

# Tonia San Nicolas-Rocca, PhD, MBA

## Education

Ph.D., Information Systems and Technology  
Claremont Graduate University, Claremont, California

Dissertation Title: Identification and Access Management: An Action Research Approach to Develop a Training Strategy for Higher Education.

Dissertation Committee: Lorne Olfman (Chair), Samir Chatterjee, Ben Schooley

Master of Business Administration  
Concentration: Information Management  
California State University, San Bernardino  
Honors: Beta Gamma Sigma

Bachelors of Arts, Business Administration  
Concentrations: Marketing, and Information Management  
California State University, San Bernardino

## Awards and Honors

Meritorious Mention Award, SIG-Health 2014 Best Published Paper Award, Americas Conference on Information System Sciences (AMCIS), *San Nicolas-Rocca, T., Schooley, B. & Joo, S-J., Design and Development of a Patient-Centered E-Health System to Improve Patient Understanding at Discharge*, Communications of the Association for Information Systems: 2014, 34(24).

Chancellor's Doctoral Incentive Program Recipient  
This program provides resources to a limited number of doctoral students with the motivation, skills, and experience needed to teach the diverse student body of the California State University.

Elected in Beta Gamma Sigma  
The honor society for AACSB Accredited Business Programs

## Grants and Scholarships

- 2016 Research, Scholarship & Creative Activity Grant, San Jose State University
- 2015 Research, Scholarship & Creative Activity Grant, San Jose State University
- 2015 Textbook Alternative Program Grant, San Jose State University
- 2012-13 Faculty Development Grant Recipient, Colorado State University, Pueblo
- 2012-13 Provost Seed Grant Recipient, Colorado State University, Pueblo
- 2011-12 Faculty Development Grant Recipient, Colorado State University, Pueblo
- Chancellor's Doctoral Incentive Program Mini-Grant Recipient
- Online Course Development Grant Recipient, California State University, San Bernardino.

## Academic Appointments

### *Assistant Professor, 2013 – present*

#### *School of Information, San Jose State University, California*

Facilitate the study of information systems to graduate level students by introducing a number of theoretical concepts while incorporating practical ideas, technology use and experiences to offer a well-rounded online learning environment according to the National Initiative for Cybersecurity Education. Strategically develop cybersecurity curriculum within a cross-disciplinary team for the creation of certificate, and masters of science degree programs. Serve on department and university committees, and advise students. Participate in outreach programs to increase female and/or minority interest in cybersecurity.

### *Assistant Professor, 2010 – 2013*

#### *Malik and Hasan School of Business, Colorado State University, Pueblo*

Facilitate the study of Computer Information Systems to undergraduate and graduate level students by introducing a number of theoretical concepts while incorporating practical ideas, technology use and experience to offer a well-rounded learning environment. Effectively teach computer information systems courses, including IT Security Management, Information Security, Information Networking, Network Systems Administration and Management of Information Systems.

Serve on department and university committees, and advise students. Responsible for program assessment to ensure Assurance of Learning (AOL) goals are achieved for the Computer Information Systems (CIS) Department and the Hasan School of Business. Prepare effective weekly and semester lesson plans. Evaluate individual and group knowledge, skills, and abilities by using several testing methods, individual assignments, and interactive group activities.

### *Lecturer, 2002-2010*

#### *College of Business and Public Administration, California State University, San Bernardino*

Facilitate the study of Information Systems to undergraduate and graduate level students by introducing a number of theoretical concepts while incorporating practical ideas, technology use and experiences to offer a well-rounded learning environment. Effectively teach introductory and core courses, including Information Management, Management of Information Systems, Information Networking and Security, Systems Analysis and Design, Database Management, Creative Problem Solving and Decision Making, and Web Publishing.

Strategically manage face-to-face, online and distance learning classroom environments. Prepare effective weekly and quarterly lesson plans for a diverse learning population. Evaluate individual and group knowledge, skills, and abilities by using several testing methods, individual assignments, and interactive group activities. Assist in mapping curriculum to meet the Department of Defense Information Assurance Scholarship for Service Program.

## Industry Experience

### *Global Account Manager, /Multinational Business Accounts, Concert (AT&T)*

Strategically manage the overall revenue growth, customer satisfaction, and performance within a portfolio of multinational corporate accounts. Develop and apply knowledge of the client business drivers and goals, and architect innovative telecommunications and network security solutions to address the client's needs. Develop and implement business plans to strategize on identifying and closing opportunities while simultaneously leading multiple global project teams. Develop and maintain technical and industry expertise to understand and identify customer needs for core and emerging networking products and services.

## *Telecommunications Solutions Consultant, Sprint*

Develop business relationships with potential customers by offering wide area network telecommunication solutions to satisfy organizational needs in the mid-size business market.

## Consulting

*Incendant, LLC, 2012 - Present*

## Grants and Scholarships

- 2016 Research, Scholarship & Creative Activity Grant, San Jose State University
- 2015 Research, Scholarship & Creative Activity Grant, San Jose State University
- 2015 Textbook Alternative Program Grant, San Jose State University
- 2012-13 Faculty Development Grant Recipient, Colorado State University, Pueblo
- 2012-13 Provost Seed Grant Recipient, Colorado State University, Pueblo
- 2011-12 Faculty Development Grant Recipient, Colorado State University, Pueblo
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## Selected Teaching Experience

- Cybersecurity
- Information Security Risk Management
- Information Retrieval Systems
- Networking
- Network Systems Administration
- Information Management Systems
- Advanced Systems Analysis and Design
- Systems Analysis and Design
- Database Management
- Creative Problem Solving and Decision Making (Knowledge Management)
- Web Publishing
- Introduction to Information Technology

## Publications

Min, H., Joo, S-J, *San Nicolas-Rocca, T.* (2016) Information System Outsourcing and Its Impact on Supply Chain Performances. *International Journal of Logistics Systems and Management*.

Spears, J.L. & *San Nicolas-Rocca, T.* (2015). Knowledge Transfer in Information Security Capacity Building for Community-Based Organizations, *International Journal of Knowledge Management: 11(4)*.

Schooley, B., *San Nicolas-Rocca, T.* & Burkhard, R. (2015). Patient-Provider Communications in Outpatient Clinic Settings: A Clinic-based Evaluation of Mobile Device and Multi-Media Mediated Communications. *Journal of Medical Information Research mHealth and uHealth: 3(1)*.

- San Nicolas-Rocca, T., Schooley, B. & Spears, J.L. (2014). Exploring the Effect of Knowledge Transfer Practices on User Compliance to IS Security Practices. International Journal of Knowledge Management: 10(2). Featured Article in the January 2015 issue of Informed Librarian Online.*
- San Nicolas-Rocca, T., Schooley, B. & Joo, S-J. (2014). "Design and Development of a Patient-Centered E-Health System to Improve Patient Understanding at Discharge," Communications of the Association for Information Systems: 34(24). Meritorious Mention Award, SIG-Health 2014 Best Published Paper Award.*
- San Nicolas-Rocca, T. and Olfman, L. (2013). "End User Security Training for Identification and Access Management," Journal of Organizational and End-User Computing: 25(4), pp. 75-103.*
- San Nicolas-Rocca, T., & Parrish, J. (2013). Capturing and Conveying Chamorro Cultural Knowledge using Social Media. International Journal of Knowledge Management, 9(3), pp. 1-18.*
- San Nicolas-Rocca, T. (2010). Identification and Access Management: An Action Research Approach to Develop a Training Strategy for Higher Education. Doctoral Dissertation, Claremont Graduate University.*
- San Nicolas-Rocca, T. & Coulson, A. (2007). Global Virtual Teams: Towards a Research Framework to Evaluate Effectiveness in using Group Support Systems, Communications of the International Information Management Association: 7(1).*

## Refereed Conference Proceedings

- San Nicolas-Rocca, T., Spears, J. "Information Security Capacity Building in Community-Based Organizations: Examining the Effects of Knowledge Transfer." Proceedings of the 49th Annual Hawaii International Conference on System Sciences, January 5-8, 2016, Computer Society Press, 2016.*
- San Nicolas-Rocca, T., Schooley, B. & Spears, J.L. "Designing effective knowledge transfer practices to improve IS security awareness and compliance." Proceedings of the 47th Annual Hawaii International Conference on System Sciences, January 6-9, 2014, Computer Society Press, 2014.*
- San Nicolas-Rocca, T. & Parrish, J. "Using Social Media to Capture and Convey Cultural Knowledge: A Case of Chamorro People." Proceedings of the 46th Annual Hawaii International Conference on System Sciences, January 7-10, 2013, Computer Society Press, 2013.*
- Parrish, J. & San Nicolas-Rocca, T. "Toward Better Decisions with Respect to IS Security: Integrating Mindfulness into IS Security Training." Association of Information Systems SIGSEC Workshop on Information Security and Privacy (WISP), International Conference on Information Systems, December 15, 2012, Orlando, FL, 2012.*
- San Nicolas-Rocca, T. & Olfman, L. "Implementing Two-Factor Authentication in Higher Education." Proceedings of the Fourth Annual AIS SIGSEC Workshop on Information Security & Privacy (WISP), December 14, 2009, Phoenix, AZ, 2009.*

*San Nicolas-Rocca, T., Rhee, D. & Olfman, L. "Designing a Knowledge Management System: A Case Study of a Global Telecommunications Company." Proceedings of the 15th Americas Conference on Information Systems, CD-ROM, 2009.*

*San Nicolas-Rocca, T. & Coulson, T. "Global Virtual Teams: Towards a Research Framework to Evaluate Effectiveness in using Group Support Systems." Proceedings of the 18<sup>th</sup> Annual Conference of the International Information Management Association, October 15 - 19, 2007, Beijing, China, 2007.*

## Papers and Projects in Process

### Cybersecurity

*San Nicolas-Rocca, T. Identifying Cybersecurity Best Practices within Libraries*

*San Nicolas-Rocca, T. and Spears, J. Improving Cybersecurity Practices in Community-based Organizations.*

*San Nicolas-Rocca, T. Cybersecurity Education: Building an Online Class to Prepare Students for the Global Workplace.*

*San Nicolas-Rocca, T., and Thomchick, R. Application Level Security: A Case Study of a Public Library.*

*San Nicolas-Rocca, T. Attitude and Behavioral Influence of User Participation to Improve IS Security Compliance.*

### eHealth

*San Nicolas-Rocca, T., Burkhard, R., and Schooley, B. Using m-Health Application to Increase Patient Motivation to Seek Medical Treatment.*

*Schooley, B., San Nicolas-Rocca, T. Evaluating the Effectiveness of an Enterprise Architecture for Electronic Patient Care Record (ePCR) Information Exchange.*

*San Nicolas-Rocca, T. Use of Mobile Health Application to Improve Endoscopy Outcomes*

*Schooley, B. and San Nicolas-Rocca, T. The Effectiveness of One Time Password in Mobile Health Systems.*

## Conference Presentations, Abstracts, Posters and Short Papers

*Spears, J., & San Nicolas-Rocca, T. "Information Security Capacity Building in Community-Based Organizations: Examining the Effects of Knowledge Transfer", 49th Annual Hawaii International Conference on System Sciences, January 5-8, 2016, Koloa, Kauai, Hawaii, USA.*

*San Nicolas-Rocca, T., Burkhard, R., & Schooley, B. "Improving Provider-patient Communications with Mobile Multi-media Computing", INFORMS Healthcare Conference, July 29-31, 2015, Nashville, TN, USA.*

*Thomchick, R. & San Nicolas-Rocca, T. "Dude, Where's My SSL?" Information Today's Internet Librarian Conference, October 27-29, 2014, Monterey CA, USA.*

# Tonia San Nicolas-Rocca

- San Nicolas-Rocca, T.*, Schooley, B. & Spears, J.L. “Designing effective knowledge transfer practices to improve IS security awareness and compliance”, 47th Annual Hawaii International Conference on System Sciences, January 6-9, 2014, Waikoloa, Hawaii, USA
- Schooley, B. & *San Nicolas-Rocca, T.* “Mobile Multi-Media Instruction at Discharge to Improve Patient Engagement”, M-Health Summit, December 8-11, 2013, National Harbor, MD, USA.
- San Nicolas-Rocca, T.* & Parrish, J. “Using Social Media to Capture and Convey Cultural Knowledge: A Case of Chamorro People”, 46th Annual Hawaii International Conference on System Sciences, January 7-10, 2013, Wailea, Maui, Hawaii, USA.
- Parrish, J. & *San Nicolas-Rocca, T.* “Toward Better Decisions with Respect to IS Security: Integrating Mindfulness into IS Security Training”, Association of Information Systems SIGSEC Workshop on Information Security and Privacy (WISP), International Conference on Information Systems, December 15, 2012, Orlando, FL, USA.
- San Nicolas-Rocca, T.* “User Participation in the Development of an IT Security Awareness Program”, IS One World Security Conference, April 11-13, 2012, Las Vegas, NV, USA.
- San Nicolas-Rocca, T.*, “Using Canonical Action Research for Identification and Access Management”, Authors Workshop for the European Journal of Information Systems, Presented in conjunction with the European Conference on Information Systems, June 9-11, 2011, Helsinki, Finland.
- San Nicolas-Rocca, T.* & Olfman, L. “Implementing Two-Factor Authentication in Higher Education”, The Fourth Annual AIS SIGSEC Workshop on Information Security & Privacy (WISP), December 14, 2009, Phoenix, AZ, USA.
- San Nicolas-Rocca, T.*, Rhee, D. & Olfman, L. “Designing a knowledge management system: A case study of a global telecommunications company”, 15th Americas Conference on Information Systems, August 6-9, 2009, San Francisco, CA, USA.
- San Nicolas-Rocca, T.* & Shayo, C. “Online Course: Introduction to Information Management”, Online Course Development Presentations, 2009, California State University, San Bernardino, CA, USA.
- San Nicolas-Rocca, T.*, “Use and Adoption of Knowledge Management Systems at a Global Telecommunications Company”, Presented at California Institute of Technology, 2008, Pasadena, CA, USA.

## Tutorials on Big Data Analytics

- Chen, H., Ho, S., *San Nicolas-Rocca, T.*, Big Data Analytics for Behavioral Modeling. 2015 International Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction (SBP15), March 31-April 3, 2015, UCDC Center, Washington DC, USA

## Professional and Peer Review Contributions

- Colloquium on Information Systems Security Education (CISSE) – Planning Committee
- European Conference on Information Systems - Reviewer
- Journal of Organizational and End User Computing - Reviewer

# Tonia San Nicolas-Rocca

- Association for Computing Machinery (AMC) SIG-Management Information Systems – Doctoral Consortium Mentor
- Human-Computer Interaction in Health and Wellness. Associate for Information Systems (AIS) SIG-Health and SIGHCI, Americas Conference on Information Systems – Program Committee Member
- European Journal of Information Systems - Reviewer
- Hawaiian International Conference on System Sciences- Reviewer
- International Conference on Information Systems - Reviewer
- International Information Management Journal - Reviewer
- Workshop on Information Security and Privacy- Reviewer

## California State University Service

- Chancellor's Doctoral Incentive Program Mini-Grant Selection Committee, 2014

## San Jose State University Service

- Curriculum Committee, Appointed Committee Member, August, 2013 – 2015, 2016 - Present
- Committee to Enhance Equity & Diversity – August, 2015 - Present
- Cybersecurity Curriculum Committee, Appointed Committee Member, August, 2013 - Present
- Student Scholarships and Student and Alumni Networking Committee – August, 2015 - Present
- Assurance of Learning Committee, Appointed Committee Member, August, 2012 – May, 2013
- Curriculum and Academic Programs Board, Appointed Committee Member, August, 2011 – May, 2013
- Search Committee, November, 2011 – May, 2012
- Student advisor, September, 2002 – Present
- Develop and evaluate Assurance of Learning (AOL) goals, August, 2010 – May, 2013
- Faculty Marketing Task Force, Appointed Committee Member, September, 2008 - June, 2010
- Course Coordinator, Appointed – September, 2007 - June, 2010
- Faculty Hearing Panel, Elected Committee Member - September 2007 - June 2010
- Information Management Department Curriculum Committee, Appointed Committee Member- September 2006 - June 2010

## Cybersecurity Outreach

- US Cyber Challenge, San Jose State University, Director, August 11-15, 2014
- CyberGirls Summit, Cal Poly Pomona, Invited, July 12, 2014
- CyberQuest, San Jose State University, Invited, April 5, 2014
- Cyber Patriot Competition, Cal Poly Pomona, Invited, April 26, 2014

## Seminars and Workshops

- Women's Institute in Summer Enrichment (WISE), sponsored by the Team for Research in Ubiquitous Secure Technology (TRUST), University of California, Berkeley, June 15-19, 2015
- The Colloquium for Information Systems Security Education, Las Vegas, NV June 15-17, 2015
- The Colloquium for Information Systems Security Education, San Diego, CA, June 15-18, 2014
- Cisco Regional Academy Conference, Pathways to Success in ICT, Cal Poly Pomona, June 16-20, 2014
- Curriculum Development in Security and Information Assurance (CDSIA), San Jose State University, April 25, 2014

# Tonia San Nicolas-Rocca

- Curriculum Development in Security and Information Assurance (CDSIA), San Jose State University, May 3, 2013
- The Association to Advance collegiate Schools of Business (AACSB) Assessment Seminar, Tampa, Florida, October 16-17, 2012
- Women's Institute in Summer Enrichment (WISE), sponsored by the Team for Research in Ubiquitous Secure Technology (TRUST), University of California, Berkeley, June 19-22, 2012
- Curriculum Development in Security and Information Assurance (CDSIA), San Jose State University, April 29, 2011

## Professional Membership and Affiliation

- ACM SIS-SEC
- ACM SIG-Health
- ACM SIGMIS
- Association for Information Systems
- Beta Gamma Sigma
- The Association to Advanced Collegiate Schools of Business (AACSB)
- Association for Information Science and Technology

## Industry Certification

- CompTIA Network+

## Professional Training

### *Technical Training*

- Network+ - New Horizons
- Certified Information Systems Security Professional (CISSP) - (ISC)<sup>2</sup>
- Rational Software with IBM
- Cisco Router and Firewall Security
- Cryptography
- Voice/Data Convergence - Frost & Sullivan
- Advanced IP Networking - AT&T School of Business
- Data Transport Technologies - AT&T School of Business
- Frame Relay Technology and Applications - Business Communications Review
- ATM Technology and Applications - Business Communications Review
- Foundations of IP Networking - AT&T School of Business
- CPE Product and Applications – Sprint's University of Excellence

### *Business Development Training*

- Global Account Management Skills - E-Peopleserve
- DEI Consultative Sales Training - Steve Schiffman
- The Seven Habits of Highly Effective People - Stephen Covey

Last updated: 1/3/2017