

# Curriculum Vita

## Jason R. Nichols

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### *Highlights*

- Over a decade of college-level teaching experience
- Consistently excellent course evaluations
- Expertise in teaching technical, hands-on courses
- Extensive experience in curriculum design
- Experience participating in grant-funded research
- Experience delivering executive presentations
- Have founded and facilitated student organizations and events
- Departmental service award recipient

## Education

### *Arizona State University*

- Ph.D., Information Systems (2009), Modular Process and Service Design In Situ (Dr. Michael Goul, Advisor, Dr. Kevin Dooley, Dr. Haluk Demirkan).
- Master of Business Administration (2003)
- Master of Science in Information Management (2003)

### *University of Oregon*

- B.S. Computer and Information Sciences (2001)
  - Minor: Business Administration

## Employment

### *Arizona State University (2018 – present)*

- *Clinical Associate Professor*

### *Oklahoma State University (2012 - 2018)*

- Assistant Professor

### *Oklahoma State University (2008 - 2012)*

- Visiting Assistant Professor
- CTANS

*Relationship* - 50% appointment and full summer support through the Center for Telecommunications and Network Security, an OSU Center for Excellence that has received over \$7 million in grants and other funding over its lifetime.

*Major Contributions:*

**Lead Developer, NRDFI** - complete rebuild of existing NRDFI system, representing the flagship project for CTANS

**Lead Developer, NRDFI-Academic** - launched a version of NRDFI for Centers of Academic Excellence in Information Assurance

**Lead Developer, DC3 Challenge** – developed a web-based management suite for the Department of Defense Cyber Crime Center’s annual Digital Forensics Challenge competition

### *Arizona State University (2003 to 2008)*

- Graduate Research/Teaching Assistant

### *CAPS Research (2001 to 2008)*

- Systems Architect – Project 10X/KMS.2  
CAPS Research is a premier strategic supply management research center. My work with them has included system design, project management, and software creation in the development of knowledge management and assessment software broadly used amongst a large set of Fortune 500 firms, as well as executive education and training.

### *University of Oregon (1999 to 2001)*

- Research Assistant

## Teaching Experience

*My course evaluations consistently rank amongst the highest in my department.*

### Average Performance (44 Total College-Level Course Sections)

- Oklahoma State University Average Performance (5pt scale, 5=very high): **4.73/5**
- Oklahoma State University Average Performance (4pt scale, 4=very high): **3.81/4**
- Arizona State University Average Performance (5pt scale, 1=very good): **1.19**

*Oklahoma State University (Performance Evaluation Rating Scale: 4/5=very high to 0=very low)*

- MSIS 2203, Intro to Business Programming
  - Fall 2008 **Average Rating: 3.75/4**
  - Spring 2009 (Section 1) **Average Rating: 3.33/4**
  - Spring 2009 (Section 2) **Average Rating: 3.85/4**
  - Fall 2009 **Average Rating: 3.79/4**
  - Spring 2010 **Average Rating: 3.86/4**
  - Fall 2014 (Section 1) **Average Rating: 3.79/4**
  - Fall 2014 (Section 2) **Average Rating: 3.93/4**
  - Spring 2015 (Section 1) **Average Rating: 3.87/4**
  - Spring 2015 (Section 2) **Average Rating: 3.75/4**
  - Fall 2015 (Section 1) **Average Rating: 4.68/5**
  - Fall 2015 (Section 2) **Average Rating: 4.68/5**
  - Fall 2015 (Section 3) **Average Rating: 4.83/5**
  - Spring 2016 (Section 1) **Average Rating: 4.57/5**
  - Fall 2016 (Section 1) **Average Rating: 4.79/5**
  - Fall 2016 (Section 2) **Average Rating: 4.82/5**
  - Spring 2017 (Section 1) **Average Rating: 4.62/5**
  - Spring 2017 (Section 1) **Average Rating: 4.78/5**
  - Fall 2017 (Section 1) **Average Rating: 4.85/5**
  - Fall 2017 (Section 1) **Average Rating: 4.65/5**
- MSIS 4363, Capstone: Advanced Systems Development
  - Spring 2010 **Average Rating: 3.82/4**
  - Fall 2010 **Average Rating: 4.0/4**
  - Spring 2011 **Average Rating: 3.86/4**
  - Fall 2011 **Average Rating: 4.0/4**
  - Fall 2012 **Average Rating: 4.0/4**
  - Spring 2013 **Average Rating: 4.0/4**
  - Fall 2013 **Average Rating: 4.0/4**
- MSIS 3363, Advanced Business Programming
  - Fall 2010 **Average Rating: 3.67/4**
  - Spring 2011 **Average Rating: 3.56/4**
  - Fall 2011 (Section 1) **Average Rating: 3.81/4**
  - Fall 2011 (Section 2) **Average Rating: 3.46/4**
  - Fall 2012 **Average Rating: 3.86/4**
  - Spring 2013 **Average Rating: 3.5/4**
  - Fall 2013 **Average Rating: 3.32/4**

- Spring 2014 (Section 1) **Average Rating:** 3.76/4
- Spring 2014 (Section 2) **Average Rating:** 3.91/4
- MSIS 5020, Masters Program – Advanced Systems Development
  - Fall 2010 **Average Rating:** 4.0/4
- MSIS 5223, Masters Program – Advanced Business Programming
  - Spring 2011 **Average Rating:** 3.88/4
  - Fall 2011 **Average Rating:** 4.0/4
  - Fall 2012 **Average Rating:** 4.0/4
  - Spring 2013 **Average Rating:** 4.0/4

*Arizona State University* (Performance Evaluation Rating Scale: **1=very good** to **5=very poor**)

- CIS 360, Business Database Concepts
  - Spring 2004 **Average Rating:** 1.22
  - Fall 2005 **Average Rating:** 1.19
- CIS 340, Object Oriented Modeling and Programming (Summer 2005, co-taught)
  - **Average Rating:** 1.00
- CIS 220, Programming Concepts for Accounting Majors
  - **Average Rating:** 1.33

### **Curriculum Design**

*I have worked with my colleagues to entirely rebuild the technical courses of our core curriculum at OSU MSIS in order to more closely align these classes with one another, with the evolving technologies of the field, and with the needs of our corporate recruiting partners. This has been, and continues to be, an ongoing process. I have also served on the initial curriculum committee for the business school's efforts to rebuild their core courses at the college level.*

*Highlights of my work in the area of curriculum design include:*

- Replacing a book-based prep of our Intro to Programming in Java class with custom developed hands-on curriculum.
- Replacing our VB.net Advanced Programming class with C#, in line with feedback from our recruiting business partners, and introducing design patterns to the curriculum.
- Developing the department's first regularly offered software development for the web class. This class was initially an elective, and now serves as the department's capstone course.
- Helping transition our capstone course from web development to mobile development.
- Rebuilding our Advanced Programming class to teach web development through asp.net and C#, framed by preparing our students to be able to take the Microsoft Certification exam in this area.
- Rebuilding the Intro to Programming class to transition from java to C#, and to leverage the model/view/controller paradigm throughout the curriculum in order to get students thinking about business-centric architectural concerns such as reusability, adaptability, and concurrent development.
- Overseeing multiple doctoral students as they delivered my course preps across either the Intro to Programming or the Advanced Programming classes in the years before we recruited full-time faculty to fill the position.

- Providing support for multiple instructors as they delivered our capstone course in the years before we recruited full-time faculty to fill the position.

### **Student Engagement**

*I have contributed to our students' academic experiences outside of the classroom as well. Highlights of these efforts include:*

- Founded a student programming group that developed prototype software artifacts for paying industry customers.
- Worked with colleagues in the entrepreneurship department to bring Startup Weekend to OSU as an annual event.
- Engaged in multiple honors contracts across each class I've taught at OSU.
- I am an academic integrity facilitator, and mediate disputes between students and faculty.
- I am head counselor for our annual ISyTE summer camp. Each year my wife and I spend a week living in the dorms overseeing a group of 25 high school students and managing their experience at camp.
- Filled in as faculty advisor for various Association of Information Technology Professionals meetings when needed.
- Drove a team of 8-12 students 450 miles to the annual Collegiate Cyber Defense Competition in the years prior to the event being made available online.
- Rewarded a team of 4 of my programming group's top members by driving them to Houston to attend a Startup Weekend event.
- Represented the department at high school career fairs.
- Regularly judged our department's Professional Development Case Competition

### **Additional University Service**

- Reviewer: OSU Interdisciplinary Planning Grant (2013)
- Undergrad curriculum and assessment committee (2012, 2013, 2014)
- University technology services fee committee (2012 - present)
- Coordinated web support for OSU Big XII conference (2013)
- Promotion and Tenure Policy Review Committee (2012)
- Department Technology Strategy Committee (2012)
- MSIS Outstanding Service Award Recipient (2009)
- Academic Integrity Facilitator (2009 – current)
- Member – Netbook Cart Committee (2010 – current)
- Member – Computing Resources Strategy Committee (2011 – current)
- Presenter – Veterans with Disabilities Entrepreneurship Program (2010 – 2013)
- Faculty Internship Mentor for Two Foreign Exchange Students (2010)

## Current Research Projects

*Complex Adaptive Supply Networks (with Dr. Michael Goul)* – Following up on a seminal article that framed the supply base as a complex adaptive system, our work modifies the underlying NK complexity model to support the broader research agenda of the supply network. In doing so, the model is expanded to include contemporary research sub-domains such as supplier integration, value co-creation, and disruption.

*Status:* Research complete, first manuscript ready soon for JOM submission.

*The Analytics of Things (with Dr. Michael Goul)* - A convergence of the Internet of Things, Big Data, artificial intelligence, digital transformation and analytics will occur as Moore's Law impacts computational capabilities at the edge. The phrase, 'Analytics of Things' (AoT) has come to characterize this convergence. Companies are already undergoing strategic shifts to prepare for AoT-based competition. Product designers are rethinking traditional lifecycles as smart products will have dormant properties that can be 'turned on' long after a sale. New business models are already emerging, and for many organizations, there will be a profound shift from a product to a service focus. Predictive analytics at the edge will deliver personalized services in new environments including smart cities and stadiums. Machine learning at the edge will mean it is possible that unpredictable emergent system behavior will occur. There are entirely new strategic, behavioral, tactical, computational, ethical and governance implications to AoT. However, there is a short window of opportunity for the IS research community to help prepare for this future.

*Status:* Mini-track proposal accepted for AMCIS 2018

## Grants and Funded Research

- Summer funding as an investigator through a NASA grant for the continued development of ECLIPSE distributed collaborative learning system. (2013)
- Co-Principal Investigator, OSU Planning Grant for Establishing Interdisciplinary Programs, for the ECLIPSE distributed collaborative learning system **(\$20,000)**
- 50% appointment and full summer support through the Center for Telecommunications and Network Security, an OSU Center for Excellence that has received over \$7 million in grants and other funding over its lifetime.
- Investigator, "Collaborative Data Warehousing" (Principals: M. Goul and H. Demirkan), field research with American Express, Submitted 12/2004. **(\$100,000)**
- Grant to attend 1<sup>st</sup> annual Design Science Research in Information Systems and Technology conference. **(\$500.00)**

## Executive Presentations

- Nichols, J. (2012) Crowd Sourcing Negative Hash Sets, Department of Defense Cyber Crime Conference, Atlanta, GA, January, 2012
- Nichols, J. and Biros, D. (2012) NRDFI System Overview and Demonstration, Atlanta, GA, January 2012

- Weiser, M. and Nichols, J. (2011) Hash Set Summit, Department of Defense Cyber Crime Conference, Atlanta, GA, January, 2011
- Weiser, M. and Nichols, J. (2011) NRDFI System Overview and Demonstration, Atlanta, GA, January 2011
- Weiser, M. and Nichols, J. (2010) NRDFI System Overview and Demonstration, St. Louis, MO, January 2010
- Weiser, M. and Nichols, J. (2009) NRDFI System Overview and Demonstration, St. Louis, MO, January 2009
- Weiser, M. and Nichols, J. (2009) Implementing a Local Version of the NRDFI for DC3, Department of Defense Cyber Crime Center, Baltimore, MD, June 23, 2009
- Goul, M., Demirkan, H., and Nichols, J. (2005) Update: Collaborative Data Warehousing Research between American Express and Department of Information Systems, Arizona State University, Phoenix, AZ, July 25, 2005
- Goul, M., Demirkan, H., and Nichols, J. (2005) Collaborative Data Warehousing Research between American Express and Department of Information Systems, Arizona State University, Phoenix, AZ, February 4, 2005
- Petersen, K., Monczka, R., and Nichols, J. (2003). Deploying Project 10X and The Integrated Suite of Applications, Scottsdale, AZ, March 12, 2003.
- Petersen, K., Monczka, R., and Nichols, J. (2003). Deploying Project 10X and The Integrated Suite of Applications. Placeware-enabled internet webcast, February 19, 2003.
- Petersen, K., Monczka, R., and Nichols, J. (2003). Deploying Project 10X and The Integrated Suite of Applications. Placeware-enabled internet webcast, January 22, 2003.
- Petersen, K., Monczka, R., and Nichols, J. (2003). Deploying Project 10X and The Integrated Suite of Applications, Chicago, IL, January 17, 2003.
- Petersen, K., Monczka, R., and Nichols, J. (2003). Deploying Project 10X and The Integrated Suite of Applications, Chicago, IL, January 16, 2003.

### Refereed Journal Publications

- Nichols, J., Biros, D. P., Sharda, R., and Shimp, U., "The Emergence of Organizational Process Liability as a Future Direction for Research on Technology Acceptance", *International Journal of Social and Organizational Dynamics in Information Technology* 2(4) 2012.
- Nichols, J., Biros, D., and Weiser, M. *Towards Alignment Between Communities of Practice and Knowledge-Based Decision Support*. *Journal of Digital Forensics, Security and Law*, 7(2) 2012.
- Demirkan, H., Sen, S., Goul, M., Nichols, J. *Ensuring Reliability in B2B Services: Fault Tolerant Inter-organizational Workflows*. *Information Systems Frontiers*, 14(3) 2012.
- Chen, A., Nichols, J. *A Model of Service-Oriented Architecture and Firm/Network Performance*. *International Journal of Information Technology and Management*, 9(1) 2010.
- H. Demirkan, and J. Nichols, *IT Services Project Management: Lessons Learned from a Case Study in Implementation*, *International Journal of Project Organisation and Management*, 1(2) 2008.
- J. Nichols, H. Demirkan, and M. Goul, *Autonomic Workflow Execution in the Grid*, *IEEE Transactions on Systems, Man and Cybernetics*, 36(3) 2006.

### Book Chapters

- J. Nichols and M. Goul, "Synergizing the Artificial Intelligence and Decision Support Research Streams: Over a Decade of Progress with New Challenges on the Horizon," in *Intelligent Decision-Making Support Systems (i-DMSS): Foundations, Applications and Challenges.*, *Decision Engineering Series*, J. Gupta, G. Forgionne, and M. Mora, Eds. London: Springer-Verlag, 2006.
- Nichols, J., Chen, A. "Coordination of a Service Oriented Architecture." *Encyclopedia of E-Commerce, E-Government and Mobile Commerce* 2006.

### Proceedings and Presentations

- Antonenko, P., Crippen, K., Eutsler, L., & Nichols, J. (2015). Task-specific and global scaffolds to social interaction in computer-supported collaborative problem solving: Results of a usability study. in *Proceedings of Conference of the American Educational Research Association* 2013, Chicago, IL.



- Antonenko, P. & Nichols, J. “ECLIPSE: Environment for Collaborative Learning Integrating Problem Solving Experiences.” in Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2013. Chesapeake, VA.
- Nichols, J., D. Biros, and M. Weiser. “Toward Alignment between Communities of Practice and Knowledge-Based Decision Support.” in Proceedings of the Conference on Digital Forensics, Security, and Law. 2012. Richmond, Virginia.
- J. Nichols, M. Goul, Dooley, K., H. Demirkan, “Reconsidering Modular Design Rules in a Dynamic Service Context.” *Accepted at the 6th International Conference on Design Science Research in Information Systems and Technology*, May 2011.
- J. Nichols, M. Goul, H. Demirkan, “Towards a Theory of Agile Dashboards for Service Oriented Organizations,” *Accepted at the 15th Americas Conference on Information Systems*, August 2009.
- M. Hass, J. Nichols, D. Biros, M. Weiser, J. Burkman, and J. Thomas, “Motivating Knowledge Sharing in Diverse Organizational Contexts: An Argument for Reopening the Intrinsic vs. Extrinsic Debate,” *Accepted at the 15th Americas Conference on Information Systems*, August 2009.
- Burkman, J., J. Nichols, D. Biros, and M. Weiser (2008). “Information Sharing: Hackers vs. Law Enforcement.” 9th Australian Information Warfare and Security Conference. Perth, Australia.
- M. Keith, M. Goul, H. Demirkan, J. Nichols, and M. Mitchell, *Contextualizing Knowledge Management Readiness to Support Change Management Strategies*. HICSS-39, Kauai, Hawaii, 2006
- J. Nichols, H. Demirkan, and M. Goul, *Towards a Model of Fault Tolerance Technique Selection in Static and Dynamic Agent-Based Inter-Organizational Workflow Management Systems*, presented at HICSS-38, Kona, Hawaii, 2005.
- Petersen, K., Barrett, M. and Nichols, J. (2003). *Empirical Survey Research – The Shared Value Approach*. 34th Annual Meeting of the Decision Sciences Institute, Washington, DC.

## Service as a Reviewer

### *Journal Reviewer*

- Decision Sciences Journal
- Decision Support Systems
- European Journal of Operational Research
- Information Sciences

- International Journal of Human Computer Studies
- International Journal of Information Technology and Management
- Electronic Commerce Research and Applications
- International Journal of Service Sciences
- International Journal of Information Systems and Supply Chain Management
- Communications of AIS
- Annals of Operations Research
- International Journal of Services Technology and Management
- Journal of Applied Computing and Informatics

*Book Chapter Reviewer*

- Intelligent Decision-Making Support Systems (i-DMSS): Foundations, Applications and Challenges
- Encyclopedia of E-Commerce, E-Government and Mobile Commerce

*Conference Paper Reviewer*

- Decision Sciences Institute Annual Conference
- Americas Conference on Information Systems
- Pacific Asia Conference of Information Systems
- Hawaii International Conference on System Sciences