1 (Jan. 2008), pp. 2–12.
- [30] Chad Albrecht, Simon Dolan, Conan C. Albrecht, and Ricardo Malagueno. "International Fraud". In: *Corporate Finance Review* 14.6 (2008), pp. 5–13.
- [31] Conan C. Albrecht, Douglas L. Dean, and James V. Hansen. "An Ontological Approach to Evaluating Standards in Ecommerce Platforms". In: *IEEE Transactions on Systems, Man, and Cybernetics-Part C* 37.5 (Sept. 2007), pp. 846–859.
- [32] Chad Albrecht, Conan C. Albrecht, and Simon Dolan. "Fraud: The How and Why". In: *European Business Forum (quoted in the Times of London)* 27 (June 2007).
- [33] Chad Albrecht, Conan C. Albrecht, Jonathan Wareham, and Paul Fox. "The Role of Power and Negotiation in Online Deception". In: *Journal of Digital Forensics, Security, and Law* 1.4 (2007), pp. 29–48.
- [34] Chad Albrecht, Conan C. Albrecht, Lon R. Freeman, and W. Steve Albrecht. "The Effect of Country and Organizational Factors on Public Equity Market Access". In: *International Research Journal of Finance and Economics* 1.8 (2007), pp. 107–125.
- [35] James V. Hansen, J. B. McDonald, Conan C. Albrecht, Douglas Dean, and Bonnie B. Anderson. "A Semantic Web Data Retrieval Implementation with an Adaptive Model for Supporting Agent Decision Structures". In: *Electronic Commerce Research* 7.1 (Sept. 2006), pp. 5–16.
- [36] Chad O. Albrecht, Daniel Arenas, Conan C. Albrecht, and Alfons Sauquet. "Towards a Better Understanding of the Breakdown of Organizational Cultures". In: *Proceedings of the European Business Ethics Network Annual Conference: Ethics in and of Global Organizations*. Vienna, Austria. Sept. 2006.
- [37] Chad O. Albrecht, Conan C. Albrecht, Jonathan Wareham, and Paul Fox. "Negotiation and Power in the Cybercrime Framework". In: *Proceedings of the 12th Americas Conference on Information Systems (AMCIS)*. Acapulco, Mexico. Aug. 2006.
- [38] Chad O. Albrecht and Conan C. Albrecht. "A New Dimension to Organizational Success". In: *Proceedings of the European Academy of Management 6th Annual Conference*. Oslo, Norway. June 2006.
- [39] W. Steve Albrecht, Ned C. Hill, and Conan C. Albrecht. "The ethics development model applied to declining ethics in accounting". In: *Australian Accounting Review* 38.16 (Mar. 2006), pp. 30–40.
- [40] W. Steve Albrecht, Conan C. Albrecht, and Chad O. Albrecht. *Fraud Examination*. 2e. Thompson South-Western, 2006.

- [41] Conan C. Albrecht, Douglas D. Dean, and James V. Hansen. "Market Place and Technology Standards for B2B eCommerce: Progress, Challenges, and the State of the Art". In: *Information and Management* 42.6 (Sept. 2005), pp. 865–875.
- [42] Steve J. J. Tedjamulia, Douglas D. Dean, David R. Olsen, and Conan C. Albrecht. "Motivating Content Contributions to Online Communities: Toward a More Comprehensive Theory". In: *38th Annual Hawaii International Conference on Systems Sciences (HICSS)*. Waikoloa, Hawaii, Jan. 2005, pp. 193–203.
- [43] W. Steve Albrecht and Conan C. Albrecht. "Accountants Handbook". In: ed. by D. R. Carmichael. 10th Edition. Wiley Publishers, 2005. Chap. Detecting Fraud, pp. 40.1–40.16.
- [44] W. Steve Albrecht, Conan C. Albrecht, and Chad O. Albrecht. "Guilty by Investigation and Other Pitfalls". In: *Security Management* 48.11 (Nov. 2004), pp. 77–86.
- [45] W. Steve Albrecht, Conan C. Albrecht, and Chad O. Albrecht. "Fraud and Corporate Executives: Agency, Stewardship, and Failed Responsibility". In: *Journal of Forensic Accounting* 5.1 (June 2004), pp. 109–130.
- [46] Conan C. Albrecht. "How Clean is the Future of SOAP?" In: *Communications of the ACM* 47.2 (Feb. 2004), pp. 66–68.
- [47] Conan C. Albrecht. "Fast, Free, and Traceless Computer Forensics". In: *The White Paper* (Jan. 2004).
- [48] Jason Thorpe and Conan C. Albrecht. "Characteristics of Large Group Support Systems". In: *37th Annual Hawaii International Conference on System Sciences (HICSS)*. Waikoloa, Hawaii, Jan. 2004, pp. 1–10.
- [49] Conan C. Albrecht, Douglas D. Dean, and James V. Hansen. "Market Place and Technology Standards for B2B ECommerce: Progress and Challenges". In: *Proceedings of the MIS Quarterly Special Issue on Standard Making*. Seattle, WA, Dec. 2003, pp. 188–209.
- [50] Conan C. Albrecht, Douglas D. Dean, and James V. Hansen. "Using situation calculus for e-business agents". In: *Expert Systems with Applications* 24.4 (May 2003), pp. 391–397.
- [51] Conan C. Albrecht and W. Steve Albrecht. "Audit At A Crossroads". In: *35th Symposium on the Interface*. Salt Lake City, UT, Mar. 2003.
- [52] Paul B. Lowry, Conan C. Albrecht, Jay F. Nunamaker, and James D. Lee. "Evolutionary development and research on Internet-based Collaborative Writing tools and processes to enhance eWriting in an eGovernment setting". In: *Decision Support Systems* 34.3 (Feb. 2003), pp. 229–252.
- [53] W. Steve Albrecht and Conan C. Albrecht. "Forensic Accounting: In the Reckoning". In: *The Accounting World* (Feb. 2003), pp. 1–12.
- [54] Conan C. Albrecht. "A Comparison of Distributed Groupware Implementation Environments". In: *36th Annual Hawaii International Conference On System Sciences (HICSS)*. Waikoloa, Hawaii, Jan. 2003, pp. 1–10.
- [55] W. Steve Albrecht and Conan C. Albrecht. "Accounting Education Reform: Is IT Necessary and, If So, What Form Should It Take?" In: *Proceedings of the World Congress of Accountants*. Hong Kong, China, Nov. 2002.
- [56] Conan C. Albrecht and W. Steve Albrecht. "The Deductive Method of Fraud Detection". In: *Proceedings of the University of Kansas Audit Symposium*. May 2002.
- [57] W. Steve Albrecht and Conan C. Albrecht. "Root Out Financial Deception". In: *Journal of Accountancy* 193.4 (Apr. 2002), pp. 30–34.
- [58] Paul B. Lowry, Conan C. Albrecht, James Lee, and Jay Nunamaker. "User Experiences Using Collaboratus as a Distributed Collaborative Writing Tool". In: *35th Annual Hawaii International Conference On System Sciences (HICSS)*. Waikoloa, Hawaii, Jan. 2002, pp. 1–10.
- [59] W. Steve Albrecht and Conan C. Albrecht. "The E-Business Handbook". In: ed. by Paul Benjamin Lowry, J. Owen Cherrington, and Ronald R. Watson. St. Lucie Press, 2002. Chap. Preventing and Detecting Fraud in Electronic Commerce Systems, pp. 315–338.

- [60] Conan C. Albrecht. “The E-Business Handbook”. In: ed. by Paul Benjamin Lowry, J. Owen Cherrington, and Ronald R. Watson. St. Lucie Press, 2002. Chap. Collaborative Architectures that Support Electronic Business, pp. 423–442.
- [61] Conan C. Albrecht and W. Steve Albrecht. “Strategic Fraud Detection: A Technology-Based Model”. Working Paper (cited by 3 others). 2002.
- [62] W. Steve Albrecht and Conan C. Albrecht. “Pro-actively Detecting Fraud”. In: *Financial Post* (July 2001), pp. 13–15.
- [63] Conan C. Albrecht, W. Steve Albrecht, and J. Greg Dunn. “Conducting a Pro-Active Fraud Audit: A Case Study”. In: *Journal of Forensic Accounting* 2.2 (June 2001), pp. 3–16.
- [64] Conan C. Albrecht, Douglas Dean, Robert Jackson, Steve Liddle, and Ray Meservy. “A Peer-to-Peer Network Protocol for Genealogical Data”. In: *Workshop on Technology for Family History and Genealogical Research*. Brigham Young University. Provo, Utah, Mar. 2001.
- [65] Conan C. Albrecht, W. Steve Albrecht, and J. Greg Dunn. “Can Auditors Detect Fraud: A review of the Research Evidence”. In: *Journal of Forensic Accounting* 2.2 (Jan. 2001), pp. 1–12.
- [66] James Lee, Conan C. Albrecht, and Jay Nunamaker. “Experiences with Collaborative Applications that Support Distributed Modeling”. In: *34th Hawaii International Conference on System Sciences (HICSS)*. Wailea, Hawaii, Jan. 2001, pp. 1–10.
- [67] Conan C. Albrecht and James Lee. “Experiences with Collaborative Applications that Support Primary Team Processes within the Organization”. In: *Software Technology Conference*. Salt Lake City, Utah, June 2000.
- [68] Conan Carl Albrecht. “A Programming Framework Supporting the Rapid Application Development of Highly-Interactive, Collaborative Applications”. PhD thesis. University of Arizona, 2000.
- [69] Tom Rodgers, Conan C. Albrecht, and Douglas Dean. “Software Process Improvement”. In: Idea Group Publishing, 1998. Chap. Group-Enabled Software Inspections.
- [70] Conan C. Albrecht. “An OSA Model for the Optometry Field”. In: *The Journal of Undergraduate Research & Creative Activities* (Jan. 1996).

Teaching

IS 537 - Data Structures and Algorithms (2016-Current): Data structures and algorithms and other base concepts of Computer Science for Information Systems students.

IS 413 - Enterprise Application Development (2002-Current): Enterprise programming concepts: business objects, data access objects, enterprise patterns, email, web programming, Javascript, Internet topics, networking.

ISM 4323 - Network Security (2018): Network security, hacking, penetration testing, and security standards (Florida Gulf Coast University).

IS 411 - System Design (2016-2018): Design of enterprise systems. Patterns and strategies.

IS 403 - Business Programming (2002-2016): Intermediate object oriented concepts in Java: encapsulation, inheritance, polymorphism, exceptions, classes, interfaces, i/o streaming, graphical user interfaces, threading.

IS 590R - Information Systems Seminar (2009): A student-driven seminar in various IS-related topics.

IS 590R - Python Fraud Detection (2007): Python-based fraud and corruption detection course using the Picalo toolkit.

MBA 510 - Management and Information Technology (2007): A core-level Information Systems course for Executive MBA students.

IS 590R - Internet Programming (2001): Internet architectures, world wide web, server-side scripting.

IS 202 - Introduction to Programming (1996-1997): Introductory Java programming topics.

IS 580 - Tools in Information Systems (1996): Advanced office suite applications, scripting.

IS 301 - Introduction to Information Systems (1996): Introductory technical and systems-based business topics.

Teaching Awards:

In 2006, I received the two highest teaching awards in the Marriott School, the first selected by faculty, and the second selected by students:

[1] *Teaching Excellence Award*, Marriott School of Management, BYU, 2006.

[2] *Merrill J. Bateman Student Choice Award*, Marriott School of Management, BYU, 2006.

Professional

The following are a selection of the consulting projects I've worked on:

Web Application Developer (2011-Current): Created and deployed a web application for *MyEducator.com*, a digital textbook company, and its subsidiaries.

White-Hat Hacker (2011): Led a team of five individuals to hack into a private, large corporation. Conducted intrusion and penetration testing on web servers, email servers, firewalls, and other enterprise systems.

Expert Witness (2008): Gave an opinion on a technology-oriented, ongoing legal case related to identity theft and data exposure.

Procurement Fraud Systems Designer (2007-2010): Designed a nationwide system to find medical procurement fraud throughout India. The system was sponsored by the *World Bank* and the *Government of India*, and it was rolled out for all procurement throughout the entire country.

Instructor (2000-2010): Conducted 1-2 day courses on computer-related fraud detection methods. This course was held several times per year in various cities throughout the U.S.A and abroad.

Technology Fraud Consultant (various): Consulted and taught for many different organizations and governments, including Puerto Rico; the Philippines; Amoco Oil (now BP); the World Bank; the United Nations; various U.S. Federal agencies such as the Iraq Reconstruction Group and General Accounting Office; states such as Texas, New York, North Carolina, Utah, Colorado, and others; and professional organizations such as the IIA, ACFE, AAA, UACPA, and IFP.

Software Development

I am an active programmer in both the professional and open source communities. I contribute pull requests to many projects each year. Following are some of the notable projects and technologies I've built:

Django-Mako-Plus (2013-Current): Mako templates within the Django web framework, plus a few goodies.

Picalo (2001-2011): A fraud detection toolkit released as open source. Python, wxWidgets, PostgreSQL, Gadfly, and MySQL.

GroupMind (2001-2008): An event-based web development platform that allows live pages without full refreshing. Used in several research projects. Python on Linux.

VoteCaster (2006): A classroom polling application that allows teachers to quickly poll their classes for anonymous votes. It is a system of getting quick feedback from groups. Python CGI.

StrikeCom (2005-2006): A battleship-like military training game used by the U.S. military. Python, GroupMind.

Ecr.gov (2000-2005): Web site development and maintenance for the U.S. Institute for Environmental Conflict Resolution. JSP and Python on Linux.

Survey3 (1998-2005): A survey engine written for research purposes. Released as open source. Servlets, JSP, and Python CGI.

Silentwhistle.com (2004-2005): Anonymous employee and customer reporting system. Web site and infrastructure design and development. PHP, Python, and PostgreSQL on Linux.

Advanced Computer-Aided Fraud Detection (2002-Current): 2-day course taught for the Association of Certified Fraud Examiners.

FamilyVisionCare.net (2001-2002): Web site development and hosting. PHP and JSP on Linux.

Thoughts.com (2001-2002): Web site development and hosting. Microsoft SQL Server, PostgreSQL, Full-Text database, JSP on Linux and Windows.

SpeedyCam.com (2000): Video chat (image streaming) applet in Java and Windows NT.

EasyScout.com (1999-2002): Free record-keeping web site used by thousands of Boy Scout troops nationwide. Java servlets on Linux.

AuctionSam.com (1998-1999): Web site development and maintenance for an auction meta-search engine. Java servlets on Linux.

Amoco Oil (1997-2002): Fraud detection using custom real-time data mining software. Oracle, DB2, PowerBuilder, Paradox, and Access on Windows and Unix.

Beneficial Life (1997): Business Process Reengineering Consultant for the new business center.

SOAIS Database Developer (1994-1997): Student database for the School of Accountancy and Information Systems (BYU) design and development. Borland Paradox on Windows.

Wesco Trucking Incorporated (1993-1994): Truck and freight tracking application development. Borland Paradox on Windows.