

# **Dr. Jim Marquardson**

## **CURRICULUM VITAE**

Associate Professor of Computer Information Systems  
Northern Michigan University

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Marquette, MI 49855 USA  
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### **EDUCATION**

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|---|-------------------|
| <b>Ph.D. Business Management (MIS Emphasis)</b><br>University of Arizona, Tucson, Arizona<br>Program GPA: 4.0 | <b>May 2015</b>   |
| <b>Master of Information Systems Management</b><br>Brigham Young University, Provo, Utah<br>Program GPA: 3.82 | <b>April 2006</b> |
| <b>B.S. Information Management</b><br>Brigham Young University, Provo, Utah<br>Cum laude<br>Program GPA: 3.87 | <b>April 2006</b> |

### **ACADEMIC EMPLOYMENT**

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| <b>Northern Michigan University</b><br>Associate Professor of Computer Information Systems (August 2021-present)<br>Tenure Granted (August 2020)<br>Assistant Professor of Computer Information Systems (August 2015-August 2021) | <b>August 2015 to present</b> |
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### **RESEARCH**

#### **Journal Articles**

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- Marquardson, J., Asadi, M. Cybersecurity Assessment for a Manufacturing Company Using Risk Registers: A Teaching Case. Information Systems Education Journal. 21(3), 62-69.
- Marquardson, J. (2022). SOC It to 'Em: Bringing a Security Operations Center onto a University Campus. Journal of Information Systems Education. 33 (3), 300-305.
- Marquardson, J. (2020). Encouraging Lifelong Learning through Tech Explorations. Information Systems Education Journal, 18 (6), 28-37.
- Marquardson, J., & Elnoshokaty, A. (2020). Skills, Certifications, or Degrees: What Employers Demand for Entry-level Cybersecurity Jobs, 18(1) pp 22-28. Information Systems Education Journal.

- Marquardson, J., & Schuetzler, R. (2019). Learning by Teaching through Collaborative Tutorial Creation: Experience using GitHub and AsciiDoc. *Journal of Information Systems Education*, 30 (1), 10-18.
- Marquardson, J., & Gomillion, D. L. (2019). Simulation for Network Education: Transferring Networking Skills Between Simulated to Physical Environments. *Information Systems Education Journal*, 17 (1), 28-39.
- Marquardson, J., & Grimes, M. (2018). Supporting Better Decisions: How Order Effects Influence Decision Support System Alignment. *Interacting with Computers: The Interdisciplinary Journal of Human-Computer Interaction*, 30 (6), 469-479, doi: 10.1093/iwc/iwy022.
- Grimes, M., & Marquardson, J. (2018). Quality Matters: Evoking Subjective Norms and Coping Appraisals by System Design to Increase Security Intentions. *Decision Support Systems*, 119, 23-34, doi: <https://doi.org/10.1016/j.dss.2019.02.010>.
- Marquardson, J., & Gomillion, D. L. (2018). Cyber Security Exercise Development: Protecting Your Institution While Giving Students Experience. *Information Systems Education Journal*.
- Marquardson, J. (2018). Infrastructure Tools for Efficient Cybersecurity Exercises. *Information Systems Education Journal*.

## Conference Proceedings

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- Marquardson, Jim (2023). Enhancing Self-Directed Learning with Artificial Intelligence: A Cybersecurity Classroom Study. In 2023 Proceedings of the ISCAP Conference. Albuquerque, New Mexico.
- Marquardson, Jim, and Gomillion, David. (2017). Cyber Security Exercise Development: Protecting Your Institution While Giving Students Experience. In 2017 Proceedings of the EDSIG Conference. Austin, TX, USA.
- Marquardson, Jim. (2017). Infrastructure Tools for Efficient Cybersecurity Exercises. In 2017 Proceedings of the EDSIG Conference. Austin, TX, USA.
- Marquardson, Jim, Dorn, Bradley, Wilson, David W., and Burgoon, Judee K. (2015). "The Discriminant Validity of Deception Indicators: An Analysis of Data from Multiple Experiments," Presented at the 48th Annual Hawaii International Conference on System Sciences, Kauai, Hawaii.
- Byrd, Michael, Grimes, Mark, Marquardson, Jim, and Burgoon, Judee K. (2015). "The Misclassification of Deceptive Behavior: An Analysis of Data from Multiple Experiments," Presented at the 48th Annual Hawaii International Conference on System Sciences, Kauai, Hawaii.
- Grimes, Mark, Proudfoot, Jeffrey G., Valacich, Joseph S., Jenkins, Jeffrey, Twyman, Nathan W., Burgoon, Judee K., and Marquardson, Jim. (2015). "Lessons Learned from Successive Deception Experiments," Presented at the 48th Annual Hawaii International Conference on System Sciences, Kauai, Hawaii.
- Grimes, M., Marquardson, J., and Nunamaker, J. 2014. "Broken Windows, Bad Passwords: Influencing Secure User Behavior via Website Design," Presented at the Twentieth Americas Conference on Information Systems, Savannah, Georgia, pp. 1-12.

Jeffrey L. Jenkins, Jim Marquardson, Jeffrey G. Proudfoot, Joseph S. Valacich, Elyse Golob, Jay F. Nunamaker, Jr. (2013). "The Checkpoint Simulation: A Tool for Informing Border Patrol Checkpoint Design and Resource Allocation" The Workshop on Innovation in Border Control (WIBC) at the European Intelligence and Security Informatics Conference (EISIC), Uppsala, Sweden, August 13-14.

Marquardson, Jim. (2012). *Password Policy Effects on Entropy and Recall: Research in Progress*. Paper presented at the 18th Americas Conference on Information Systems, Seattle, WA.

## Conference Presentations

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Marquardson, Jim (2023). Enhancing Self-Directed Learning with Artificial Intelligence: A Cybersecurity Classroom Study. 2023 ISCAP Conference. Albuquerque, New Mexico.

Marquardson, Jim (2022). Risk Register TLC: A Cybersecurity Case of Manufacturing Tables, Lecterns, and Chairs. 2022 EDSIG Conference on Information Systems and Computing Education. Clearwater, Florida.

Marquardson, Jim (2021). SOC It to 'Em: Bringing a Security Operations Center onto a University Campus. 2021 EDSIG Conference on Information Systems and Computing Education. Washington, DC.

Marquardson, J. (2019). Encouraging Lifelong Learning through Tech Explorations. EDSIG Conference on Information Systems and Computing Education, Cleveland, Ohio.

Marquardson, J. & Elnoshokaty, A. (2019). Skills, Certifications, or Degrees: What Companies Demand for Entry-level Cybersecurity Jobs. EDSIG Conference on Information Systems and Computing Education, Cleveland, Ohio.

Marquardson, J. & Gomillion, D. L. (2018). Simulation for Network Education: Transferring Networking Skills Between Simulated to Physical Environments. EDSIG Conference on Information Systems and Computing Education, Norfolk, Virginia.

Marquardson, J. & Schuetzler, R. (2018). Learning by Teaching through Collaborative Tutorial Creation: Experience using GitHub and AsciiDoc. EDSIG Conference on Information Systems and Computing Education, Norfolk, Virginia.

Marquardson, J., & Gomillion, D. (2017). Cyber Security Exercise Development: Protecting Your Institution While Giving Students Experience. Presented November 6, 2017 at the 2017 EDSIG Conference on Information Systems and Computing Education. Austin, TX, USA.

Marquardson, J. (2017). Infrastructure Tools for Efficient Cybersecurity Exercises. Presented November 6, 2017 at the 2017 EDSIG Conference on Information Systems and Computing Education. Austin, TX, USA.

Marquardson, Jim. "Using Cognitive Dissonance Theory and Decision Presentation Order to Make Decision Support Systems More Persuasive." Presented at the 2013 BYU Information Systems Research Symposium, October 9.

## Technical Presentations and Demonstrations

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Marquardson, Jim; Grimes, Mark. Case, Eric. Automated Credibility Assessment and AVATAR

Demonstration. Presentation given to the Ft. Huachuca Captains Group at the University of Arizona, November 3, 2014.

Marquardson, Jim. Border Patrol Checkpoint Operations Summary. Presentation given to Congressman Ron Barber staff member Grant Kerr at the University of Arizona, December 6, 2013.

Marquardson, Jim; Schuetzler, Ryan. Automated Credibility Assessment and AVATAR Demonstration. Presentation given to the Ft. Huachuca Captains Group at the University of Arizona, August 29, 2013.

Marquardson, Jim; Schuetzler, Ryan. AVATAR Demonstration for the Economist at the University of Arizona, June 14, 2013.

Marquardson, Jim; Jenkins, Jeffrey. Border Patrol Checkpoint Simulation Demonstration. Presentation given to Border Patrol leadership at University of Arizona with remote participants in Washington D.C., April 3, 2013.

## Technical Reports

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Border Patrol Checkpoint Operations: An Assessment of Data Integrity and Quality, Community Impacts, Performance Models and Measures, and Managerial Tool Development. Jenkins, Jeffrey; Proudfoot, Jeffrey; Marquardson, Jim; Gans, Judith; Golob, Elyse; Nunamaker, Jay. June, 2013. Prepared for the United States Border Patrol.

## Dissertation

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Title: "Achieving Alignment: System Design and Attitudinal Considerations to Increase the Persuasive Power of Technology"

- Chapter 1: Using Cognitive Dissonance Theory and Ordering Effects to Make Decision Support Systems More Persuasive
- Chapter 2: The Effects of Media Selection and Decision Framing on Persuasion
- Chapter 3: Using Protection Motivation and Participation through Personalization to Achieve Alignment

Dissertation Chair: Jay F. Nunamaker, Jr., University of Arizona

Committee Member: Joseph S. Valacich, University of Arizona

Committee Member: Susan A. Brown, University of Arizona

## RESEARCH GRANTS

### GenCyber Summer Camp

Douglas Miller, Michael Sauer, Jim Marquardson

\$150,000 – Awarded for 2024 Camp

### GenCyber Summer Camp

Douglas Miller, Jim Marquardson

\$150,000 – Awarded for 2023 Camp

### **Credibility Assessment On The Go: Evaluating a Tablet-Based Concealed Information Test**

Jim Marquardson, Justin Giboney, Mark Grimes, Jeffrey G. Proudfoot

\$40,000 - Awarded June 2014

Center for Identification Technology Research (CITeR)

### **Chat Bot for Enhancing Voluntary Disclosure**

Schuetzler, Grimes, Giboney, Buckman, Marquardson, Burgoon

\$40,000 – Awarded June 2014

Center for Identification Technology Research (CITeR)

### **Mobile Interviewing Agents**

Ryan Schuetzler, Justin Giboney, Mark Grimes, Jim Marquardson, David Wilson

\$50,000 - Awarded January 2013

Center for Identification Technology Research (CITeR)

## **TEACHING**

I earned my Certificate in College Teaching from the University of Arizona in May, 2014.

I have taught the following courses:

- **IS 116 Cybersecurity Fundamentals**, Northern Michigan University
- **IS 436 Advanced Networking Tools and Techniques**, Northern Michigan University
- **CIS 222 Quantitative Business Problem Solving**, Northern Michigan University
- **CIS 226 Introduction to Networks and Security**, Northern Michigan University
- **CIS 250 Systems Analysis and Design**, Northern Michigan University
- **CIS 336 Network Operating Systems**, Northern Michigan University
- **MIS 111L Computers and the Internetworked Society Lab**, University of Arizona
- **MIS 304 Using and Managing Information Systems**, University of Arizona
- **MIS 111 Computers and the Internetworked Society**, University of Arizona

I have assisted the following courses:

- **MIS 111 Computers and the Internetworked Society**, University of Arizona
- **MIS 478/578 Project Management**, University of Arizona
- **I SYS 100 Excel**, Brigham Young University
- **I SYS 101 PowerPoint**, Brigham Young University

## **SERVICE**

### **University Committees**

- **NMU Senate Committee on Internationalization (Chair)**
- **NMU Library and Instructional Support Committee**
- **NMU AI Literacy Working Group**
- **NMU Open Education Resource Working Group**
- **NMU College of Business AACSB Compliance Committee**
- **NMU College of Business Evaluation Committee**
- **NMU College of Business Scholarship Committee**

## Reviewer

- Journal of Management Information Systems (JMIS)
- Americas Conference on Information Systems (AMCIS)
- Hawaii International Conference on System Sciences (HICSS)
- International Conference on Information Systems (ICIS)
- Conference on Information Systems and Computing Education (EDSIGCON)

## PROFESSIONAL AND ACADEMIC CONSULTING CLIENTS

- BYU Bookstore (Provo, UT)

## RESEARCH INTERESTS

- Persuasive technology in a decision support scenario
- Data mining for business intelligence analytics and healthcare informatics
- Virtual team collaboration in a global environment
- Automation of credibility assessment

## WORK EXPERIENCE

**Summary:** I have developed new systems to automate business processes, managed projects, and engineered the architecture for enterprise wide collaboration tools. The following are the organizations for which I have worked:

- **ExxonMobil**, Senior Information Systems Analyst (Houston, TX; May 17, 2005-August 19, 2005; June 5, 2006-August 11, 2011 )
  - **Custom application development:** Created an interface between the financial systems and a bank to automate payment of international invoice payments using the .NET framework; wrote an ASP.NET website to automate the listing of management's spending approval authority limits; updated legacy VB6 code to improve performance
  - **Change management:** Lead the effort to reengineer the SharePoint change management processes to make the process more agile and more secure; lead several small projects to make enhancements to existing systems
  - **System support:** Provided last line support of SharePoint and custom software; worked with vendors to isolate problems and implement solutions; communicated with clients throughout the troubleshooting process
- **Brigham Young University**, Marriott School of Management, Teaching Assistant (Provo, UT; April 12, 2004-April 29, 2005; August 22, 2005-April 26, 2006)
  - **Improved course materials:** Updated the Excel and PowerPoint course manuals for the newer from Office 2000 to Office 2003
  - **Grading:** Determined final grades; worked with professor to help decide all grading issues and student concerns
  - **Presenting:** Presented the course introduction to groups of up to several hundred students at a time
- **Zions Bank**, Intern (Provo, UT; May 10, 2004-February 4, 2005)
  - **Web development:** Streamlined the service offering templates to allow call center representatives to quickly help customers; improved the intranet usability by fixing several design flaws using JavaScript

## **INTERNATIONAL / CROSS-CULTURAL**

- Have lived in Seattle, Provo, Guatemala City, Houston, and Tucson
- Have worked on teams with virtual team members in Argentina, Malaysia, Budapest, Canada, Brazil, and England
- Conversant in Spanish

## **TECHNICAL SKILLS**

- Network+ certified
- Proficient in the .NET framework, including ASP.NET and ASP.NET MVC
- Experience programing in C#, VB.NET, Java, JavaScript, Python, PowerShell, VBScript
- Advanced SQL knowledge, primarily using SQL Server
- Proficient using R and Weka for statistics and data mining