

# Curriculum Vitae

## Byron Marshall

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Oregon State University  
443 Austin Hall  
Corvallis, Oregon 97331

### Affiliation

September 2011 – Present Associate Professor – Oregon State University, College of Business,  
September 2005 – Present Assistant Professor – Oregon State University, College of Business,

2001-2005 Research Associate at the Artificial Intelligence Lab at the University of Arizona

### Education

2001-2005 University of Arizona, MIS Department, Tucson, AZ

PhD - Management Spring 2005

Major: Management Information Systems, Minor: Linguistics

Advisor: Dr. Hsinchun Chen

1995 California State University, Fresno Fresno, CA

MBA – emphasis in accounting Graduated with distinction

1988 California State University Fresno Fresno, CA

BS – Business Administration – Computer Applications and Systems - Cum Laude

### Certifications and Certificates

Certified Information Systems Auditor – ISACA (2017-Present) [Digital Badge](#)

CSX Security Fundamentals Certificate – ISACA (2017) [Digital Badge](#)

### Research Interests

Information Security: Individual non-compliance with information security recommendations can create vulnerabilities despite the best technical security measures. Our work explores methods to assess or predict compliance.

Knowledge Management: Leveraging knowledge elements found in informal conceptual graphs to store, retrieve, and process information for education, business, and other managed organizations. Previous work includes the aggregation and application of relations extracted from the free text of biomedical abstracts, the selection of interesting associations in large networks of criminal activity, and algorithms that support the use of concept mapping tools in education. Recent and current efforts focus on analysis of networks of educational standards and documents, and dynamic display of accounting information from XBRL documents.

### Journal Publications

“InfoSec Process Action Model (IPAM): Systematically Addressing Individual Security Behavior”, M. Curry, Marshall, B., Crossler, R., and Correia, J., The Data Base for Advances in Information Systems, Conditionally Accepted, August 2017

["A Normative Model for Assessing SME IT Effectiveness"](#), M. Curry, Marshall, B., and Kawalek, P., Communications of the IIMA, vol. 15, no. 1, 2017.

["Improving IT assessment with IT artifact affordance perception priming"](#), Byron Marshall, Michael Curry, and Peter Kawalek, International Journal of Accounting Information Systems, Vol 19, pp. 17-28, 2015.

"IT Artifact Bias: How Exogenous Predilections Influence Organizational Information System Paradigms" Michael Curry, Byron Marshall, Peter Kawalek, International Journal of Information Management, Vol 34, No. 4, 2014

["Can Intermediary-based Science Standards Crosswalking Work? Some Evidence from Mining the Standard Alignment Tool \(SAT\)"](#)

René Reitsma, Byron Marshall, Trevor Chart, Journal of the American Society for Information Science and Technology (JASIST) September 2012, Vol. 63, No. 9, pp 1843-1858, ISSN: 1532-2882, doi>10.1002/asi.22712

"Organizational Information Technology Norms and IT Quality" Byron Marshall, Michael Curry, and René Reitsma, Communications of the IIMA, vol. 11, issue 4, 2011.

["Aspects of 'Relevance' in the Alignment of Curriculum with Educational Standards"](#)

René Reitsma, Byron Marshall, Malinda Zarske, Information Processing & Management (IPM) May 2010, Vol. 46, No. 3, pp 362-376, ISSN 0306-4573, DOI: 10.1016/j.ipm.2009.08.006.

["Visualizing basic accounting flows: does XBRL + model + animation = understanding?"](#)

2010 Byron Marshall, Kristian G. Mortenson, Amy Bourne, and Kevin Price, International Journal of Digital Accounting Research (IJDAR) March 2010, Vol. 10, pp. 27-54, ISSN: 1577-8517

["Topological Analysis of Criminal Activity Networks: Enhancing Transportation Security"](#)

Siddharth Kaza, Jennifer Xu, Byron Marshall, and Hsinchun Chen, IEEE Transactions on Intelligent Transportation Systems, Vol 10, No. 1, Pages 83-91, March 2009

["Using Importance Flooding to Identify Interesting Networks of Criminal Activity"](#)

Byron Marshall, Hsinchun Chen, and Siddharth Kaza, Journal of the American Society for Information Science and Technology (JASIST), Vol. 59, No. 13, Pages 2099-2114, Nov 2008

["User-Centered Evaluation of Arizona BioPathway: An Information Extraction, Integration, and Visualization System"](#), Karin D. Quiñones, Hua Su, Byron Marshall, Shauna Eggers, and Hsinchun

Chen, IEEE Transactions on Information Technology in Biomedicine Vol.11, No.5, Sep 2007, Pages 527-536

["Moving Digital Libraries into the Student Learning Space: the GetSmart Experience"](#)

Byron Marshall, Hsinchun Chen, Rao Shen, and Edward A. Fox, ACM JERIC -- Journal on Educational Resources in Computing Vol.6, No.1, Mar 2006, Article No. 2

["Aggregating Automatically Extracted Regulatory Pathway Relations"](#) Byron Marshall, Hua Su, Daniel McDonald, Shauna Eggers, and Hsinchun Chen, IEEE Transactions on Information Technology in Biomedicine, Forthcoming, IEEE Transactions on Information Technology in Biomedicine, Vol. 10, No.1, Jan 2006, Pages 100-108

["Matching Knowledge Elements in Concept Maps using a Similarity Flooding Algorithm"](#) Byron Marshall, Hsinchun Chen, Therani Madhusudan, Decision Support Systems, Vol.42, No.3, Dec 2006, Pages 1290-1306

["EBizPort: Collecting and Analyzing Business Intelligence Information"](#), Byron Marshall, Dan McDonald, Hsinchun Chen, Wingyan Chung, Journal of the American Society for Information Science and Technology (JASIST), 55(10) : 873-891 (2004) Special Issue on Document Search Interface Design for Large-scale Collections and Intelligent Access

["A Case-based Reasoning Framework for Workflow Model Management"](#), Therani Madhusudan, J. Leon Zhao, and Byron Marshall, Data and Knowledge Engineering, 50: 87-115 (2004) Special Issue on Business Process Management.

["Extracting Gene Pathway Relations Using a Hybrid Grammar: The Arizona Relation Parser"](#), Dan McDonald, Hsinchun Chen, Hua Su, & Byron Marshall, Bioinformatics, 20: 3370-8 (2004)

### **Conference Paper Presentations**

"Hope for change in individual security behavior assessments", Michael Curry, Byron Marshall, and Robert Crossler, 2016 Pre-ICIS Workshop on Accounting Information Systems, Dublin, Ireland 2016

"Unraveling K-12 Standard Alignment; Report on a New Attempt", Byron Marshall, René Reitsma, and Carleigh Samson, Proceedings of the 16th Joint ACM/IEEE Conference on Digital Libraries (JCDL 2016), June 19-23, 2016, U.S.A.

"Affordance Perception in Risk Adverse IT Adoption: An Agenda to Identify Drivers of Risk Consideration and Control Adoption in Individual Technology Choices", Byron Marshall and Michael Curry, Pre-ICIS Workshop on Accounting Information Systems, 2015.

"Weather Factors and Online Product/Service Reviews", J. Feng, Yao, Z., Zhu, B., and Marshall, B., 'Doing IS Research in China' Workshop of the Pacific Asia Conference on Information Systems (PACIS 2015), 2015.

B. Marshall, Curry, M., and Kawalek, P., "The Moderating Power of IT Bias on User Acceptance of Technology", in Sixth Annual Pre-ICIS Workshop on Accounting Information Systems, Auckland, 2014.

"Disentangling IT Artifact Bias", Michael Curry and Byron Marshall 4th Annual Pre-ICIS Workshop on Accounting Information Systems, December, 2012, Orlando, Florida, U.S.A.

"World vs. Method: Educational Standard Formulation Impacts Document Retrieval" (2010), Byron Marshall and René Reitsma Proceedings of the 11th Joint ACM/IEEE Conference on Digital Libraries (JCDL 2011), June 13-16, 2011, Ottawa, Canada

"IT Governance Norms and IT Success" (2010) Byron Marshall, Michael Curry, & Rene Reitsma, 2nd annual Pre-ICIS Workshop on Accounting Information Systems.

"Does Using CobiT Improve IT Solution Proposals?" (2010) Byron Marshall, Michael L. Curry, Rene Reitsma, American Accounting Association Annual Meeting, IS Section

"Does Using CobiT Improve IT Solution Proposals?" (2010) Byron Marshall, Michael L. Curry, Rene Reitsma, American Accounting Association Annual Meeting, IS Section

["Delivering Value Beyond Efficiency with Visualized XBRL"](http://aisel.aisnet.org/icis2009/114) Byron Marshall, Kristian G. Mortenson, Amy Bourne, Kevin Price, Andrew Marshall, Proceedings of the 2009 International Conference on Information Systems (ICIS 2009) (2009). Paper 114.  
<http://aisel.aisnet.org/icis2009/114>

["Dimensional Standard Alignment in K-12 Digital Libraries: Assessment of Self-found vs. Recommended Curriculum"](https://doi.acm.org/10.1145/1555400.1555403) Byron Marshall, René Reitsma, and Malinda Zarske, Proceedings of the 9th Joint ACM/IEEE Conference on Digital Libraries (JCDL 2009), June 15-19, 2009, Austin Texas Definitive Version: [doi.acm.org/10.1145/1555400.1555403](https://doi.acm.org/10.1145/1555400.1555403)

["Exploring Educational Standard Alignment: In Search of 'Relevance'"](https://doi.acm.org/10.1145/1378889.1378901) René Reitsma, Byron Marshall, Michael Dalton, and Martha Cyr, Proceedings of the 8th Joint ACM/IEEE Conference on Digital Libraries (JCDL 2008), June 15-20, 2008, Pittsburgh [doi.acm.org/10.1145/1378889.1378901](https://doi.acm.org/10.1145/1378889.1378901)

"Standards or Semantics for Curriculum Search? " Byron Marshall Rene Reitsma and Martha Cyr, Proceedings of the 7th Joint ACM/IEEE Conference on Digital Libraries (JCDL 2007), June 17-22, 2007, Vancouver, British Columbia, Canada

["Using Importance Flooding to Identify Interesting Networks of Criminal Activity"](#) Byron Marshall and Hsinchun Chen, Proceedings of the IEEE International Conference on Intelligence and Security Informatics (ISI-2006), May 23-24, 2006, San Diego, U.S.A.

["Visualizing Aggregated Biological Pathway Relations"](#) Byron Marshall, Karin Quiñones, Hua Su, Shauna Eggers, and Hsinchun Chen, Proceedings of the 2005 Joint ACM/IEEE Conference on Digital Libraries (JCDL 2005), June 7-11, 2005 , Denver, CO

["Linking Ontological Resources Using Aggregatable Substance Identifiers to Organize Extracted Relations"](#) Byron Marshall, Hua Su, Dan McDonald, and Hsinchun Chen, Pacific Symposium on Biocomputing, Jan 4-8, 2005, Big Island, Hawaii

["Element Matching in Concept Maps"](#), Byron Marshall, Therani Madhusudan, Proceedings of the 2004 Joint ACM/IEEE Conference on Digital Libraries (JCDL 2004) June 7-11, 2004, Tucson, AZ

[“Knowledge Management and E-Learning: the GetSmart Experience”](#), Byron Marshall, Yiwen Zhang, Hsinchun Chen, Ann Lally, Rao Shen, Edward Fox and Lillian Cassel, Presented at the Third Joint ACM/IEEE Conference on Digital Libraries (JCDL 2003), May, 2003, Houston, Texas

### Other Publications

[“Personal Motivation Measures for Personal IT Security Behavior”](#), Byron Marshall, Michael Curry, John Correia, and Robert Crossler, Americas Conference on Information Systems (AMCIS 2017), Boston MA, August 10-12, 2017

BA302: Microsoft Dynamics NAV ERP Exercise/Walkthrough, Written Case with Instructional Material, Curry, Marshall, Raja, and Reitsma, 2016, <http://hdl.handle.net/1957/59858>

"Visualizing basic accounting flows: does XBRL + model + animation = understanding?" (2009) Byron Marshall, Kristian G. Mortenson, Amy Bourne, Kevin Price, Andrew Marshall, *American Accounting Association 18th Annual Strategic and Emerging Technologies Research Workshop – Presented by Dr. Mortenson*

[“Coplink center: social network analysis and identity deception detection for law enforcement and homeland security intelligence and security informatics: a crime data mining approach to developing border safe research”](#) Hsinchun Chen, Homa Atabakhsh, Jennifer Jie Xu, Alan Gang Wang, Byron Marshall, Siddharth Kaza, Lu Chunju Tseng, Shauna Eggers, Hemanth Gowda, Tim Petersen, and Chuck Violette, Proceedings of the 2005 national conference on Digital government research (dg.o2005) Atlanta, Georgia, USA, May 15-18, 2005

[Poster: “BorderSafe: cross-jurisdictional information sharing, analysis, and visualization”](#) Hsinchun Chen, Homa Atabakhsh, Siddharth Kaza, Byron Marshall, Jennifer Xu, G. Alan Wang, Tim Petersen, and Chuck Violette, Proceedings of the 2005 national conference on Digital government research (dg.o2005) Atlanta, Georgia, USA, May 15-18, 2005

[Poster: “Visualization in Law Enforcement”](#) Hsinchun Chen, Homa Atabakhsh, Chunju Tseng, University of Arizona, USA; Tim Petersen, Tucson Police Department, USA; Byron Marshall, Siddharth Kaza, Shauna Eggers, Ankit Shah, Hemanth Gowda, University of Arizona, USA, Conference on Human Factors in Computing Systems (CHI 2005), Portland, Oregon, USA, April 2-7, 2005

[Demonstration: “Cross-Jurisdictional Activity Networks to Support Criminal Investigations”](#) Byron Marshall, Siddharth Kaza, Jennifer Xu, Homa Atabakhsh, Tim Petersen, Chuck Violette, and Hsinchun Chen, the 5th Annual Conference on Digital Government Research (dg.o2004), May 24-26, 2004, Seattle, Washington, USA

[“Analyzing and Visualizing Criminal Network Dynamics: A Case Study”](#) Jennifer Xu, Byron Marshall, Siddharth Kaza, and Hsinchun Chen, 2nd Symposium on Intelligence and Security Informatics, June 10-11 2004, Tucson, AZ

[“Cross-Jurisdictional Criminal Activity Networks to Support Border and Transportation Security”](#) Byron Marshall, Siddharth Kaza, Jennifer Xu, Homa Atabakhsh, Tim Petersen, Chuck Violette and

Hsinchun Chen (2004), 7th Annual IEEE Conference on Intelligent Transportation Systems (ITSC 2004), October 3-6, 2004, Washington, D.C., USA

### **Grants**

Marshall, B. (Supporting), Reitsma, R., Grant. IT Service Delivery Boot Camp. OSU Division of Business and Engineering, Oregon State University, \$10000, Funded. (March 2011 - March 2012).

Michael Curry, Byron Marshall, René Reitsma - IT Governance Norms in SME \$2,500 – College of Business grant for data collection (Sep 2011 – June 2012)

Marshall, B., Hulse, K., Grant. IT Audit Materials. Honors College, Oregon State University, \$3000, Funded. (March 28, 2011 - December 30, 2011).

Marshall, B., Price, K. C. (Co-Principal), Grant. Visualizing XBRL Accounting Flows. Undergraduate Research, Innovation, Scholarship & Creativity (URISC), Oregon State University, \$3600, Funded. (February 2009 - Present).

Marshall, B., Grant. Importance Flooding for Standards-based Learning Object Retrieval. College of Business, Oregon State University, \$8000, Funded. (January 2008 - Present).

### **Research Community Involvement**

Associate Editor: Journal of Electronic Commerce Research

Associate Editor: Advances in Accounting (2015-2016)

Program Committee: JCDL (IEEE/ACM Joint Conference on Digital Library) (2009-Present)

Web Master, SIGASYS: (Association for Information Systems Special Interest Group for Accounting Information Systems) (2013-Present)

Program Committee Member: PAISI Pacific Asia Workshop on Intelligence and Security Informatics (2008-2014)

Program Committee Member ASONAM - Advances in Social Networks Analysis and Mining (2009,2010,2011,2012,2013).

Ad Hoc Reviewer for a number of journals and conferences.

### **Teaching**

Oregon State University:

BA480, Information System Security (2018-Present)

BA574, Data Management (2015-Present)

ACTG420/520, IT Auditing (2007-Present)

BA272, Business Application Development (2007-2009, 2014-2016)

ACTG378, Accounting Information Management (2006-2014)

BA370, Business Systems Analysis (2006)

BA372, Business Systems Development (2006)

BA471, Management Information Systems (2006)

University of Arizona: MIS 363, Systems Analysis and Design for Business Managers

### **College/University Service**

University Security Governance Committee (2013- Present)

Faculty Advisory Council to the Vice Provost and Dean for Undergraduate Studies (2016-Present)

College of Business Promotion and Tenure Committee,

Committee Member (2010-2015) (Chair 2013) (2017-2019)

Non-Voting Committee Member, (2008 - 2009)

ISACA Academic Advocate (2008-present)  
IT Consulting with OSU – network cost allocation and data center planning (2012-2014, 2016-2017)  
College of Business Strategic Management Committee/Taskforce (2012, 2015)  
Austin Hall Building Planning Committee (2011-2013)  
Faculty Senate, Oregon State University (2007-2009, 2013-2015)  
SIM (Students in Information Management) club support (Field trips, club meetings)  
Club advisor 2009-2014)  
College of Business Undergraduate Program Committee (UPC) (2010-2012)  
OSU Undergraduate Research Working Group (2012-2016)  
Awards Committee, Committee Member (2008, 2010)  
ITAC - COB's Information Technology Advisory Council, Committee Member. (2007 - 2009)  
Classroom Conduct Taskforce, Committee Member. (September 2006 - June 2007)  
Library Liaison. (September 2008 - June 2009).

### **Awards**

Excellence in Scholarship Award, OSU College of Business, Scholarship/Research. (June 2007).  
Byron L. Newton Excellence in Teaching Award, OSU College of Business. (June 2009).  
Student Learning and Success Teamwork Award, OSU – with the Accounting Faculty . (June 2008).  
Mervyn L. Brenner Distinguished Teaching Fellow, OSU College of Business. (May 2008).  
KPMG Faculty Fellow. (2008, 2009).  
Outstanding Dedication to OSU MIS Students award voted by the OSU Students in Information Management (SIM) club (January 2010).  
Outstanding Dedication to OSU MIS Students award voted by the OSU Students in Information Management (SIM) club (January 2010).  
Favorite Accounting Professor, OSU Accounting Program, Teaching. (2011), voted by students.  
Newcomb Fellowship. (June 2011).  
College Service Award – College of Business (2012).  
Outstanding Commitment to Experiential Learning – College of Business (2012), voted by students.

### **Graduate and Honors Students**

Pei, Y., Dissertation Committee, "Learning with Partial Supervision for Clustering and Classification", Completed. June 2017.  
Crop, Joe, Dissertation Committee, *Methods to Improve the Reliability and Resiliency of Near/Sub-Threshold Digital Circuits*, Final Exam Scheduled Spring 2014  
Holliday, J., Dissertation Committee Member, Other (Within Oregon State University) Department, *The Effects of CI Tools and Implementation Practices on Hospital Performance*, Completed. (March 2007 - June 2010).

Courtain, C., Undergraduate Honors Thesis, Accounting Department, "US GAAP, IFRS, and the convergence efforts", (June 2010 - August 2010).

Bailey, D., Undergraduate Honors Thesis, "The Winners and Losers of Sarbanes-Oxley", (June 2007 - June 2010).

### **Industry Experience**

1988 - 2001 Dunavant of California Fresno, CA Programmer/Analyst

- Spearheaded the development of many computer-based business systems involving:
- Hundreds of users in several states using & computers from hand-held through mainframes.
- Many programming environments including COBOL, Visual Basic, VB Script, DOS batch files, HTML, Active server pages, Cold Fusion, and SQL. Included extensive work managing distributed data with various data communications protocols.
- Complete solutions: Network installation, hardware maintenance, operating system upgrades, comprehensive backup solutions, user training, bug fixes, and continuous program upgrades.
- Various related technologies: EDI, XML, SQL, bar coding, FTP and other telecommunication protocols, digital certificates, encryption, firewalls, distributed processing, automated interfaces with satellite-based market information.

### **Professional Memberships**

AAA - American Accounting Association. (2010-present).

ISACA - Information Systems Audit and Control Association, (2005-present). Academic Advocate

SIM – Society for Information Management, Portland Chapter (2011-present)

IEEE - Institute of Electrical and Electronics Engineers, (January 2005-present).

AIS - Association for Information Systems, (2004-present).

ACM - Association for Computing Machinery, (2001-present).

### **Community Service**

Corvallis Youth Symphony Association (CYSA), Board member, Treasurer, Financial review committee member, Corvallis, OR. (2010-2013)