

ELIOT H. RICH

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University at Albany, State University of New York
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EDUCATION

Ph.D., Information Science, University at Albany, State University of New York, 2002.
Dissertation Title: “Modeling the Dynamics of Organizational Knowledge”, supervised by
Prof. Peter J. Duchessi. Received Distinguished Dissertation Award.

Master of Public Policy, Harvard University, Cambridge, MA, 1981. Awarded Kennedy
School Fellowship.

B.A., Economics, *Magna cum Laude*, Brooklyn College, Brooklyn, NY, 1979. Minor in
Computer Science. Awarded Adam Smith Medal as leading graduate in department.

ACADEMIC APPOINTMENTS

UNIVERSITY AT ALBANY, State University of New York
Department of Information Technology Management
Assistant Professor (Tenure-Track)¹ 2003 - Current
Lecturer (Tenure-track) 2000 - 2002
Visiting Lecturer 1999 - 2000
Adjunct Lecturer 1997 - 1999
Adjunct Instructor, School of Information Science and Policy 1995 - 1996

UNIVERSITY OF AGDER, NORWAY
Faculty of Engineering and Science
Visiting Professor 2006 - Current

TECNUN, UNIVERSITY OF NAVARRA, SPAIN
Department of Industrial Engineering
Visiting Professor 2009 - Current

CORNELL UNIVERSITY
School of Applied Economics and Management
Visiting Fellow 2004 - 2006

¹ Includes appointment as Visiting Assistant Professor to accommodate family leave, 2005-2006

PUBLICATIONS

PEER-REVIEWED ARTICLES

Rich, E., Gonzalez, J. J., Qian, Y., Sveen, F. O., Radianti, J. and Hillen, S. (2009) "Emergent Vulnerabilities in Integrated Operations: A Proactive Simulation Study of Economic Risk" International Journal of Critical Infrastructure Protection 2(3) 110-123.

Schryen, G. and Rich, E. (2009), "Security in Large-Scale Internet Voting Systems: An Exploratory Multiple Case Study of Internet Voting in Estonia, the Netherlands and Switzerland" IEEE Transactions on Information, Forensics and Security 4(4), forthcoming

Rich, E. (2008) "Management Fads and Information Delays: An Exploratory Simulation Study" Journal of Business Research 61(11) 1143-1151.

Martinez-Moyano, I., Rich, E., Conrad, S., Andersen, D., and Stewart, T. (2008), "A Behavioral Theory of Insider-Threat Risks: A System Dynamics Approach" ACM Transactions on Modeling and Computer Simulation 18(2) 7:1-7:27.

Rich, E. (2008) "E-ZPass and the Ohio Turnpike: Adoption and Integration of Electronic Toll Collection" Journal of Cases in Information Technology 10(1) 32-51.

Sveen, F. O., Rich, E., and Jager, M. (2007) "Overcoming Organizational Challenges to Secure Knowledge Management" Information Systems Frontiers 9(5) 481- 492.

Sveen, F. O., Sarriegi, J. M., Rich, E., and Gonzalez, J. J. (2007) "Toward Viable Information Security Reporting Systems" Information Management and Computer Security 15(5) 408-419.

Johnsen, S. O, Hansen, C. W., Line, M. B., Nordby, Y., Rich, E., and Qian Y. (2007) "CHECKIT-A Program to Measure and Improve Information Security and Safety Culture" International Journal of Performability Engineering 3(1) 175-186.

PEER-REVIEWED BOOK CHAPTERS

Andersen, D., Rich, E., and MacDonald, R. (2009) "System Dynamics Applications to Public Policy" Encyclopedia of Complexity and Systems Science pp.7051-7061, Springer.

Martinez-Moyano, I., Rich, E., and Conrad, S. (2006) "Exploring the Detection Process: Integrating Judgment and Outcome Decomposition" Lecture Notes in Computer Science, (3975) 701 - 703, Springer.

Rich E. and Duchessi, P. (2005) "Keeping the Flame Alive: Sustaining a Successful Knowledge Management Program" Case Studies in Knowledge Management, pp. 315-326, M. Jennex ed., Idea Group Publishing.

Reprinted in Knowledge Management: Concepts, Methodologies, Tools and Applications (2008) pp. 112-122, M. Jennex ed., IGI Global.

Miesing, P., and Rich, E. (1997) "Using Technology to Experience Business Ethics in the Business Class" Current Topics in Management, (2) 267-286, JAI Press.

PEER-REVIEWED CONFERENCE PROCEEDINGS

Sveen, F. O., Rich, E., Sarriegi, J. M., Hernantes, J. and Gonzalez, J. J. (2010) "A Group Model Building approach for identifying simulation scenarios in critical infrastructure" Hawaii International Conference on System Sciences (HICSS-43), Big Island, Hawaii. 10 pages.

Schryen, G. and Rich, E. (2010) "Increasing software security through open source or closed source development? Empirics suggest that we have asked the wrong question" Hawaii International Conference on System Sciences (HICSS-43), Big Island, Hawaii. 10 pages.

Radianti, J., Gonzalez, J. J., and Rich, E. (2009) "A Quest for a Framework to Improve Software Security: Vulnerability Black Markets Scenario" 27th International Conference of the System Dynamics Society, Albuquerque, NM. 35 pages.

Radianti, J., Rich, E. and Gonzalez, J. J. (2009) "Vulnerability Black Markets: Empirical Evidence and Scenario Simulation" Hawaii International Conference on System Sciences (HICSS-42), Big Island, Hawaii. 10 pages.

Larsen, K., Nevo, D., and Rich, E. (2008) "Exploring the Semantic Validity of Questionnaire Scales" Hawai'i International Conference on System Sciences (HICSS-41), Big Island, Hawaii. 10 pages.

Whitmore, A., Rich, E. and Nelson, M. (2008) "Building on Shifting Sands: The Structure of Repetitive IT Project Escalation, Crisis, and De-escalation" 26th International Conference of the System Dynamics Society, Athens, Greece. 27 pages.

Radianti, J., Rich, E. and Gonzalez, J. J. (2007) "Using a Mixed Data Collection Strategy to Uncover Vulnerability Black Markets" 2nd Workshop on Information Security and Privacy (WISP 2007), Montreal, Canada. 9 pages.

Rich, E., Nelson, M., and Whitmore, A. (2007) "IT Project Management, Concept Modeling, and Blind Dates" 25th International Conference of the System Dynamics Society, Boston, MA. 16 pages.

Rich, E., Sveen, F. O., Qian, Y., Hillen, S., Radianti, J., and Gonzalez, J. J. (2007) "Emergent Vulnerability in Integrated Operations: A Proactive Simulation Study of Risk and Organizational Learning" Hawai'i International Conference on System Sciences (HICSS-40), Big Island, Hawaii. 10 pages.

Rich, E., Sveen, F. O., and Jager, M. (2006) "Overcoming Organizational Challenges to Secure Knowledge Management" Second Secure Knowledge Management Workshop, Brooklyn, NY. 8 pages.

Martinez-Moyano, I. J., Rich, E., Conrad, S., Stewart, T., and Andersen, D. F. (2006) "Integrating Judgment and Outcome Decomposition: Exploring Outcome-Based Learning Dynamics" 24th International Conference of the System Dynamics Society, Nijmegen, the Netherlands. 14 pages.

Rich, E., "Modeling Risk Dynamics in E-Operations Transitions" (2006) International Society for Crisis Response and Management (ISCRAM-06), Newark, NJ. 12 pages.

Martinez-Moyano, I. J., Rich, E., Conrad, S. H., Andersen, D. F. (2006) "Modeling the Emergence of Insider Threat Vulnerabilities" Inform's Winter Simulation Conference, Monterey, CA. 6 Pages.

Rich, E. and Gonzalez, J. J. (2006) "Maintaining Security and Safety in High-threat E-operations Transitions" Hawai'i International Conference on System Sciences (HICSS-39), Kauai, Hawaii. 10 pages.

Martinez-Moyano, I. J., Conrad, S., and Rich, E. (2005) "Simulating Insider Cyber-Threat Risks: A Model-Based Case and a Case-Based Model" 23rd International Conference of the System Dynamics Society, Boston, MA. 47 pages.

Andersen, D. F. , Cappelli, D. , Gonzalez, J. J., Mojtahedzadeh, M., Moore, A. Rich, E., Sarriegi, J. M., Shimeall, T., Stanton, J. Weaver, E. A., and Zagonel, A. (2004) "Preliminary System Dynamics Maps of the Insider Cyber-threat Problem" 22nd International Conference of the System Dynamics Society, Oxford, UK. 35 pages.

Rich, E. and Duchessi, P. (2004) "Modeling the Sustainability of Knowledge Management Programs" Hawai'i International Conference on System Sciences (HICSS-37), Big Island, Hawaii. Nominated for Best Paper award, Organizational Systems and Technology Track. 10 pages.

Rich, E. and Duchessi, P. (2001) "Models for Understanding the Dynamics of Organizational Knowledge in Consulting Firms" Hawai'i International Conference on System Sciences (HICSS-34), Maui, Hawaii, 2001. 10 pages.

TECHNICAL REPORTS

Rich, E., Andersen, D. F. and Richardson, G. P., (2006) OLF-IRMA-AMBASEC Group Modeling Report I, University at Albany, Albany, NY.

Rich, E., Andersen, D. F. and Richardson, G. P. (2006) OLF-IRMA-AMBASEC Group Modeling Report II, University at Albany, Albany, NY.

Martinez-Moyano, I. J , Rich, E., Conrad, S., Andersen,, D. F., and Stewart, T. R. (2005) A Behavioral Theory of Insider-Threat Risks: A System Dynamics Approach, Center for Policy Research, University at Albany.

INVITED ARTICLE

Gonzalez, J. J., Qian, Y, Sveen, F. O., and Rich, E. (2005) "Helping Prevent Information Security Risks in the Transition to Integrated Operations" Teletronikk 101 (1), pp. 29-37.

ARTICLES UNDER REVIEW

Rich, E., Hernantes, J., Laugé, A., Labaka, Leire, Sarriegi, J., and Sveen, F. O., "Modeling a National Power Crisis in Support of A Crisis Lifecycle Model" under review for International System Dynamics Conference, 2010.

Schryen, G. and Rich, E. "Armed for the spam battle: a joint technological and organizational infrastructure framework" under revision for Journal of Information Privacy and Security.

Rich, E. and Gonzalez, J. J., "When New Information Technology Endangers Safety: Integrated Operations, Knowledge Management, and Emergent Vulnerability" under first review at Information and Management.

Nelson, M. and Rich, E. "Brown Spots on the Banana: Lessons Learned from Failed Large-scale IT Projects" under first review at International Journal of Information Technologies and the Systems Approach, special issue on "System Dynamics and other Simulation-based Approaches for Information Systems".

ARTICLES IN DEVELOPMENT

Miesing, P., Krzykowski, L., and Rich, E., "Sustainable Strategies: The Dual Meaning of Green Business Models" targeted for Organization Science.

Miesing, P. and Rich, E. "The Transnational Knowledge Organization," targeted for Journal of International Business Studies.

Radianti, J., Rich, E., Gonzalez, J. J. "Software Vulnerability Markets: Dynamic Theory and Empirical Evidence" targeted for Information Systems Research.

Rich, E. and W. A. Conklin, "Systems Thinking and Information Security" targeted for ACM Transactions on Information and System Security.

Miesing, P., Krzykowski, L. and Rich, E. "Going Green Globally with Strategic Sustainable Systems"

PRESENTATIONS**PEER-REVIEWED INTERNATIONAL AND NATIONAL CONFERENCES**

Rich, E. and Conklin, Wm A. (2009) "Using Systems Models to Improve Information Security Management" 2009 System Dynamics Winter Conference, College Station, TX.

Larsen, K, Lee, J., and Rich, E. (2008), "The Development of a Shared Dataset for Predictive Analysis in the Behavioral Sciences" Symposium on Semantic Knowledge Discovery, Organization and Use (NSF-Sponsored), New York University, NY.

Martinez-Moyano, I. J., Rich, E., Conrad, S. (2006) "Modeling Detection Processes: Integrating Judgment and Outcome Decomposition" IEEE Intelligence and Security Informatics Conference (ISI), San Diego, CA.

I. J. Martinez-Moyano, S. Conrad, E. Rich, D. Andersen and T. Stewart (2005) "Judgment and Decision Making Under Uncertainty: Modeling Insider Threat Risks in Organizations" INFORMS, San Francisco.

Rich, E. (2005) "Insider Threats: Raising the Profile and Managing the Risks" Research and Development Partnerships in Homeland Security Conference, Department of Homeland Security, Boston.

Rich, E. (2003) "Using Simulation to Explore the Dynamics of Organizational Knowledge" Abstract included in Proceedings of the 21st International Conference of the System Dynamics Society, New York City.

Rich, E. (1998) "A Simulation Model of the Effects of Technology on Organizational Knowledge", Association for Information Systems, Baltimore, MD, July 1998. Abstract included in Proceedings of the 4th Americas Conference on Information Systems, Baltimore, MD.

Rich, E. (1998) "Limits to Groupware-Facilitated Organizational Learning in a Consulting Firm", Abstract included in Proceedings of the 16th International Conference of the System Dynamics Society, Quebec City, Canada.

INVITED PRESENTATIONS

Miesing, P., Krzykowski, L., Rich, E. (2009) "Strategic Sustainability Systems: Evidence from the G3 Program at the UAlbany School of Business", Corporate Social Responsibility and Environmental Sustainability Conference, University at Albany School of Business, Albany, NY.

Rich, E. (2007) "Using Your Experience to Improve Safety and Security in Integrated Operations," Integrated Operations Conference, SINTEF and Norwegian University of Science and Technology, Trondheim, Norway.

Rich, E. (2007) "System Dynamics: Actions, Behavior, and Structure", International Center for Learning, Education and Performance Systems, Tallahassee, FL.

Rich, E. (2004) "An emerging perspective on the dynamics of insider cyber-threats", Third Russian National Conference on Mathematics and Information Technology Security (MaBIT-04), Moscow State University, Moscow, Russia.

Rich, E. (2004) "The Sustainability of Organizational Knowledge: A Simulation-based Exploration", Presented to School of Applied Economics and Management Strategy Faculty Seminar Series, School of Applied Economics and Strategy, Cornell University, Ithaca, NY.

AWARDS RECEIVED

University at Albany School of Business Graduate Teaching Award, selected based on peer review, 2009.

University at Albany School of Business Undergraduate Teaching Award, selected based on peer review, 2005.

University at Albany Distinguished Dissertation Award, 2003.

SPONSORED RESEARCH

EXTERNAL SUPPORT

Title: TLS and DAT: Construct Utilization in the Behavioral Sciences

Duration: 2010-2012

Role: Co-Principal Investigator (Unfunded)

Lead Institution: University of Colorado, Boulder

Funder: National Science Foundation, Science of Science Policy

Title: Simulation Exercise to Manage Power Cut Crises (SEMPOC)

Amount: €22,000

Duration: 2009-2011 Summer Support

Role: Senior Researcher

Lead Institution: TECNUN, University de Navarre, Spain

Funder: European Commission, Directorate of Justice, Freedom, and Security

Title: A Model-based Approach to Security (AMBASEC)

Amount: 80,000 NOK (approx. \$15,000)

Duration: 2006 Summer Support

Role: Grant co-Author and Senior Researcher

Lead Institution: University of Agder, Norway

Funder: Norwegian Research Council

Title: Incident Response Management (IRMA)

Amount: 40,000 NOK (approx. \$7,500)

Duration: 2007 Summer Support

Role: Researcher

Lead Institution: SINTEF, Norway

Funder: Norwegian Research Council

INTERNAL SUPPORT

Title: Development and integration of student response technology into courses

Amount: \$500

Duration: 2007

Funder: Institute for Teaching, Learning, and Academic Leadership, University at Albany

Title: Meeting support for Security Dynamics Network meeting

Amount: \$1,000

Duration: 2006

Funder: Office of the Dean, School of Business and Office of Special Programs, University at Albany

SERVICE ACTIVITIES**SERVICE TO THE PROFESSION**

Conference Track / Mini-Track Organizer – Hawai'i International Conference on System Sciences (2006-2011), ACM Symposium on Applied Computing (2009), International Society for Crisis Response and Management (2007).

Journal Reviewer: Academy of Management Learning & Education, Annals of Information Systems, Computers and Security, Decision Support Systems, Information Systems Frontiers, Information Technology and Management, International Journal of Information Technology Management, Journal of Data and Information Quality, Journal of Electronic Commerce Research, OMEGA, System Dynamics Review.

Conference Reviewer: Academy of Management, ACM SIGKDD Workshop on Cyber-Security and Intelligence Informatics, International Conference of the System Dynamics Society, Information Resources Management Association, Hawai'i International Conference of System Sciences, MIT Conference on Information Quality, Workshop for Information Security and Privacy (WISP).

SERVICE TO THE SCHOOL OF BUSINESS, UNIVERSITY AT ALBANY

School of Business MBA Orientation – Lecturer and Simulation Facilitator, 2008-2009

School of Business MBA “Going Green Global” Lecturer and Simulation Facilitator, 2009

School of Business Ethics Series Lecturer, 2006 – 2009.

School-wide Committee services:

AACSB Accreditation, Assessment of Learning Committee, 2008 – 2009.

Computing, Teaching and Learning Committee, 2004 - 2006. Committee Chair, 2005-2006.

Graduate Affairs Committee 2008 - 2009. Committee Chair, Spring 2008.

Search Committee, School of Business MBA Director, 2007.

Search Committee, School of Business Undergraduate Advisor, 2008.

SERVICE TO THE UNIVERSITY AT ALBANY

University-wide Committee Service

Undergraduate Committee on Academic Standing, School of Business Representative, 2005 – 2006.

College of Computing and Informatics, Information Science Ph.D. Program

Doctoral Dissertation Committee Service

Wei-Tsong Wang, “Strategic Alignment: A Knowledge Management Approach to Crisis Management,” Committee Member, Ph.D. awarded 2006.

Meg Fryling, “Total Cost of Ownership of Enterprise Resource Planning Software: Simulating a Dynamic Feedback Perspective in the Higher Education Environment,” Committee Member, defense planned 2010.

Stephen Lackey, Integrating Place and Time with Tasks: Supporting the Student Commuter, Committee Member, defense planned 2010.

Girk Cakmak, Untitled dissertation, Committee Member, defense planned 2011.

Doctoral Student Program Committee Service

Namjoo Choi, achieved candidacy 2009.
Dawit Demissie, achieved candidacy 2009.
Matthew Jager, achieved candidacy 2009.
Tung-Mou Yang, achieved candidacy 2009.
Andrew Whitmore, achieved candidacy 2009.

Other Campus Service

Undergraduate Academic Mentor Program, 2008 – 2009.
Undergraduate Freshman Orientation Volunteer, 2007.
Faculty sponsor, Gift of Life Bone Marrow Drive, 2006, 2009.
University and School of Business Commencement Marshal, ongoing.
Affiliated Faculty, Center for Policy Research, Rockefeller College of Public Affairs and Policy, 2003 – current.

UA Community Outreach

Faculty Leader, Key Bank – UA Curriculum Collaboration, 2008 - 2009.
Faculty Participant, International Institute of Business Analysts, 2008 - 2009.

EXTRAMURAL SERVICE

Dissertation Committee Service, University of Bergen, Norway

Ying Qian, "Mitigating information security risks during operation transition: Models and data", co-supervisor, defense planned 2010.

Jaziar Radianti, "The Vulnerability Black Market (VBM): Maps, Model, Data", co-supervisor, defense planned 2010.

Cornell System Dynamics Network, Cornell University, Ithaca, NY

Supported for System Dynamics research and teaching at Cornell's School of Applied Management through teaching and mentoring of doctoral students and review of faculty research applications, 2004 - 2006.

TEACHING

RECENT TEACHING

ITM 601: Business Systems Analysis and Design (Fall, Graduate).

ITM 611: Analysis and Design of Information Decision Systems (Spring, Graduate, alternate years).

ITM 415Z: Business Systems Analysis and Design (Fall, Undergraduate, Co-instructor).

The above MBA and undergraduate courses cover systems analysis and design for Information Technology Management MIS concentrators. Course includes analysis of live case through database design and software prototype implementation. Introduced object-oriented analysis, UML, use cases, and advanced requirements gathering techniques into the course. Integrated professional-quality tools into curriculum, including Rational Rose, Visual Paradigm, Visual Analyst, and ORACLE. Provided instruction and technical support to student projects implemented in SQL, Microsoft Access, Java and Visual Basic. Developed and supported Blackboard materials for content management, examination, and access to resources.

ITM 692: Advanced Programming (Fall).

Intensive one-credit programming course for Information Technology Management MBA students. Taught computing concepts using COBOL, Visual Basic and Java. Currently taught as overload course.

ITM 698: Research Project in Information Technology Management.

Supervised selected MBA student theses. Overload course, average 1-2 theses per academic year.

ITM 330: Business Information Systems & Technologies (Spring)

Undergraduate IT applications survey course for all business majors delivered in large-lecture (~220 student) format. Developed new and adapted existing course material and introduced iClicker technology to improve student engagement during lectures.

INF897: Independent Study in Information Science

Directed independent study or readings courses for students in Informatics doctoral program. Overload course, offered each semester, 1-3 enrollees.

PAST TEACHING**ITM 522: Managing Information Technology**

MBA core course in information systems. Curriculum includes the role of IT in corporate strategy definition and implementation, design of strategic information systems, decision support systems, Business Process Reengineering, data mining, data warehousing and other emerging technologies. Integrated case teaching with traditional text and examination format.

ITM 692: Special Topics in Information Systems

Graduate level course presenting various topics of interest to IT and Operations Management students. Offerings have included introduction to systems theory, intelligent systems, programming techniques, and simulation modeling for IT management.

ITM510: Advanced Excel with Visual Basic for Applications**ITM520: Database Management****ITM331: Business Application Development****ITM333: Software Development for Business**

These four courses are intensive tool instruction for undergraduate and graduate students in software tools and technologies, including Microsoft Access, SQL, Microsoft Excel, Visual Basic and Java. Integrated professional programming methods, analysis techniques and documentary standards into introductory courses to improve quality and consistency of student assignments.

PROFESSIONAL EMPLOYMENT

CENTER FOR TECHNOLOGY IN GOVERNMENT
University at Albany

1994 - 1995

Led implementation of GIS prototype and groupware test bed projects for internationally recognized research center.

INDEPENDENT CONSULTANT, Albany NY

1991 - 1993

Representative engagements include implementation strategist, groupware architect/developer project reviewer and lecturer.

THE SOFTBRIDGE GROUP, Cambridge, MA

1990 -1991

Director of Systems Development, Marsoft Division

Led 10 member development staff supporting design, development, and maintenance of decision support tools used in maritime futures trading.

AMERICAN MANAGEMENT SYSTEMS, INC., New York City, NY

1981 - 1990

Principal

Directed 60+ staff years of systems design and development services to public- and private sector clients.

PROFESSIONAL ORGANIZATIONS AND CERTIFICATIONS

Member: ACM, IEEE Computing Society, System Dynamics Society, ICCP, Beta Gamma Sigma, IIBA

C.C.P., C.D.P., Institute for the Certification of Computer Professionals.