

# Dr. Jordan Shropshire, PhD

Associate Professor  
School of Computing  
University of South Alabama

Address: Shelby Hall, 150 Jaguar Dr., Suite 2101 Mobile, Alabama 36688  
Telephone: (251)-461-1597 • Email: jshropshire@southalabama.edu

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## EDUCATION

*Doctor of Philosophy in Business Administration* (overall GPA: 3.8/4.0)

Emphasis in Management Information Systems

Dissertation Topic: "Predicting compliance with prescribed organizational information security protocols." (Chair: Dr. Merrill Warkentin)

Mississippi State University, Starkville, MS (Fall 2008)

*Bachelors of Business Administration* (overall GPA: 3.3/4.0)

Concentration in Statistics

University of Florida, Gainesville, FL (2004)

## GRANT FUNDED ACTIVITY

Shropshire, J., Principal Investigator (2013-2015). National Science Foundation, Secure and Trustworthy Cyberspace: *Securing Cloud Infrastructure: Unobtrusive Techniques for Detecting Hypervisor Compromise* \$107,704.

## JOURNAL PUBLICATIONS

### Accepted Articles

Shropshire, J. (2015) "On technical skills, motivation and system hardening," *Journal of Management Systems*, Accepted.

Shropshire, J., Warkentin, M., and Sharma, S. (2015) "Personality, attitudes, and intentions: Predicting initial adoption of information security behavior," *Computers & Security*, (29:3) pp.177-191.

Aasheim, C., Shropshire, J., Li, L., and Kadlec, C. (2012) "Knowledge and Skill Requirements for Entry-Level IT Workers: A Longitudinal Study," *Journal of Information Systems Education*, (23:2) pp. 193-204.

Shropshire, J. and Kadlec, C. (2012) "Where Are You Going? A Comparative Analysis of Job and Career Change Intentions Among IT Workers in the United States," *Journal of Internet Banking and Commerce*, (17:2) pp.1-17.

- Shropshire, J. and Kadlec, C. (2012) "Feeling marginalized: Turnover of Public-Sector IT Professionals," *Journal of Emerging Trends in Computing and Information Sciences*, (3:6) pp. 848-864.
- Shropshire, J. and Kadlec, C. (2012) "I'm leaving the IT field: the Impact of stress, job insecurity, and burnout on IT professionals," *International Journal of Information and Communication Technology Research*, (2:1) pp. 6-14.
- French, A. and Shropshire, J. (2011) "Handheld versus Traditional Computer Security Threats and Practices: A Comparison of End User Perceptions," *The Journal of Internet Electronic Commerce Research*, (11:2) pp. 153-171.
- Johnston, A., Warkentin, M., and Shropshire, J. (2011) "The influence of the informal social learning environment on information privacy policy compliance efficacy and compliance intention" *European Journal of Information Systems* (20:3) pp. 267-284.
- Shropshire, J., Warkentin, M., and Johnston, A. (2010) "Impact of negative message framing on security adoption," *Journal of Computer Information Systems*. (51:1) pp. 41-51.
- Kadlec, C. and Shropshire, J. (2010) "Best practices in IT disaster recovery planning among U.S. banks" *Journal of Internet Banking and Commerce*. (15:1) pp.1-11.
- Shropshire, J. and Kadlec, C. (2010) "The relationship between IT director values and extent of IT disaster recovery planning in the banking industry," *International Journal of Information Systems for Crisis and Response Management*. (2:2) pp.54-68.
- Shropshire, J. and Kadlec, C. (2009) "Developing the information technology disaster recovery planning construct," *Journal of IT Management*, (20:4), pp. 37-56.
- Shropshire, J. (2009) "A canonical analysis of intentional information security breaches by insiders," *Information Management and Computer Security*, (17:4), pp. 296-310.
- Shim, J.P., Shropshire, J., Park, S., Harris, H., and N. Campbell (2007). "Podcasting for e-learning, communication, and delivery," *Industrial Management & Data Systems* (107:4), pp.587-600.
- Shropshire, J. (2006). "A taxonomy of metrics for hosted databases," *Journal of Internet Banking and Commerce* (11:1).

## Articles under Review

Shropshire, J. “A survey of hypervisor attack surfaces: towards a secure architecture” *International Journal of Information & Computer Security*, Under 1<sup>st</sup> Review.

Campbell, M., Stylianou, A., and Shropshire, J. “Impact of attitudinal factors on intention to report workplace internet abuse,” *Journal of Information Privacy and Security*, Revise & resubmit.

Campbell, M., Stylianou, A., and Shropshire, J. “A stitch in time saves nine: the role of moral judgment in reducing internet policy violations,” *International Journal of Business Information Systems*, Revise & resubmit.

Shropshire, J. and Gowan, A. “A structured approach to effective access control list tuning,” *Journal of Information Systems Security*, Accepted pending revisions.

Shropshire, J., Warkentin, M., and Straub, D. “Fostering employee compliance with information security policies,” *MIS Quarterly*. Under 2<sup>nd</sup> Review.

## REFEREED CONFERENCE PROCEEDINGS

Shropshire, J. (2015) “Strategies for Ensuring High Availability Cloud Services,” *Proceedings of the 21<sup>th</sup> Americas Conference on Information Systems*, San Juan, PR.

Shropshire, J., and Gowan, A. (2015) “Characterizing the traits of top-performing security personnel” *ACM SIGMIS Computers and People Research 2015*, Newport beach, CA.

Waziri, I., and Shropshire, J. (2015) “A heuristic migration logic between firewalls in a federated cloud” *Proceedings of the Annual IEEE SoutheastCon*, Ft. Lauderdale, FL.

Shropshire, J. (2015) “Hyperthreats: hypercall-based DoS attacks” *Proceedings of the Annual IEEE SoutheastCon*, Ft. Lauderdale, FL.

Shropshire, J., Campbell, M., and Sweeney, B. (2015) “Overcoming privacy challenges in mobile-cloud computing,” *Proceedings of the 18<sup>th</sup> Annual Conference of the Southern Association for Information Systems*, Hilton Head, SC.

Campbell, M., Sweeney, B., and Shropshire, J. (2015) “A safety net for social networking: development of a predictive tool for domestic terrorism,” *Proceedings of the 18<sup>th</sup> Annual Conference of the Southern Association for Information Systems*, Hilton Head, SC.

- Shropshire, J. Chapman, J., and Kadlec, C. (2015) "A Taxonomy of Android Vulnerabilities," *Proceedings of the Forty-Fifth Annual Meeting of the Southeast Decision Science Institute*, Savannah, GA.
- Shropshire, J. (2014) "Extending the cloud with fog: Security challenges & opportunities," *Proceedings of the 20<sup>th</sup> Americas Conference on Information Systems*, Savannah, GA.
- Shropshire, J. (2014) "Analysis of monolithic and microkernel architectures: Towards secure hypervisor design" *Proceedings of the 47<sup>th</sup> Hawaii International Conference on System Sciences (HICSS)*, Big Island, HI.
- Turnbull, L., Ochieng, H., Kadlec, C., and Shropshire, J. (2013) "Improving Service Continuity: IT Disaster Prevention and Mitigation for Data Centers," *13<sup>th</sup> Annual ACM Conference on IT Education/IT Research (SIGITE)*, Orlando, FL.
- Shropshire, J. and Gowan, A. (2013), "A Measure for assessing the adequacy of DDOS defenses," *Proceedings of the 19th Americas Conference on Information Systems*, Chicago, IL.
- Turnbull, L., and Shropshire, J. (2013), "Breakpoints: An analysis of potential hypervisor attack vectors," *Proceedings of IEEE SoutheastCon*, Jacksonville, FL.
- Shropshire, J. and Gowan, A. (2012), "A structured approach to effective access control list tuning," *Proceedings of the 2012 Workshop on Information Security and Privacy (WISP), the SIGSEC pre-ICIS Workshop*, Orlando, FL.
- Shropshire, J., Burrell, S., and Kadlec, C. (2011), "This is not what I signed up for: Job modification and IT worker turnover," *41<sup>st</sup> Annual Meeting of the Southeastern Decision Science Institute*, Savannah, GA.
- Aasheim, C., Li, L., Shropshire, J., and Kadlec, C. (2011) "I.T. program curriculum recommendations based on a survey on knowledge and skill requirements for entry-level workers," *2011 Annual Meeting of the Southeastern Institute for Operations Research and the Management Sciences (SE Informs)*, Myrtle Beach, SC.
- Shropshire, J. (2011) "Environment, motivation, and systems hardening," *IFIP Dewald Roode Information Security Workshop IFIP WG8.11/WG11.13*, Blacksburg, VA.
- Shropshire, J. and Kadlec, C. (2009) "The relationship between IT director values and extent of IT disaster recovery planning" *40th Annual Meeting of the Decision Science Institute*, New Orleans, LA.

- Kadlec, C. and Shropshire, J. (2009) "Establishing the IT disaster recovery construct"  
*Proceedings of the 15th Americas Conference on Information Systems*, San Francisco, CA.
- Shropshire, J. (2008) "A canonical analysis of intentional security breaches by insiders."  
*Proceedings of the 2008 Annual Meeting of the Decision Science Institute*, Baltimore, MD.
- Warkentin, M., Shropshire, J., and Johnston, A (2007), "The IT security adoption conundrum: An initial step toward the validation of applicable measures."  
*Proceedings of the 13th Americas Conference on Information Systems*, Keystone, Colorado.
- Shim, J.P., Shropshire, J., Park, S., Harris, H., and Campbell, N. (2006), "Perceived value of podcasting: Student communication medium-preferences," *Proceedings of the 12th Americas Conference on Information Systems*, Acapulco, Mexico.
- Shropshire, J., Warkentin, M., Johnston, M., and Schmidt, M. (2006), "Personality and IT security: An application of the five-factor model," *Proceedings of the 12th Americas Conference on Information Systems*, Acapulco, Mexico.
- Warkentin, M., Shropshire, J., and Johnston, A. (2006), "Security software discontinuance," *Proceedings of the 2006 Workshop on Information Security and Assurance (WISA)*, the SIGSEC pre-ICIS Workshop, Milwaukee, WI.
- Warkentin, M., Shropshire, J., and Johnston, A. (2006), "Why do we check the box? - A study of security action automation and capitulation," *Proceedings of The ISOneWorld Security Conference*, Las Vegas, NV.
- Shropshire, J. and Warkentin, M. (2005), "The modified attributes of innovation use," *Proceedings of 2005 INFORMS Conference on Information Systems and Technology (CIST)*, New Orleans, LA. (Conference presentation subsequently cancelled due to Hurricane Katrina.)

### **Research Grants**

- Shropshire, J. Principle Investigator (2013), "*1318399: Securing Cloud Infrastructure: Unobtrusive Techniques for Detecting Hypervisor Compromise.*" \$108,000.  
National Science Foundation, Computer and Network Systems program, Secure and Trustworthy Cyberspace track.

### **Awards**

- College of Information Technology Award for Outstanding Teaching (2011)  
College of Information Technology Award for Outstanding Research (2010)  
Emerald Literati Editor's Award for Highly Commended Research "Highly Cited Research" Category (2010)

## PROFESSIONAL ACTIVITIES

### Presentations

Shropshire, J. Annual meeting of the Advisory Board of the Allen E. Paulson College of Information and Technology, "*The State of Information Technology Research*," Georgia Southern University, Statesboro, GA.

Shropshire, J. (2010) (Keynote Speaker), Annual IT & Operations Conference, "*Benchmarking study: IT disaster recovery planning*," Georgia Bankers Association, Atlanta, GA.

Shropshire, J. (2009) Quarterly meeting of the IT & operation committee, "*Executive update: IT disaster recovery planning*," Georgia Bankers Association, Atlanta, GA.

### Reviews & Editorial Service

MIS Quarterly

Information & Management

Journal of Business Research

Decision Support Systems

Behaviour & Information Technology

European Journal of Information Systems

Information Systems Journal

Information & Organization

Americas Conference on Information Systems (AMCIS)

(2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 Information Security, Technology Adoption, and Management of IT Tracks)

International Conference on Information Systems (ICIS) (2006, 2007, 2010, 2011, 2012, 2013 Information Security Track)

Decision Sciences Institute Conference (DSI) (2006, 2007, 2008, 2009, 2011 Information Systems Track)

Assisted Dr. Ray Vaughn and Dr. Merrill Warkentin (Eds.) with coordination and administration of peer-reviewed book on information security: *Enterprise Information Systems Assurance and System Security: Managerial and Technical Issues*, Hershey, PA: Idea Group Publishers, 2006.

### Affiliations

Member of the Decision Sciences Institute (2007 – present)

Member of the Association of Information Systems (2006 – present)

Member of the Institute for electronics and electrical engineers (2012 – present)

## **TEACHING**

### **Courses Taught**

- Database Design
- Systems Analysis and Design
- IT Infrastructure
- Introduction to IT
- Network Architecture
- Network Security
- Introduction to Business
- Visual Basic

## **EMPLOYMENT HISTORY**

- 2014 – Present: Associate Professor of CIS, School of Computing, University of South Alabama – Mobile, Alabama
- 2013 – 2014: Associate Professor of IT, Department of IT, Georgia Southern University – Statesboro, Georgia
- 2008 – 2012: Assistant Professor of IT, Department of IT, Georgia Southern University – Statesboro, Georgia
- 2007 – 2008: Instructor for the College of Business and Industry, Mississippi State University – Starkville, Mississippi
- 2004 - 2008: Graduate Research Assistant, Mississippi State University - Starkville, Mississippi

## **CONSULTING**

- Conducted information systems consulting for small, medium, and large organizations in the southeastern United States. Created custom applications and solutions for a variety of business processes. Audited existing system designs and frameworks for security weaknesses.
- Approximately 40% of past and present consulting projects involve development of new systems; 60% of past and present consulting projects involve systems integration/ creation of middleware to bridge existing systems.
- Technical skills include: Network engineering, LAMP architecture (Linux Red Hat, Apache Server, MySQL, and PHP), data center management, and systems administration.