Curriculum Vitae – Mark Nissen

EDUCATION

- Ph.D. Southern Cal (1996)
  - Business Administration
  - Concentrations in Information Systems, Artificial Intelligence, Organization Strategy & Analysis
  - Co-Advisors: Omar El Sawy (Jim March's student) and Walt Scacchi (Rob Kling's student)
- M.S. Southern Cal (1988)
  - Systems Management
  - Concentrations in Systems Management, R&D Management
- B.S. Berkeley (1980)
  - Business Administration
  - Concentrations in Finance, Accounting, Applied Economics

EXPERIENCE

- Naval Postgraduate School:
  - Research & teaching in Information Science; Leadership, Organization & Management
  - Professor (2007 – present)
  - Director, Edge Center (2004 – present)
  - OASD-NII Command & Control Chair Professor (2007 – 2012)
  - Information Sciences PhD Program Director (2004 – 2013)
  - Associate Professor (2002 – 2007)
  - Assistant Professor (1996 – 2002)
- Point Loma Nazarene University:
  - Adjunct Professor, Mathematical, Information and Computer Sciences (2017 – present)
  - Computer Information Technology Program (2017 – present)
- UC San Diego:
  - Adjunct Professor (2016 – present)
  - Visiting Professor, Rady School of Business (2016 – present)
- University of San Diego:
  - Adjunct Professor, Schools of Business & Leadership and Education Sciences (2015 – 2020)
  - Visiting Professor, School of Business (2014 – 2015)
- Stanford University:
  - Adjunct Professor, Center for Professional Development (2005 – 2016)
  - Visiting Professor, School of Engineering (2002 – 2003)
- UC Berkeley:
  - Assistant Professor, Haas School of Business (1995 – 1996)
  - Research Fellow, Fisher Center for Information Technology & Management (1995 – 1996)
- Consulting:
  - Founder & CEO of independent consulting company (2012 – present)
  - Many years consulting for very large to very small organizations (1995 – present)
- Corporate Experience:
  - 12 years' experience in aerospace, electronics & information technology (1979 – 1991)
  - Technical, analytical, managerial and executive roles & responsibilities

RESEARCH FOCI

- Dynamics of knowledge and organization
- Organization design for agility and competitive advantage
- Organizational and technological integration of autonomous systems and people
- Knowledge, talent and human resource management
- Distance education pedagogy/andragogy & technological implementation
- Computational and laboratory experimentation

HONORS AND AWARDS

- Multiple, award-winning, conference papers (2004 – present)
- Young Investigator, Office of Naval Research (2001)
- Menneken Faculty Award for Excellence in Scientific Research, Naval Postgraduate School (2000)
- Outstanding Research Achievement, Naval Postgraduate School (1998)
- Doctoral Dissertation Award, International Conference on Information Systems (1996)
- Competitive Doctoral Dissertation Grant Award, Office of Naval Research (1994)
- Competitive Doctoral Dissertation Grant Award, National Association of Purchasing Management (1994)
- Best Interdisciplinary Paper Award, Decision Sciences Institute (1993)
- Scholastic Excellence Award, UC Berkeley School of Business (1980)
- Phi Beta Kappa (1980) & Beta Gamma Sigma (1980)

TEACHING EXPERIENCE

Naval Postgraduate School

- MS course on Knowledge & Information Management (Knowledge Management & Organization Analysis) – classroom & remote
- MS course on Command and Control (Leadership, Organization & Management) – classroom & remote
- MS course on Knowledge Superiority (Knowledge Management & Business Strategy) – classroom & remote
- PhD course on Qualitative Research Methods (IS PhD core course) – classroom
- MS course on Computer Based Tools for Decision Support – classroom
- PhD Information Sciences Seminar
- MS course on Decision Support Systems
- MS course on Software Project Management
- MS course on Manpower Modeling & Decision Support
- MS course on Information Technology Acquisition
- MS course on Electronic Business
- MS course on Seminar on Knowledge Management
- MS course on Seminar on Intelligent Agents
- MS course on Seminar on Reengineering
- MS course on Seminar on Acquisition Contract Management

Completed the NPS Interactive Distributed Learning Course and Teaching Effectiveness Seminar in 2007: very proficient at web-based education & training course design, development & instruction

Executive Education

- Stanford Advanced Project Management Program – Strategic Project & Knowledge

Management
- NPS Center for Executive Education – Command & Control, Knowledge Management
- Navy Corporate Business Course – Information Management & Knowledge Management
- Navy Information Professional Senior Officer Course – Knowledge Management
- Navy Afloat Knowledge Managers Course – Knowledge Principles for Competitive Advantage
- Army Operational Knowledge Managers Course – Knowledge Principles for Competitive Advantage

University of California at San Diego

- MBA course on Knowledge Management for Strategic Advantage (Daytime/Evening/Weekend MBA elective) – classroom & remote

Point Loma Nazarene University

- BS Course on Computer Networking (Computer Information Technology core course) – classroom & remote

University of San Diego

- MBA course on Knowledge Management for Competitive Advantage (Daytime MBA elective) – classroom & remote
- MS Course on Organization Theory & Change (Extended Education core course) – remote
- EdD Course on Organization Theory & Change (Doctoral Program core course) – classroom

Stanford University

- Graduate Seminar on Organizational Knowing & Learning (Engineering MS & PhD student elective) – classroom

University of California at Berkeley

- MBA course on Information Technology & Management (Daytime MBA core course)
- MBA course on Telecommunications and Distributed Processing: Focus on Electronic Commerce (Daytime/Evening MBA elective)

University of Southern California

- MBA course on Information Systems Management (Evening MBA core course)

PUBLICATIONS

Books

1. *Harnessing Dynamic Knowledge Principles in the Technology-Driven World.* Hershey, PA: IGI Global (2014).

2. *Harnessing Knowledge Dynamics: Principled Organizational Knowing & Learning.* Hershey, PA: IRM Press (2006).

3. *Contracting Process Innovation.* National Contract Management Association: Vienna, VA (2000).

4. *Knowledge-Based Organizational Process Redesign: Using Process Flow Measures to Transform Procurement.* School of Business, University of Southern California (May 1996); published through UMI.

Articles in Refereed Journals

5. "Human Machine Interactions as Partnership," *Naval Engineers Journal*. (March 2023), Technical Paper 9, No 135-1; with Shelley Gallup and Doug MacKinnon.

6. "Initiating a System for Visualizing and Measuring Dynamic Knowledge," *Technological Forecasting & Social Change* (April 2018).

7. "Working Toward a System for Measuring Dynamic Knowledge," *International Journal of Knowledge Management* 13:3 (2017), pp. 1-19.

8. "Organization Design for Dynamic Fit: A Review and Projection," *Journal of Organizational Design* 3:2 (2014), pp. 30-42.

9. "Leveraging Strategic Sourcing and Knowledge Management to Improve the Acquisition of Knowledge Based Services," *Journal of Public Procurement* 14:21 (summer 2014), pp. 215-251; with Timothy G. Hawkins and Rene G. Rendon.

10. "Knowledge Work through Social Media Applications: Team Performance Implications of Immersive Virtual Worlds," *Journal of Organizational Computing and Electronic Commerce* 23:1-2 (2013), pp. 84-109; with Richard Bergin.

11. "If You Can't Trust, Stick to Hierarchy: Structure and Trust as Contingency Factors in Threat Assessment Contexts," *Journal of Homeland Security and Emergency Management* 9:1 (2012), Article 14, pp. 1-19; with Ned Powley.

12. "Designing Inter-Organisational Collectivities for Dynamic Fit: Stability, Manoeuvrability and Application in Disaster Relief Endeavours," *International Journal of Organizational Design and Engineering* 1:4 (2011), pp. 276-291.

13. "Designing Organizations for Dynamic Fit: System Stability, Maneuverability and Opportunity Loss," *IEEE Transactions on Systems, Man and Cybernetics – Part A* 41:3 (May 2011), pp. 418-433; with Rich Burton.

14. "Accelerating Acculturation through Tacit Knowledge Flows: Refining a Grounded Theory Model," *VINE* 40: 3/4, Special Issue on KM and Culture (2010), pp. 312 – 325; DOI 10.1108/03055721011071430); with June Lee.

15. "Knowledge Sharing as a Contingency in the Design of Counterterrorism Organizations," *International C2 Journal* 4:2 (2010), pp. 1-30; with Tara Leweling.

16. "Efficient Experimental Design Tools for Exploring Large Simulation Models," *Computational and Mathematical Organization Theory* 15:3 (2009), pp. 237-257; DOI 10.1007/s10588-009-9059-1; with Regine Pei Tze Oh, Susan Sanchez, Thomas Lucas and Hong Wan.

17. "Toward Harmonizing Command and Control with Organization and Management Theory," *International C2 Journal* 3:2 (2009), pp. 1-59; with David Alberts.

18. "Streams of Shared Knowledge: Computational Expansion of Knowledge Flow Theory," *Knowledge Management Research & Practice* 6:2 (2008), pp. 124-140; with Ray Levitt and Ryan Orr.

19. "Editorial – Managing Knowledge Transfer in Distributed Contexts," Introduction to Special Issue of *Information Systems Journal* 18:6 (2008), pp. 559-566; with Kevin Desouza and Carsten Sørensen; note: this editorial piece appears in a refereed journal, but the piece itself was subject to only editorial- not peer-review.

20. "Keynote Paper: Enhancing Organisational Metacognition – Flow Visualisation to Make the Knowledge Network Explicit," *International Journal of Networking and Virtual Organisations* 4:4 (2007), pp. 331-350*.*

21. "Information Flow Aspects of Interorganizational Crisis Management," *Journal of Information Warfare* 6:2 (2007), pp. 39-51; with Rauno and Tuija Kuusisto.

22. "Knowledge Management and Global Cultures: Elucidation through an Institutional Knowledge-Flow Perspective," *Knowledge and Process Management* 14:3 (2007), pp. 211-225.

23. "Computational Experimentation on New Organizational Forms: Exploring Behavior and Performance of Edge Organizations," *Computational and Mathematical Organization Theory* 13:3 (2007), pp. 203-240.

24. "Enterprise Command, Control and Design: Bridging C2 Practice and CT Research," *International C2 Journal* 1:1 (2007), pp. 61-112; accessible online at http://www.dodccrp.org/files/IC2J_v1n1_03_Nissen.pdf.

25. "Computational Modeling of Project Organizations under Stress," *Project Management Journal* 38:1 (2007), pp. 5-20; with John Dillard.

26. "Defining and Exploring the Terrorism Field: Toward an Intertheoretic, Agent-Based Approach," *Technology Futures & Social Change* 74 (2007), pp. 165-192; with Tara Leweling.

27. "Discontinuity in Organizations: Developing a Knowledge-Based Organizational Performance Model for Discontinuous Membership," *International Journal of Knowledge Management* 3:1 (2007), pp. 18-36; with Rahinah Ibrahim.

28. "Incorporating Software Agents into Supply Chains: Experimental Investigation with a Procurement Task," *MIS Quarterly* 30:1 (2006), pp. 145-166; with Kishore Sengupta.

29. "Dynamic Knowledge Patterns to Inform Design: A Field Study of Knowledge Stocks and Flows in an Extreme Organization," *Journal of Management Information Systems* 22:3 (2006), pp. 225-263.

30. "Experimental Assessment of an Innovation Knowledge System for Decision Support," *Business Process Management Journal* 11:5 (2005), pp. 444-475.

31. "Managing Context in Business Process Management Systems," *Journal of Requirements Engineering* online publication of Springer-Verlag: DOI 10.1007/s00766-005-0005-6 (2005); with Bala Ramesh, Radhika Jain and Peng Xu.

32. "Editorial Preface – Knowledge as a Multidimensional Concept: a Call for Action," *International Journal of Knowledge Management* 1:3 (2005), pp. i-v; with Murray Jennex; note: this editorial piece appears in a refereed journal, but the piece itself was subject to only editorial- not peer-review.

33. "Contextual Criticality of Knowledge-Flow Dynamics: Understanding a U.S. Tragedy of Friendly Fire," *Defense & Security Analysis* 20:3 (2004), pp. 209-228; with Erik Jansen, Carl Jones and Gail Thomas.

34. "Agent-Based Modeling of Knowledge Dynamics," *Knowledge Management Research & Practice* 2:3 (2004), pp. 169-183; with Ray Levitt.

35. "Experimental Analysis of e-Employment Market Designs," *Journal of Organizational Computing and Electronic Commerce* 14:3 (2004), pp. 195-222; with Bill Gates.

36. "Knowledge Management Research & Practice: Visions and Directions," *Knowledge Management Research & Practice* 1:1 editorial paper (2003), pp. 49-60; with John Edwards, Meliha Handzic and Sven Carlsson; note: this editorial piece appears in a refereed journal, but the piece itself was subject to only editorial- not peer-review.

37. "Beyond the Body of Knowledge: A Knowledge-Flow Approach to Project Management Theory and Practice," *Project Management Journal* 34:2 (2003), pp. 4-12; with Keith Snider.

38. "An Extended Model of Knowledge-Flow Dynamics," *Communications of the Association for Information Systems* 8 (2002), pp. 251-266.

39. "Measurement-driven Enterprise Systems Engineering," *Journal of Engineering Valuation and Cost Analysis* 4:1 (2001), pp. 63-76.

40. "Beyond Electronic Disintermediation through Multi-Agent Systems," *Journal of Logistics Information Management* 14:4 (2001), pp. 256-275.

41. "Designing Agent-based Electronic Employment Markets," *Electronic Commerce Research Journal*, Special Issue on Theory and Application of Electronic Market Design 1:3 (2001), pp. 239-263; with Bill Gates.

42. "Innovating the Federal Acquisition Process through Intelligent Agents," *Acquisition Review Quarterly* 8:3 (2001), pp. 161-165; with David Fowler.

43. "Agent-Based Supply Chain Integration," *Journal of Information Technology Management* 2:3 Special Issue, Electronic Commerce in Procurement and the Supply Chain (2001), pp. 289-312.

44. "An Experiment to Assess the Performance of a Redesign Knowledge System," *Journal of Management Information Systems* 17:3 (2000), pp. 25-44.

45. "Agent-Based Supply Chain Disintermediation vs. Re-intermediation: Economic and Technological Perspectives," *International Journal of Intelligent Systems in Accounting, Finance & Management* 9 (2000), pp. 237-256.

46. "An Intelligent Tool for Process Redesign: Manufacturing Supply Chain Applications," *International Journal of Flexible Manufacturing Systems* 12:4, Special Issue on Business Process Design, Modeling and Analysis (October 2000), pp. 321-339.

47. "Knowledge Process and System Design for the Coast Guard," *Knowledge and Process Management Journal* 7:3, Special Issue, Into the 'E' Era (2000), pp. 165-176; with LT James Espino.

48. "Integrated Analysis and Design of Knowledge Systems and Processes," *Information*

Resources Management Journal 13:1 (January-March 2000), pp. 24-43; with Magdi Kamel and Kishore Sengupta.

49. "Knowledge-Based Knowledge Management in the Reengineering Domain," *Decision Support Systems* 27 Special Issue, from Information Retrieval to Knowledge Management (1999), pp. 47-65.

50. "SPS and Beyond: Innovating Acquisition through Intelligent Electronic Contracting," *Acquisition Review Quarterly* 6:4 (1999), pp. 383-394.

51. "A Systematic Approach to Prioritizing Weapon System Requirements and Military Operations through Requisite Variety," *Acquisition Review Quarterly* 6:1 (1999), pp. 1-20; with Maj. Douglas B. Bushey.

52. "Redesigning Reengineering through Measurement-Driven Inference," *MIS Quarterly* 22:4 (1998), pp. 509-534.

53. "Alpha Contracting JSOW Style," *National Contract Management Journal* 29:1 (1998), pp. 15-32.

54. "Managing Radical Change in Acquisition," *Acquisition Review Quarterly* 5:2, Special Issue on Managing Radical Change (1998), pp. 89-106; with K. Snider and D. Lamm.

55. "Reengineering Support through Measurement-Driven Inference," *Intelligent Systems in Accounting, Finance and Management* 6 (1997), pp. 109-120.

56. "Reengineering the RFP Process through Knowledge-Based Systems," *Acquisition Review Quarterly* 4:1 (1997), pp. 87-100.

57. "A Focused Review of the Reengineering Literature: Expert Frequently Asked Questions," *Quality Management Journal* 3:3 (1996), pp. 52-66.

58. "Designing Qualitative Simulation Systems for Business," *Simulation & Gaming* 27:4 (1996), pp. 462-483.

Chapters in Books

59. "Power Implications within Competitive Organizations: New Insights through Knowledge Measurements in an R&D Organization." Ch. 9. In: E. Idemudia (Ed.), *Handbook of Research on IT Applications for Strategic Competitive Advantage and Decision Making*. Hershey, PA: IGI Global (2020), pp. 153-176; with Paul Shigley, Bob Tanner & Shelley Gallup.

60. "Reconsidering a System for Measuring Dynamic Knowledge: Extending a Novel Line of Research." In: M. Jennex (Ed.), *Current Issues and Trends in Knowledge Management, Discovery, and Transfer*. Hershey, PA: IGI Global (2020), pp. 48-70.

61. "Organization Design and Engineering for Dynamic Fit: Toward Analytic Principles, Methods and Tools," in R. Magalhães (Ed.), *Organisational Design and Engineering* (2014).

62. "Harnessing Knowledge Power for Competitive Advantage," in: M. Chilton and J. Bloodgood (Eds.), *Knowledge Management for Competitive Advantage: Issues and Potential Solutions* Hershey, PA: IGI Global (2013).

63. "Leveraging Mobile Network Technologies to Accelerate Tacit Knowledge Flows across

Organizations and Distances," in G. Trentin (Ed.) *Technology and Knowledge Flow: The Power of Networks* Oxford: Chandos (2012); with Alex Bordetsky.

64. "Measuring Dynamic Knowledge Flows: Implications for Organizational Performance," in: G. Schiuma (Ed.), *Managing Knowledge Assets and Business Value Creation in Organizations* Hershey, PA: Business Science Reference (2011), Ch. 8, pp. 125-145.

65. "Designing Complex Organizations Computationally," in: M. Wang and Z. Sun (Eds.), *Handbook of Research on Complex Dynamic Process Management: Techniques for Adaptability in Turbulent Environments* Hershey, PA: IGI Global (2010), pp. 573-598; with Carl Oros.

66. "Developing a knowledge-based organizational performance model for improving knowledge flows in discontinuous organizations," in: M. Jennex (ed.) *Knowledge Management, Organizational Memory and Transfer Behavior: Global Approaches and Advancements* Hershey, PA: IGIGlobal (2009), pp. 89-108; with Rahinah Ibrahim.

67. "Diagnosing Misfits, Inducing Requirements, and Delineating Transformations within Computer Network Operations Organization," in: K. Knapp (Ed.), *Cyber-Security and Global Information Assurance: Threat Analysis and Response Solutions* (2009); with Nikolaos Bekatoros and Jack Koons.

68. "Visualizing Knowledge Networks and Flows to Enhance Organizational Metacognition in Virtual Organizations," in: C. Camisón, D. Palacios, F. Garrigós and C. Devece (Eds.), *Connectivity and Knowledge Management in Virtual Organizations: Networking and Developing Interactive Communications* Hershey, PA: IGI Global (2008).

69. "Transforming Business Process Transformation with Diagnostic Knowledge-Based Tools," in: V. Grover and M. Markus (Eds.) *Business Process Transformation* Armonk, NY: Sharpe (2008), pp. 101-121.

70. "Toward the Multidimensional Conceptualization of Knowledge," in: M. Jennex (Ed.), *Knowledge Management in Modern Organizations* Hershey, PA: Idea Group (2007), pp. 278-284; with Murray Jennex.

71. "Co-Evolution and Co-Design of Agile Organizations and Information Systems Through Agent-Based Modeling," in: K. Desouza (Ed.), *Agile Information Systems: Conceptualization, Construction, and Management* Amsterdam: Elsevier (2007), pp. 266-284; with Yan Jin.

72. "Computational Experimentation," in: D. Schwartz (Ed.), *Encyclopedia of Knowledge Management* Hershey, PA: Idea Group (2006), pp. 51-57; with Ray Levitt.

73. "Toward Designing Organizations around Knowledge Flows," in: K. Desouza (Ed.), *New Frontiers of Knowledge Management* New York, NY: Palgrave MacMillan (2005), pp. 182-203.

74. "Defense Project Management Knowledge Flow through Lessons Learned Systems," in: E. Carayannis, Y. Kwak and F. Anbari (Eds.), *The Story of Managing Projects* Westport, CN: Praeger (2005), pp. 118-133; with Keith Snider.

75. "Agent- and Web-Based Employment Marketspaces in the U.S. Department of Defense," in: M. Khosrow-Pour (Ed.), *Encyclopedia of Information Science and Technology I-V* Hershey PA: Idea Group Press (2005), pp. 74-80; with Bill Gates.

76. "Delineating Knowledge Flows for Enterprise Knowledge Agility," in: M. Khosrow-Pour (Ed.), *Encyclopedia of Information Science and Technology, Vol. 2* Hershey PA: Idea Group Press (2005), pp. 779-785.

77. "Procurement: Process Overview and Emerging Project Management Techniques," in: P. Morris and J. Pinto (Eds.), *The Wiley Guide to Managing Projects* Hoboken, NJ: Wiley (2004), pp. 643-653.

78. "Intelligent Agents," in: H. Bidgoli (Ed.), *The Internet Encyclopedia* Volume 2, New York: Wiley (2004), pp. 192-203; with Daniel D. Zeng.

79. "Inducing Enterprise Knowledge Flows," in: J. Gupta and S. Sharma (Eds.), *Creating Knowledge Based Organizations* Hershey, PA: Idea (2004), Ch. 9, pp. 185-202.

80. "Knowledge Flow through a Military Joint Task Force Operation," in: C. Holsapple (Ed.), *Handbook on Knowledge Management* Springer-Verlag (2002).

81. "U.S. Defense Acquisition Research Program: A New Look," in: D. Slevin, D. Cleland and J. Pinto (Eds.), *The Frontiers of Project Management Research* Newtown Square, PA: Project Management Institute (2002), Ch. 6, pp. 115-134; with Keith Snider and Ira Lewis.

82. "Agent- and Web-based Employment Marketspaces in the U.S. Department of Defense," in: A. Gronlund (Ed.), *Electronic Government: Design, Applications and Management* Idea Group Publishing: Hershey, PA (2002), Ch. 9, pp. 170-204; with Bill Gates.

83. "Integrating Knowledge Process and System Design for Naval Battle Groups," in: M. Khosrowpour (Ed.), *Advanced Topics in Information Resources Management* Idea Group Publishing: Hershey, PA (2002), Ch. XVIII, pp. 315-333; with Elias Oxendine.

84. "Systematic Analysis and Design of Knowledge Systems and Processes," in: Y. Malhotra (Ed.), *Knowledge Management and Virtual Organizations* Idea Group Publishing: Hershey, PA (2000), Chapter XII, pp. 214-244; with Magdi Kamel and Kishore Sengupta.

85. "Integrated Analysis and Design of Knowledge Systems and Processes," in: Y. Malhotra (Ed.), *Knowledge Management and Virtual Organizations* Hershey: Idea (2000); with Magdi Kamel and Kishore Sengupta.

86. "A Configuration-Contingent Enterprise Redesign Model," in: T.R. Gulledge, D.J. Elzinga and C.Y. Lee (Eds.), *Process Engineering: Advancing the State of the Art* Kluwer: Norwell, MA (1999), Chapter 7, pp. 145-185.

87. "The Standard Procurement System and Beyond," in A. Lee and C. Fisher (Eds.), *Innovative Contracting: Practical Approaches* National Contract Management Association: Vienna, VA (1999), Chapter 11, pp. 127-141; with A. Karty.

Articles in Refereed Conference Proceedings

88. "Assessing Knowledge Flow Efficiency, Cost and Performance," *Proceedings* Hawaii International Conference on System Sciences. Maui, HI (January 2023)

89. "Human-Machine Interaction as Partnership," *Proceedings* International Command & Control Research & Technology Symposium; with Shelley Gallup (November 2021).

90. "Power Implications within Command and Control Organizations: New Insights through

Knowledge Measurement, *Proceedings* International Command & Control Research & Technology Symposium; with Shelley Gallup, Paul Shigley & Bob Tanner (November 2020).

91. "Extending a System for Measuring Dynamic Knowledge: Reconsidering Knowledge Flow Efficiency for Decision Support," *Proceedings* Hawaii International Conference of System Sciences, Maui, HI (January 2020).

92. "Understanding Organization Power Implications of Information System Designs through Measurement of Dynamic Knowledge," *Proceedings* International Command & Control Research & Technology Symposium. Johns Hopkins Applied Physics Laboratory, Laurel, MD; with Shelley Gallup, Paul Shigley & Bob Tanner (November 2019).

93. "Applying a System for Measuring Dynamic Knowledge: Reconsidering the Spiral Model," *Proceedings* Hawaii International Conference on System Sciences, Wailea, HI (January 2019).

94. "Dynamic C2 Design for Teams of Autonomous Systems and People," *Proceedings* International Command and Control Research and Technology Symposium, Pensacola, FL (November 2018).

95. "Towards Assessing the Willingness of Intelligence Analysts to Contribute to Knowledge Management Systems (KMS) in Highly Classified and Sensitive Environments," *Proceedings of the 2015 IEEE SoutheastCon.* Ft. Lauderdale, FL (2015); with Bob Hambly, Yair Levy and Amon Seagull.

96. "Toward Computational Modeling of C2 for Teams of Autonomous Systems and People," *Proceedings* International Command and Control Research and Technology Symposium, Alexandria, VA (June 2014); with David Place.

97. "Measuring Acquisition Workforce Quality through Dynamic Knowledge and Performance: An Exploratory Investigation to Interrelate Acquisition Knowledge with Process Maturity," *Proceedings* Acquisition Research Symposium, Monterey, CA (May 2014); with Rene Rendon.

98. "Archetypical C2 Organization Design for Ever Increasing Technological Autonomy: An Unmanned Aircraft System Illustration," *Proceedings* International Command & Control Research & Technology Symposium, Alexandria, VA (June 2013); with David Place.

99. "Measuring Dynamic Knowledge and Performance at the Tactical Edges of Organizations: Assessing Acquisition Workforce Quality," *Proceedings* Acquisition Research Symposium, Monterey, CA (May 2013).

100.   "Understanding the Potential of Virtual Environments for Improving C2 Performance," *Proceedings* International Command & Control Research & Technology Symposium, Quebec City, Quebec (June 2011); with Ken Hudson.

101.   "Examining Work Performance in Immersive Virtual Environments versus Face-to-Face Physical Environments through Laboratory Experimentation," *Proceedings* Hawaii International Conference on System Sciences, Koloa, HI (January 2011); with Richard Bergin and Bryan Hudgens; available: https://www.computer.org/csdl/proceedings/hicss/2011/4282/00/01-04-01.pdf.

102.   "Command & Control in Virtual Environments: Laboratory Experimentation to Compare Virtual with Physical," *Proceedings* International Command & Control Research & Technology Symposium, Santa Monica, CA (June 2010); with Richard Bergin,

Alicemary Adams, Ramez Andraus, Bryan Hudgens and June Lee.

103.   "Command & Control in Virtual Environments: Designing a Virtual Environment for Experimentation," *Proceedings* International Command & Control Research & Technology Symposium, Santa Monica, CA (June 2010); with Ken Hudson.

104.   "Extending Hypothesis Testing of Edge Organizations Using Functional Magnetic Resonance Imaging During ELICIT," *Proceedings* International Command & Control Research & Technology Symposium, Santa Monica, CA (June 2010); with Layne Kalbfleisch; available: https://pdfs.semanticscholar.org/f114/2afd259e1cf3c4494f6954e9921ee4333ae7.pdf.

105.   "Study of Trust as an Organizational Contingency, Part II: Examining Four Dimensions of Trust in ELICIT Experimentation," *Proceedings* International Command & Control Research & Technology Symposium, Santa Monica, CA (June 2010); with Ned Powley and Joe Seykora.

106.   "Command & Control in Virtual Environments: Tailoring Software Agents to Emulate Specific People," *Proceedings* International Command & Control Research & Technology Symposium, Santa Monica, CA (June 2010); with Danielle Wynn and Mary Ruddy.

107.   "Tacit Knowledge Flows and Institutional Theory: Accelerating Acculturation," *Proceedings* Hawaii International Conference on System Sciences, Koloa, Kauai, HI (January 2010); with Alicemary Adams and June Lee; nominated for Best Paper Award.

108.   "Conceptualizing Dynamic Fit and Misfit: Organizational Design Implications," *Proceedings* Academy of Management Conference, Chicago, IL (August 2009).

109.   "Trust-Mistrust as a Design Contingency: Laboratory Experimentation in a Counterterrorism Context," *Proceedings* International Command & Control Research & Technology Symposium, Washington, DC (June 2009); with Ned Powley; recommended for Best Paper Award; available: http://www.dtic.mil/dtic/tr/fulltext/u2/a503238.pdf.

110.   "Conceptualizing Dynamic Organizational Fit in Multicontingency Contexts," *Proceedings* Academy of Management Conference, Anaheim, CA (August 2008); with Tara Leweling.

111.   "C2 for Computer Networked Operations: Using Computational Experimentation to Identify the Highest-Performance Organizational Configurations," *Proceedings* International Command & Control Research & Technology Symposium, Seattle, WA (June 2008); with Jack L. Koons III and Nikolaos Bekatoros.

112.   "New Software Platform Capabilities and Experimentation Campaign for ELICIT," *Proceedings* International Command & Control Research & Technology Symposium, Seattle, WA (June 2008); with Mary Ruddy.

113.   "Self-Organization and -Synchronization at the Edge: Situated Action, Identity and Improvisation," *Proceedings* International Command & Control Research & Technology Symposium, Seattle, WA (June 2008); with Frank Barrett.

114.   "Expanding Knowledge-Flow Theory through Computational Analysis of Knowledge Specialization," *Proceedings* Academy of Management Conference, Philadelphia, PA (August 2007); with Ryan Orr and Ray Levitt.

115.   "Hypothesis Testing of Edge Organizations: Modeling the C2 Organization Design

Space," *Proceedings* International Command & Control Research & Technology Symposium, Newport, RI (June 2007); Winner – Best Student Paper Award; with Jamie Gateau, Tara Leweling and John Looney; available: http://www.dodccrp.org/events/12th_ICCRTS/CD/html/papers/093.pdf.

116. "Hypothesis Testing of Edge Organizations: Laboratory Experimentation using the ELICIT Multiplayer Intelligence Game," *Proceedings* International Command & Control Research & Technology Symposium, Newport, RI (June 2007); nominated for the Best Paper Award; with Tara Leweling; available: http://www.dodccrp.org/events/12th_ICCRTS/CD/html/papers/017.pdf.

117. "Hypothesis Testing of Edge Organizations: Empirically Calibrating an Organizational Model for Experimentation," *Proceedings* International Command & Control Research & Technology Symposium, Newport, RI (June 2007); with Doug MacKinnon, Ray Levitt and Marc Ramsey.

118. "Transcontinental Knowledge Flows: Bridging our International Understanding of Knowledge Management Research and Practice," *Proceedings* Wissen Management Konferenz, Potsdam, Germany (March 2007); note: this article review appears in a refereed conference proceedings volume, but the article itself was subject to only editorial- not peer-review.

119. "Implications of Information Flow Priorities for Interorganizational Crisis Management," *Proceedings* International Conference on Information Warfare & Security, Monterey, CA (March 2007), pp. 133-140; with Rauno and Tuija Kuusisto.

120. "Organizational Metacognition: the Importance of Knowing the Knowledge Network," *Proceedings* Hawaii International Conference on System Sciences, Big Island, HI (January 2007); with John Looney.

121. "Computational Experimentation on C2 Models," *Proceedings* International Command and Control Research and Technology Symposium, Cambridge, UK (September 2006); nominated for the Best Paper Award; with Ryan Orr.

122. "Computational Modeling and Analysis of Networked Organizational Planning in a Coalition Maritime Strike Environment," C111, *Proceedings* Command & Control Research & Technology Symposium, San Diego, CA (June 2006); Winner – Best Student Paper Award; with John Looney.

123. "Modeling Skill Growth and Decay in Edge Organizations: Near-Optimizing Knowledge & Power Flows (Phase Two)," C152, *Proceedings* Command & Control Research & Technology Symposium, San Diego, CA (June 2006); with Doug MacKinnon and Ray Levitt.

124. "Changing Major Acquisition Organizations to Adopt the Best Loci of Knowledge, Responsibilities and Decision Rights," *Proceedings* Third Acquisition Research Symposium, Monterey, CA (May 2006); with Frank Barrett.

125. "Hypothesis Testing of Edge Organizations: Specifying Computational C2 Models for Experimentation," *Proceedings* International Command & Control Research & Technology Symposium, McLean, VA (June 2005).

126. "A Computational Approach to Diagnosing Misfits, Inducing Requirements, and Delineating Transformations for Edge Organizations," *Proceedings* International Command & Control Research & Technology Symposium, McLean, VA (June 2005);

nominated for the Best Paper Award.

127. "Knowledge as Inventory: Near-Optimizing Knowledge and Power Flows in Edge Organizations (Phase One)," *Proceedings* International Command & Control Research & Technology Symposium, McLean, VA (June 2005); Winner – Best Student Paper Award; with Doug MacKinnon and Ray Levitt.

128. "Determining the Best Loci of Knowledge, Responsibilities and Decision Rights in Major Acquisition Organizations," *Proceedings* Second Annual Acquisition Research Symposium, Monterey, CA (May 2005); with John Dillard.

129. "Developing a Knowledge-based Organizational Performance Model for Discontinuous Participatory Enterprises," *Proceedings* Hawaii International Conference of System Sciences, Big Island, HI (January 2005); with Rahinah Ibrahim.

130. "Simulating Environment Contingencies using SimVision," *Proceedings* North American Association for Computational Social and Organizational Science, Pittsburgh, PA (June 2004); with Rahinah Ibrahim.

131. "Computational Experimentation: Bridging the Chasm between Laboratory and Field Research in C2," *Proceedings* Command and Control Research and Technology Symposium, San Diego, CA (June 2004); with Ray Buettner.

132. "Agent-Based Modeling of Knowledge-Flows: Illustration from the Domain of Information Systems Design," *Proceedings* Hawaii International Conference on System Sciences, Waikoloa, HI (January 2004); with Ray Levitt.

133. "Emerging Technology to Model Dynamic Knowledge Creation and Flow among Construction Industry Stakeholders during the Critical Feasibility-Entitlements Phase," *Proceedings* Joint Symposium on IT in CE, Nashville, TN (November 2003); with Rahinah Ibrahim.

134. "The Virtual Design Team (VDT): A Multi-Agent Analysis Framework for Designing Project Organizations," *Proceedings* International Conference on the Integration of Knowledge Intensive Multi-Agent Systems, Boston, MA (October 2003); with Ray Levitt.

135. "Dynamic Models of Knowledge-Flow Dynamics," *Proceedings* Minnesota Knowledge Management Symposium, Minneapolis, MN (March 2003); with Ray Levitt.

136. "What is a Digital Contract?" *Proceedings* National Contract Management Association World Congress, Long Beach, CA (July 2002); with Chris Webster.

137. "Lessons Learned to Guide Project Management Theory and Research: Pragmatism and Knowledge Flow," *Proceedings* Second PMI Research Conference, Seattle, WA (July 2002); with Keith Snider.

138. "An Empirical Investigation of e-Employment Market Designs," *Proceedings* International Conference on Electronic Commerce Research, Dallas, TX (November 2001); with Bill Gates.

139. "Intelligent Agent Intermediation of Patient/Physician Relationships," in: V. Mookerjee and P. Bowen (Eds.), *Proceedings* 2000 International Conference on Information Systems, Brisbane, Australia, Workshop on Information Technology and Systems (December 2000); with James Warren.

140. "U.S. Defense Acquisition Research Program," *Proceedings* First PMI Research Conference, Paris, France (June 2000), pp. 103-114; with Keith Snider.

141. "Toward Integrating Knowledge Management, Processes and Systems: A Position Paper," *Proceedings* American Association for Artificial Intelligence 2000 Spring Symposium, Stanford, CA, Workshop on Bringing Knowledge to Business Processes (March 2000), pp. 22-29; with Magdi Kamel and Kishore Sengupta.

142. "Supply Chain Process and Agent Design for E-Commerce," in: R. Sprague (Ed.), *Proceedings* Hawaii International Conference on System Sciences, Maui, HI (January 2000).

143. "Experimental Assessment of a Process Workflow Redesign Agent," in: R. Sprague (Ed.), *Proceedings* Hawaii International Conference on System Sciences, Maui, HI (January 2000).

144. "A Multi-Agent Approach to Supply Chain Disintermediation," in: S. Narasimhan and S. Sarkar (Eds.), *Proceedings* 1999 International Conference on Information Systems, Charlotte, NC, Workshop on Information Technology and Systems (December 1999), pp. 222-227.

145. "An Agent Federation for Supply Chain Integration," in: B. Drabble and P. Jarvis (Eds.), *Proceedings* American Association for Artificial Intelligence Conference, Orlando, FL, Workshop on Agent-Based Systems in the Business Context (July 1999).

146. "SPS and Beyond: Innovating Acquisition through Intelligent Electronic Contracting," in: C. Brown (Ed.), *Proceedings* Acquisition Research Symposium, Rockville, MD (June 1999).

147. "Some Intelligent Software Supply Chain Agents," in: O. Etzioni, J. Muller and J. Bradshaw (Eds.), *Proceedings* Agents 99 Conference, Seattle, WA (May 1999); with Anshu Mehra.

148. "An Intelligent Agent for Web-based Process Redesign," in: R. Sprague (Ed.), *Proceedings* Hawaii International Conference on System Sciences, Maui, HI (January 1999).

149. "Redesigning Software Procurement through Intelligent Agents," in: R. Gamble (Ed.), *Proceedings* American Association for Artificial Intelligence Conference, Madison, WI, Workshop on Knowledge Management and Business Process Reengineering (1998); with Anshu Mehra.

150. "Case Study: Intelligent Software Supply Chain Agents Using ADE," in: J. Baxter and B. Logan (Eds.), *Proceedings* American Association for Artificial Intelligence Conference, Madison, WI, Workshop on Software Tools for Developing Agents (1998); with Anshu Mehra.

151. "Toward Intelligent Web-based Redesign Support," in: D. O'Leary and R. Gamble (Eds.), *Proceedings* American Association for Artificial Intelligence Conference, Providence, RI, Workshop on AI in Business (1997).

152. "Measurement-Driven Inference for Reengineering Support," in: D. O'Leary and P. Watson (Eds.), *Proceedings* American Association for Artificial Intelligence Conference, Portland, OR, Workshop on AI in Business (1996).

153. "Meta-Cognitive Learning Effects through Student Redesign of the IS Core," in: C.

Ragsdale and E. Houck (Eds.), *Proceedings* Decision Sciences Institute Conference (Volume 1) Boston, MA (1995).

154. "Valuing IT through Virtual Process Measurement," in: M. Munroe (Ed.), *Proceedings* International Conference on Information Systems, Vancouver, Canada (1994).

155. "Qualitative Simulation of Organizational Microprocesses," in: R. Sprague, Jr. and J. Nunamaker, Jr. (Eds.), *Proceedings* Hawaii International Conference on System Sciences (Volume IV), Maui, HI (1994).

156. "Multivariate Statistics and Symbolic Artificial Intelligence: Analytical and Empirical Comparisons in Language Recognition," in: J. Evans (Ed.), *Proceedings*: Decision Sciences Institute Conference (Volume 2) Washington, DC (1993); Best Paper Award.

Other Publications

157. "Preparing Engineering Duty Officers for Major Command Assignments," Technical Report NPS-IS-22-011, Naval Postgraduate School, Monterey, CA (December 2022); with Simona Tick, Rene Rendon and Robert Mortlock.

158. "Art and Science of JADC2 Conceptualization from a Navy Perspective," Technical Report NPS-IS-22-010, Naval Postgraduate School, Monterey, CA (December 2022); with Shelley Gallup.

159. "Assessing Inclusion Behaviors and Inclusion within the Fleet," Technical Report NPS-DDM-22-001, Naval Postgraduate School, Monterey, CA (March 2022); with Erik Helzer and Simona Tick.

160. "Assessing Inclusion Behaviors and Inclusion within the Fleet," Technical Report NPS-DDM-21-N315-A, Naval Postgraduate School, Monterey, CA (March 2021); with Erik Helzer and Simona Tick.

161. "Evaluation of Leadership Traits for Future Warfare," Technical Report NPS-IS-21-002, Naval Postgraduate School, Monterey, CA (December 2021); with Simona Tick.

162. "Developing a Formal Navy Knowledge Management Process," Technical Report NPS-IS-21-001, Naval Postgraduate School, Monterey, CA (March 2021); with Shelley Gallup.

163. "Computational Modeling and Simulation of Distributed Maritime Operations," Technical Report NPS-IS-20-005, Naval Postgraduate School, Monterey, CA (December 2020); with Shelley Gallup.

164. "Naval Collaboration with Academia Promotes Rigorous Research," *Future Forces* 6(4). (2020), pp. 56-57; with Clare Morton, Paul Shigley & Bob Tanner.

165. "Manned-Unmanned Teaming in Distributed Maritime Operations," Technical Report NPS-IS-19-002, Naval Postgraduate School, Monterey, CA (December 2019); with Shelley Gallup.

166. "Surface Warfare Proficiency Knowledge Management Architecture," Technical Report NPS-IS-19-003, Naval Postgraduate School, Monterey, CA (October 2019); with Shelley Gallup.

167. "A Knowledge Based Analysis of Information Technologies Required to Support Fleet Tactical Grid," Technical Report NPS-IS-19-001, Naval Postgraduate School, Monterey,

CA (March 2019); with Shelley Gallup and Steven Iatrou.

168. "Key Recommendations for Retaining Surface Warfare Officer Talent," *U.S. Naval Institute Blog* (25 March 2019); URL: https://blog.usni.org/posts/2019/03/25/key-recommendations-for-retaining-surface-warfare-officer-talent; with Simona Tick.

169. "Toward Integrating Our Understanding of Talent in the US Navy," Technical Report NPS-IS-18-002, Naval Postgraduate School, Monterey, CA (November 2018); with Simona Tick.

170. *PLCPC Contribution Trends and Demographics*. Statistical analysis of Church contributions. San Diego, CA (March 2019).

171. "Understanding and Retaining Talent in the Surface Warfare Community," Technical Report NPS-IS-18-001, Naval Postgraduate School, Monterey, CA (March 2018); with Simona Tick.

172. "Dynamic C2 Design for Asymmetric Advantage: Teams of Autonomous Systems and People," Technical Report NPS-IS-17-004, Naval Postgraduate School, Monterey, CA (December 2017).

173. "Toward a System for Visualizing and Measuring Dynamic Knowledge," Technical Report NPS-IS-17-003, Naval Postgraduate School, Monterey, CA (December 2017).

174. "Four Key Steps to Retaining Talent in the Information Warfare Community," *CHIPS* (April-June 2017); Online ISSN 2154-1779; Print ISSN 1047-9988; with Simona Tick; available at http://www.doncio.navy.mil/chips/ArticleDetails.aspx?ID=8915.

175. "Understanding and Retaining Talent in the Information Warfare Community," Technical Report NPS-IS-17-002, Naval Postgraduate School, Monterey, CA (February 2017); with Simona Tick.

176. "Command and Control for Teams of Autonomous Systems and People," Technical Report NPS-IS-16-001, Naval Postgraduate School, Monterey, CA (November 2016); with David Place.

177. "Command and Control Models of Next Generation Unmanned Aircraft Systems," Technical Report NPS-IS-15-002, Naval Postgraduate School, Monterey, CA (October 2015); with David Place.

178. "Featured Article: Advancing Autonomous Systems: Rough Seas Ahead for Command & Control," *CRUSERNews* 54 (August 2015).

179. "Marine Forces Reserve: Accelerating Knowledge Flow through Asynchronous Learning Technologies," Technical Report NPS-14-008, Naval Postgraduate School, Monterey, CA (December 2014); with Robert McGuiness and Anthony Davis.

180. "Computational Experimentation to Understand C2 for Teams of Autonomous Systems and People," Technical Report NPS-14-007, Naval Postgraduate School, Monterey, CA (December 2014); with David Place.

181. "Command and Control for Teams of Autonomous Systems and People: 2014 Abbreviated Research Summary," in: R. Buettner (Ed.), *FY2014 CRUSER Research Results* (September 2014).

182.   *Nissen Family in Ribe*, English translation of A. Rauff's (1998) Danish compendium, accompanied by a new updated section to capture the subsequent three generations. Monograph. (2014).

183.   "Measuring Acquisition Workforce Quality through Dynamic Knowledge and Performance: An Exploratory Investigation to Interrelate Acquisition Knowledge with Process Maturity," Technical Report NPS-CM-13-116, Acquisition Research Program, Naval Postgraduate School, Monterey, CA (October 2013); with Rene Rendon.

184.   "C2 Agility and Combat Boots: One Size Does Not Fit All," *CRUSER News* 26 (April 2013).

185.   "Toward an Operational Proxy for Acquisition Workforce Quality," Technical Report NPS-AM-12-206, Acquisition Research Program, Naval Postgraduate School, Monterey, CA (October 2012).

186.   "Applying an Aerodynamics Inspired Organizational Dynamic Fit Model to Disaster Relief Endeavors," Technical Report No. NPS-IS-11-001, Naval Postgraduate School (January 2011).

187.   "CyberKM: Harnessing Dynamic Knowledge for Competitive Advantage through Cyberspace," Technical Report No. NPS-IS-10-006, Naval Postgraduate School (November 2010).

188.   "Command and Control in Virtual Environments: Using Contingency Theory to Understand Organization in Virtual Worlds," Technical Report No. NPS-IS-10-005, Naval Postgraduate School (October 2010).

189.   "Book Review: *Knowledge Management – Systems Implementation: Lessons from the Silicon Valley,* by Hind Benbya," *Knowledge Management Research & Practice* 7:2 (2009); note: this book review appears in a refereed journal, but the piece itself was subject to only editorial- not peer-review.

190.   "Dynamic Fit and Misfit through Organizational Design: Conceptualization via Stability and Maneuverability," Naval Postgraduate School Technical Report NPS-46-09-001 (June 2009).

191.   "Responding to Counterterrorism Threats: Effects of Coalition Trust and Mistrust on Organizational Design," Naval Postgraduate School Technical Report NPS-GSBPP-09-001 (February 2009); with Ned Powley.

192.   "NAVAL POSTGRAD SCHOOL SEEKS TO DECENTRALIZE DECISION-MAKING," quoted by Dan Taylor in *Inside the Navy Magazine* 22:14, Article #17 (13 April 2009).

193.   "Man vs. Machine: How Computers Routed the Experts," quoted by Ian Ayres in *Financial Times Magazine* (2 September 2007), p. 18.

194.   "Who's the Boss? Soon It May Be a Computer Calling the Shots," quoted by Chris Penttila in *Entrepreneur* (March 2007), p. 36.

195.   "Book Review: *Case Studies in Knowledge Management*," *Knowledge Management Research & Practice* 4:1 (2006), pp. 75-76; note: this book review appears in a refereed journal, but the review itself was subject to only editorial- not peer-review.

196.   "Book Review: *The Agile Organization*," *Cambridge Review of International Affairs* 19:2

(2006), p. 362; note: this book review appears in a refereed journal, but the review itself was subject to only editorial- not peer-review.

197. "Freeway Ministry," written for Bill Hardman, *Truth Magazine* (October-December 2006).

198. "Changing Major Acquisition Organizations to Adopt the Best Loci of Knowledge, Responsibilities and Decision Rights," NPS Technical Report NPS-PM-06-022 or NPS-GSBPP-06-015 (September 2006); with Frank Barrett.

199. "Maybe We Should Leave That Up to the Computer," quoted by Douglas Heingartner in *The New York Times* (18 July 2006).

200. "Validating the Virtual Design Team (VDT) Computational Modeling Environment," CRGP Working Paper 25, Stanford University (2005); with Ray Levitt and Ryan Orr.

201. "Determining the Best Loci of Knowledge, Responsibilities and Decision Rights in Major Acquisition Organizations," NPS Technical Report NPS-PM-05-005 (June 2005); with John Dillard.

202. "Contextual Criticality of Knowledge-Flow Dynamics: The Tragedy of Friendly Fire," NPS Technical Report NPS-GSBPP-03-002 (2003); with Erik Jansen, Carl Jones and Gail Thomas.

203. "Two-Sided Matching Agents for Electronic Employment Market Design: Social Welfare Implications," NPS Technical Report NPS-GSBPP-02-005 (2002); with Bill Gates.

204. "Toward Simulation Models of Knowledge-Intensive Work Processes," CIFE Working Paper 077, Stanford University (2002); with Ray Levitt.

205. "Dynamic Models of Knowledge-Flow Dynamics," CIFE Working Paper 076, Stanford University (2002); with Ray Levitt.

206. "The Rolodex Model: Understanding Relationship Complexity as a Precursor to the Design of Organizational Forms for Chaotic Environments," NPS Technical Report NPS-GSBPP-02-004 (2002); with Omar El Sawy.

207. "Toward Enterprise Process Engineering: Configuration Measurement and Analysis," NPS Technical Report NPS-GSBPP-02-003 (2002).

208. "Virtual Supply Chain Re-Intermediation through Multi-Agent Systems," NPS Technical Report NPS-GSBPP-02-002 (2002).

209. "Understanding 'Understanding' Flow for Network-Centric Warfare: Military Knowledge-Flow Mechanics, Technical Report No. NPS-GSBPP-02-001, Naval Postgraduate School (2002).

210. "Knowledge Process and System Design for the Naval Battlegroup," *Knowledge & Innovation: Journal of the KMCI* 1:3 (2001), pp. 89-109; with Elias Oxendine.

211. "Facilitating Naval Knowledge Flow," Technical Report No. NPS-GSBPP-01-004, Naval Postgraduate School (2001).

212. "Toward a Program of Research on Knowledge Flow in the Very-Large Enterprise," Technical Report No. NPS-GSBPP-01-003, Naval Postgraduate School (2001).

213. "Contracting Process Innovation," Technical Report No. NPS-GSBPP-01-001, Naval Postgraduate School (2001).

214. "Web-Based Markets for Improving Naval Personnel Detailing," *Naval Postgraduate School Research* 11:2 (June 2001); with Dr. Bill Gates, Maj. Hock Sing Ng, Cpt. Paul Robards, LCDR Richard Schlegel, LT Melissa Short, Maj. Cheow Guan Soh, Maj. Suan Jow Tan, and Maj. Chee Meng Yeong.

215. "Toward Understanding Navy Knowledge Flow," *Naval Postgraduate School Research* 11:1 (February 2001).

216. "A Framework for Integrating Knowledge Process and System Design," *Information Strategy: The Executive's Journal* 16:4 (Summer 2000), pp. 17-27; with Magdi Kamel and Kishore Sengupta.

217. "Software Acquisition Lessons Learned through Student Thesis Research," *Army AL&T* (May-June 2000), pp. 23-24; with Col. David Matthews (US Army Ret).

218. "Procurement Revolution with Intelligent Agent Technology," *PRACTIX: Best Practices in Purchasing and Supply Chain Management* 3:2 (December 1999).

219. "Process Innovation: Analysis and Redesign of the California Army National Guard State Emergency Mobilization Process," *Naval Postgraduate School Research* 9:1 (February 1999); with Cpt. Patrick McGuire, Cpt. Andrew Palan and LT David White.

220. "The TOPGUN Approach to Software Acquisition Education," *CrossTalk* 11:3, Special Issue on Software Education and Training (March 1998), pp. 3-5.

221. "The Commerce Model for Electronic Redesign," *Journal of Internet Purchasing* (1997).

222. "JSOW Alpha Contracting Technical Report," Naval Postgraduate School reimbursable research report (1997); a close derivative also led to development of an instructional case study, "JSOW Alpha Contracting Case Study (Software Version)," which has been adopted for pedagogical use in multiple acquisition courses at the Naval Postgraduate School (1997).

INVITED PRESENTATIONS

1. "Knowledge Management," tailored support presentation for RDML Brophy, Naval Postgraduate School, Monterey, CA (July 2023).

2. "Knowledge Dynamics: Visualization and Measurement," invited presentation, Naval Information Warfare Center San Diego, CA (June 2023).

3. "Continuing to Extend Knowledge Measurement via Incremental Research," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (April 2023).

4. "Theory Building through Literature Bridging," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (May 2022).

5. "Explicit and Tacit Knowledge: Complementary Properties and Behaviors," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey,

CA (January 2022).

6. "KIDS: One Approach to Appearing Informed about 'IS Research'," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (December 2021).

7. "Navy KM Study N1 Brownbag," invited presentation, Monthly MyNavyHR Brownbag (July 2021).

8. "Computational Organization Design & Experimentation," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (July 2021).

9. "Human-Machine Teaming Panel Discussion," invited presentation, Naval Research Working Group 21, Naval Postgraduate School, Monterey, CA (April 2021); Teams panel session.

10. "Knowledge Dynamics Research," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (February 2021).

11. "Human-Machine Teaming," invited presentation, Naval Research Working Group 20, Naval Postgraduate School, Monterey, CA (April 2020); Zoom panel session recording for asynchronous delivery.

12. "The One Pager," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (November 2019).

13. "Computational Experimentation," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (March 2018).

14. "Further Toward Dynamic Knowledge Visualization and Measurement," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (May 2016).

15. "The Continuum of Pedagogy from Classroom to Online," invited presentation, Center for Educational Excellence, University of San Diego, San Diego, CA (April 2015).

16. "Computational Organization Design and Experimentation," invited presentation, School of Business Research Seminar, University of San Diego, San Diego, CA (October 2013).

17. "Prof. Nissen's Sometimes Melifluous Research Stream," invited presentation, Information Sciences PhD Seminar, Naval Postgraduate School, Monterey, CA (Oct 2012).

18. "Organizational Exploration via Computational Experimentation," invited presentation, Interdisciplinary Committee on Organizational Studies, University of Michigan (September 2011).

19. "KM404: Advanced Knowledge Management Principles & Techniques for Viral Organizational Transformation," invited presentation, Knowledge Management Conference & Exposition, McLean, VA (May 2011).

20. "Agent-Based C2 Modeling and Simulation with POWer," invited presentation, MOVES Seminar, Monterey, CA (July 2010).

21. "Application Services for Command & Control," invited presentation, Naval Postgraduate School C4I Workshop, Monterey, CA (June 2010).

22. "KM Education and Research: Naval Postgraduate School," invited presentation, KM2010 Conference, Washington, DC (May 2010).

23. "Modeling and Simulating Military Organizations with POWer," invited presentation, Simulation Experiments and Efficient Designs (SEED) Seminar, Monterey, CA (February 2010); with John Looney.

24. "Emerging DoD and NATO Research Vectors," invited presentation, Modeling in Virtual Environments and Simulation (MOVES) Seminar, Monterey, CA (February 2010); with David Alberts.

25. "Dynamic Knowledge Principles & Learning Army Organizations: How Unthinkable?" invited plenary presentation, Army Operational Knowledge Management Conference, Kansas City, MO (October 2009).

26. "Knowledge Management Concepts & Training: Operational IM-KM Focus," invited plenary presentation, US Marine Corps Information Management Conference, Camp Pendleton, CA (October 2009).

27. "ELICIT Research Opportunities at the Army Research Laboratory," invited presentation, US Army Research Laboratory, Adelphi, MD (June 2009).

28. "ELICIT Research Experience at the Naval Postgraduate School," invited plenary presentation, International Command & Control Research & Technology Symposium, Washington, DC (June 2009).

29. "ELICIT (Experimental Laboratory for Investigating Collaboration, Information-sharing and Trust) Experimentation in a Virtual Environment: Some Preliminary Design Thoughts," invited presentation, MOVES Institute Seminar, Naval Postgraduate School, Monterey, CA (May 2009).

30. "Research centres and knowledge: the good, the bad and the ugly," invited presentation, Monieson Centre, Queens University, Kingston, ON, Canada (May 2009).

31. "Information Propagation, Impact and Persistence: Organizational Design and Trust Implications," invited presentation, DARPA Mimetics Seedling Research Meeting, Arlington, VA (February 2009).

32. "The Logic of Organizing," invited presentation, Logic Group, Stanford University (July 2008).

33. "Information Propagation, Impact and Persistence: Trust and Mistrust Research Opportunities," invited presentation, DARPA Mimetics Seedling Research Meeting, Arlington, VA (July 2008).

34. "Philosophy of Science and Engineering Research: Quantitative and Qualitative Methods & The Design of Large Experiments," invited presentation, *CS, ECE, IS, MOVES, OR & SWE Joint PhD Seminar*, Naval Postgraduate School, Monterey, CA (January 2008).

35. "A Campaign of Experimentation to Evaluate C2 Approaches Using ELICIT and POW-ER Tools," invited plenary address, International Command & Control Research & Technology Symposium, Newport, RI (June 2007).

36. "Transcontinental Knowledge Flows: Bridging our International Understanding of Knowledge Management Research and Practice," invited keynote address, Wissen Management Konferenz, Potsdam, Germany (March 2007).

37. Virtual interview with the Army Knowledge Management Community on the book *Harnessing Knowledge Dynamics: Principled Organizational Knowing & Learning* (June – August 2006).

38. "Understanding Command and Control," invited panel presentation, Command & Control Research & Technology Symposium, San Diego, CA (June 2006).

39. "Edge Organization and Knowledge Dynamics," invited presentation, School of Business, George Washington University (May 2006).

40. "Hypothesis Testing of Edge Organizations," invited presentation, Second Edge Project Research Workshop, Naval Postgraduate School, Monterey, CA (July 2005).

41. "Computational Experimentation on Edge Organizations," invited presentation, Information Sciences Research Seminar, Naval Postgraduate School, Monterey, CA (May 2005).

42. "Hypothesis Testing of Edge Organizations," invited presentation, Edge Project Workshop, Stanford University (December 2004).

43. "Understanding the Edge Organization: Project Ideas," invited presentation, Virtual Design Team Research Group, Stanford University (October 2004).

44. "Computational Modeling of Organizational Knowing: Designing Organizations around Knowledge Flows, or Describing Organizational Knowing through Dynamic Models," invited presentation, Management Research Seminar, Fuqua School of Management, Duke University (October 2004).

45. "Knowing Management: 10 Principles for NCO," presented at the Naval Postgraduate School Network-Centric Operations Course, Monterey, CA (July 2004).

46. "Computational Experimentation in Acquisition/Logistics," invited presentation, Acquisition/Logistics Seminar, Naval Postgraduate School (April 2004).

47. "Agent-Based Modeling of Knowledge Flows – Organizational Design Implications," invited presentation, Virtual Design Team Research Group Seminar, Stanford University (January 2004).

48. "Dynamic Knowledge Organization – Insights from a Year on the Farm," invited presentation, Graduate School of Business & Public Policy Research Seminar, Naval Postgraduate School, Monterey, CA (October 2003).

49. "Designing Organizations Around Knowledge Flows: Compelling, Crazy or Passé?" invited presentation, Department of Organization & Management Research Seminar, University of Southern Denmark (May 2003).

50. "Dynamic Models of Knowledge-Flow Dynamics," invited presentation, Minnesota Knowledge Management Symposium, Minneapolis, MN (March 2003).

51. "Understanding Knowledge Flow in Large Distributed Organizations," invited

presentation, Center for Work, Technology and Organizations Research Colloquium, Stanford University (March 2003).

52. "Two-Sided Matching for the U.S. Navy's Enlisted Detailing Process: A Comparison of Deferred Acceptance Versus Linear Programming Via Simulation," invited presentation, Navy Manpower Research and Analysis Conference, held at the Center for Naval Analysis, Alexandria, VA (March 2003); with Bill Gates, Joshua Ho, and Eng Whee Low.

53. "Two-Sided Matching Agents for Electronic Employment Market Design: Social Welfare Implications," invited presentation, Graduate School of Business and Public Policy Research Colloquium, Naval Postgraduate School, Monterey, CA (March 2003); with Bill Gates.

54. "A Workday in the Life of an Artificial Learning Agent," invited presentation, James March Monday Lunch Seminar, Stanford University (February 2003).

55. "Dynamic Models of Organizational Learning," invited presentation, Virtual Design Team Research Group Seminar, Stanford University (February 2003).

56. "The Navy's Enlisted Detailing Process: An Empirical Analysis," invited presentation, Graduate School of Business and Public Policy Board of Advisors, Naval Postgraduate School, Monterey, CA (December 2002); with Bill Gates, Joshua Ho, Eng Whee Low, Dong Ho Park and Mark Ramirez.

57. "Measuring Knowledge Flow," invited presentation: Global Knowledge Economics Summit, New York, NY (November 2002).

58. "Understanding Knowledge Flow," invited presentation: James March Monday Lunch Seminar, Stanford University (October 2002).

59. "Knowledge Flow/VDT Research Integration," invited presentation: Virtual Design Team Research Group Seminar, Stanford University (October 2002).

60. "Flow Mechanics for Knowledge Superiority," invited presentation, Cebrowski Institute for Information Innovation and Superiority (CINFINIS) Research Symposium, Naval Postgraduate School, Monterey, CA (July 2002).

61. "Knowledge-Flow Patterns for Process Design," invited presentation, School of Business Research Colloquium, Naval Postgraduate School, Monterey, CA (July 2002).

62. "NPS Research on Knowledge Flow," invited presentation, Naval Strike Air Warfare Center, Monterey, CA (March 2002).

63. "Agent-Based Electronic Employment Markets," invited presentation, Navy Personnel Research Studies & Technologies Office, in Millington, TN (February 2002); with Bill Gates.

64. "Characterizing Sailor and Command Enlisted Assignment Preferences," invited presentation, Navy Manpower Research Analysis Conference, sponsored by the Center for Naval Analysis, held in Alexandria, VA (February 2002); with Virginia Butler, Valerie Molina and Bill Gates.

65. "A Redesign of the U.S. Navy's Enlisted Assignment Process," invited presentation, Navy Manpower Research and Analysis Conference, sponsored by the Center for Naval Analysis, held in Alexandria, VA (February 2002); with Gerard Koh and Bill Gates.

66. "BPR Conceptual Modeling," invited presentation, Bureau of Naval Personnel CIO, Millington, TN (December 2001).

67. "Research Experiences and Opportunities with the Navy Sea-Based Battle Lab," invited presentation, Naval Postgraduate School, School of Business & Public Policy Research Colloquium, held in Monterey, CA (September 2001).

68. "Intelligent Agents and Web-Based Markets for Detailing Naval Personnel," invited presentation, Military Personnel Research Science Workshop, held at the University of Memphis (June 2001); with Bill Gates.

69. "Navy Knowledge Flow," invited presentation, Navy Chief Information Office, Knowledge-Centric Organization Project, presentation filmed in Monterey, CA (May 2001).

70. "Navy Knowledge Flow Exchange," invited presentation, Command Third Fleet, held onboard the USS Coronado, San Diego, CA (May 2001).

71. "A Brief Look at Knowledge Flow," invited presentation, Naval Postgraduate School Research Recognition Evening, held in Monterey, CA (April 2001).

72. "A Tale of Three Knowledge Systems," invited presentation, Stanford University Center for Integrated Facilities Engineering, held in Palo Alto, CA (March 2001).

73. "An Experimental Approach to Understanding Human and Software Agent Performance along the Supply Chain," invited presentation, University of Arizona Information Systems Research Seminar, held in Tucson, AZ (November 2000).

74. "Agent-Based Market Design for Navy Enlisted Personnel," invited presentation, Navy Manpower Research and Analysis Conference, held in Washington, DC (October 2000); with Bill Gates.

75. "Agent Supply Chain Dis/Re-intermediation," invited presentation, IFIP Working Group 7.6 Workshop on Virtual Environments for Advanced Modeling, held in Monterey, CA (August 2000).

76. "U.S. Defense Acquisition Research Program," invited presentation, First PMI Research Conference, Paris, France (June 2000).

77. "Future of Project Management Research," invited panel discussion, First PMI Research Conference, Paris, France (June 2000).

78. "The Future Acquisition Environment," invited presentation, Federal Acquisition Institute, Washington, DC (May 2000).

79. "IT Acquisition Research Strategies," invited presentation, American Project Management Forum, held in Tysons Corner, VA (November 1999).

80. "External Research for the DoD," invited presentation, Dr. Jacques Gansler, Under Secretary of Defense for Acquisition and Technology, Ft. Belvoir (June 1999).

81. "Knowledge-Based Knowledge Management," invited presentation, Naval Postgraduate School Research Colloquium, held in Monterey, CA (October 1999).

82. "Intelligent Acquisition Agents," invited presentation at the Advanced Technology in Business Conference on Managing Information Technologies, held in Auburn Hills, MI

(October 1998).

83. "Acquisition Vectors: Knowledge and Systems," invited presentation, Supply Corps Flag Officers' Workshop on the Future of Acquisition and Contracting, conducted at the Naval Postgraduate School, Monterey, CA (August 1998).

84. "Reengineering Acquisition," invited presentation, Acquisition Center of Excellence exchange, conducted at the Naval Postgraduate School, Monterey, CA (October 1997).

85. "Knowledge-based Organizational Process Redesign," invited presentation, Information Systems Colloquium, held at the University of California at Los Angeles (October 1996).

86. "Intelligent Virtual Enterprise Management," invited presentation, CITM/ECRC Workshop on Virtual Enterprise Management, held at the University of California at Berkeley (March 1996).

87. "Knowledge-Based Procurement Process Redesign," invited presentation, Bay Area Information Systems Research Symposium, held at Stanford University, Palo Alto, CA (January 1996).

88. "Agents to Increase the Intelligence of the Intelligent Hub," invited presentation, CommerceNet CALS Working Group Meeting, Sunnyvale, CA (December 1995).

89. "Knowledge-Based Contracting," invited presentation, National Contract Management Association regional meeting, held in Landcaster, CA (May 1995).

90. "The ICIS '99 Virtual Conference Prototype Experiment," invited presentation, Workshop on Information Systems Research & Development Doctoral Student Consortium, held at the University of Southern California (October 1994).

91. "Measurement-Based Software Process Redesign and Optimization," invited presentation, Southern California CASE Users Group meeting, held at the University of Southern California (May 1994).

WORK IN PROCESS

1. "Retention of High Quality Officers: An Assessment of Importance of STEM Degrees," Technical Report NPS-17-TBD, Naval Postgraduate School, Monterey, CA (March 2017); with Simona Tick, Stephen Mehay and Elda Pema.

2. "An Analysis of Professional Characteristics and Performance of Junior Navy Officers," Technical Report NPS-18-TBD, Naval Postgraduate School, Monterey, CA (March 2018); with Simona Tick, and Stephen Mehay.

3. "An Analysis of Alternative Measures of Performance and Career Outcomes of Junior Navy Officers," Technical Report NPS-19-TBD, Naval Postgraduate School, Monterey, CA (February 2019); with Simona Tick, Stephen Mehay and Elda Pema.

EDITORIAL RESPONSIBILITIES

- Regional Editor for the Americas (Founding Member), *Knowledge Management Research and Practice* (2002 – 2013); this was the first knowledge management journal to gain an Impact Factor listing.

- Editorial Board (Founding Member), *Knowledge Management & E-Learning: An International Journal* (2009 – 2013).

- Editorial Board (Founding Member), *International Command & Control Journal* (2006 – 2011).

- Guest Editor, *Information Systems Journal*, Special Issue on managing knowledge transfer in distributed contexts (2008).

- Editorial Board, *International Journal of Knowledge Management* (2004 – present).

- Editorial Board, *Project Management Journal* (2004 – 2013).

- Editorial Board, *Information Resources Management Journal* (2001 – 2013).

- Editorial Board, *International Journal of Intelligent Systems in Accounting, Finance and Management* (2000 – 2003).

- Editorial Board, *Acquisition Review Quarterly* (2000 – 2002).

- Guest Editor, *Acquisition Review Quarterly* 5:2, Special Issue on Managing Radical Change (1998), with K. Snider and D. Lamm.

- Contributing Editor, *Journal of Internet Purchasing* leading-edge online publication (1997 – 1998).

MAJOR RESEARCH PROJECTS

Naval Postgraduate School

- "Talent Management," sponsored by OPNAV N1T (2015 – present); Co-Principal Investigator on this project to investigate what constitutes talent in the organization and how to retain it.

- "Command and Control of Autonomous Systems and People," sponsored by CRUSER (2014 – 2018); Principal Investigator on this project to conceptualize how to organize teams of autonomous systems—working as peers and teammates—and people.

- "Organization Design for Autonomy," independent research & development (2012 – present); Sponsor & Principal Investigator for this project to understand how organizations (including command & control) can be (re)designed to integrate autonomous systems with people as cooperative teammates.

- "Dynamic Organization Design," independent research & development (2010 – present); Sponsor & Principal Investigator for this project to understand how organizations (including command & control) can be agile and (re)designed frequently to fit their perennially changing environments (and missions).

- "Edge Center," sponsored originally by the Office of the Assistance Secretary of Defense for Networks & Information Integration, through its Command & Control Research Program (2004 – present); Director for this cutting-edge, multidisciplinary, multi-university, research center.

- "Information Propagation, Impact and Persistence: Trust-Mistrust Effects," sponsored by the Defense Advanced Research Projects Agency, through its Memetics Program (2007 – 2008); Principal Investigator for this seedling research program.

- "Virtual Design Team Research Program," established in the School of Engineering at Stanford University (2002 – 2004); Researcher with this basic and applied program to develop and employ computational organization models to build and test theory.

- "Knowledge-Flow Theory for the Very-Large Enterprise," sponsored by the Office of Naval Research through its Young Investigator Program (2001 – 2004); Principal Investigator on this basic-research project to develop and test knowledge-flow theory.

- "An Agent-based Employment Market for the Military," sponsored by the Naval Personnel Research Studies and Technologies Office (2000 – 2002); Co-Principal Investigator on multi-disciplinary project to conceptualize, agent-enable and analyze a virtual marketspace for matching military personnel with jobs; with Bill Gates.

- "External Acquisition Research Program," sponsored by the Defense Acquisition University (1998 – 2000); this project involves both the management and performance of research.
    - Program Manager. The program management job requires planning, initialization, startup and management of a research program for the DoD, with an explicit focus on top scholars from leading universities outside the Government. This work is helping to improve the quality and quantity of scholarly acquisition research.
    - Principal Investigator. This funding source enables me to conduct my information systems research, write and publish papers and attend academic conferences. The Naval Postgraduate School requires faculty members to cover 50% of their salary through reimbursable-research funding.

- "JSOW Alpha Contracting," sponsored by the Naval Air Warfare Center (1997); Principal Investigator in a project to understand and evaluate an innovative, team-based procurement approach called "Alpha Contracting"; this work led to publication of "The JSOW Alpha Contracting Case," which is now used in multiple graduate-level courses.

- "Knowledge-Based Reengineering - Intelligent Tools Development and Testing," sponsored by the Naval Postgraduate School (1997 – 1998) as part of its Research Initiation Program (RIP).
    - "Intelligent acquisition agents" (Jan 98 – Jun 98); submitted NSF CAREER proposal entitled "Intelligent Procurement Agents" (1998) and ONR Young Investigator proposal entitled "Intelligent Acquisition Agents for Real Time War Fighting Support and Sustainment" (1997).
    - "Reengineering Knowledge Systems"; extension of dissertation research to prototype and validate knowledge-based systems for reengineering support (Jan 97 – Jan 98); implemented Web-based redesign expert system called "KOPeR-lite," which is used for both research and instruction.

University of California at Berkeley

- "Intelligent Supply Chain Management," sponsored by CommerceNet; extension of dissertation research to investigate the use of intelligent agents for vendor identification, selection, contracting and management (Jul 95 – Jul 96).

University of Southern California

- "Knowledge-Based Organizational Process Redesign: Using Process Flow Measures to Transform Procurement"; doctoral research to develop a theoretical model of process

redesign, and then implement and deploy a knowledge-based system for redesign support of Navy procurement processes in the field (Sep 93 – Jul 95). This research was funded in part by a competitive doctoral dissertation award from the National Association of Purchasing Management and by a grant from the Office of Naval Research; the dissertation also finished as runner-up in the 1996 ICIS (International Conference on Information Systems) Doctoral Dissertation Competition.

INFORMATION SYSTEM IMPLEMENTATIONS

Development and implementation of information systems requires considerable time and effort that can obscure a researcher's productivity as measured simply by publications and presentations. The information system implementations below represent considerable research accomplishments.

- Personnel Mall (2000). The Personnel Mall is a proof-of-concept multi-agent system developed to represent employers and job seekers in a Web-based electronic employment market. Semi-autonomous agents collaborate to find and match potential employees with jobs. This implementation serves as a platform for assessment of competing approaches to matching people with jobs (e.g., keyword matching, quasi-pricing, two-sided matching algorithms, personal preferences) and represents a key part of the proposed Navy/Marine Corps Career Management System. This implementation was adapted from the Intelligent Mall described below.
- Intelligent Mall (1998). The Intelligent Mall is a proof-of-concept multi-agent system developed to represent buyers and sellers along the enterprise supply chain. Semi-autonomous agents collaborate in small supply chain federations to perform the procurement and order-fulfillment processes of buyer and seller. This implementation stresses social conformance, as agents are required to adhere to the many policies, rules and regulations governing commercial activity along the supply chain. Mobile agents are developed using G2 and adapted to run on distributed Java virtual machines. Buyer and seller agents can be created and employed via the Web.
- KOPeR-Lite (1997). KOPeR-Lite is a proof-of-concept expert system developed to perform redesign analysis through a Web interface. It dynamically produces Web pages that integrate tailored, intelligent recommendations for process redesign. This system is a follow-on to KOPeR (discussed below) that contains only limited, domain-independent reengineering knowledge.
- KOPeR (1995). KOPeR stands for Knowledge-based Organizational Process Redesign. It is a proof-of-concept expert system developed to redesign enterprise processes. The application analyzes graph-based process representations and employs a corresponding measurement scheme to drive redesign inference. Knowledge in the form of production rules and two taxonomies—one for process pathologies, another for redesign transformations—is used through heuristic classification to diagnose process problems or shortcomings and match appropriate technologies and other change enablers. KOPeR was built on top of the Articulator and ran in the UNIX environment.

SERVICE

Naval Postgraduate School

- PhD Program Committee, Information Science, Graduate School of Operational and Information Sciences (2018 – present).
- Director, Edge Center, Graduate School of Operational & Information Sciences (2004 – present).
- Chair for Committee to Recommend Reappointment of the IS Department Chair (2023)
- Department Evaluation Committee for Mustafa Canan (2023)
- Department Evaluation Committee for Ying Zhao (2018)
- Associate Chair for Research, Information Sciences Department (2012 – 2015).
- NPS Action Team, Value of the Naval Postgraduate School – present and future (2011).
- NPS Search Committee, Information Sciences Department Chair (2011).
- Program Manager and Academic Associate, Knowledge Superiority Academic Certificate Program (2004 – present).
- Editor, *Information Sciences Department Newsletter* (2004 – 2015).

- Command & Control Chair Professor (2007 – 2012).
- PhD Programs Committee, Naval Postgraduate School (2007 – 2011).
- Menneken Award for Excellence in Scientific Research Committee, Naval Postgraduate School (2006).
- PhD Program Director, Information Science, Graduate School of Operational and Information Sciences (2004 – 2013).
- NPS Search Committee, Associate Provost and Director of Library Services (2005).
- Proposal Evaluation Panelist, Command and Control Research Program, Office of the Assistance Secretary of Defense – Networks and Information Integration (June 2006).
- Faculty Research Council, Graduate School of Business and Public Policy (2004 – 2006).
- PhD Program Committee, Information Science, Graduate School of Operational and Information Sciences (2003 – 2005).
- PhD Program Committee, Public Management, Graduate School of Business and Public Policy (2003 – 2005).
- NPS Sabbatical Committee (2004).
- Proposal-Review Panel, National Science Foundation (March 2003).
- Strategic Planning Committee Chair (2002). I led the task force that developed a new strategic plan for the School of Business & Public Policy.
- Executive MBA Program Committee (2002). I participated in the creation and design of this new program.
- Joint MBA Program-Review Committee Chair (2002). I led a faculty committee to review the proposed joint program.
- Inaugural NPS Representative to Command Third Fleet (2001). This ambassadorial role is one of high visibility and importance, and it contributes to the NPS mission by augmenting the indispensability of NPS to the Navy.
- MBA Curriculum Development Committee (2001). My effort through this design role helped the GSBPP to conceive and develop a new curriculum for the MBA-degree program.
- Acquisition Group Recruiting Committee (1998 – 2001). As one of only two faculty members in the acquisition group possessing a Ph.D. degree, my effort is directed principally toward attracting, screening and recruiting top researchers to this group.
- Information Systems Group Recruiting Committee (1999 – 2001). In 1999, I played a principal role (along with Dan Dolk) recruiting IS faculty, including extensive time interviewing at conferences. In 2001, I am again playing a principal role.
- DAU External Acquisition Research Program Manager. The research-management portion of this job represents much more service than research; progress to date is bringing positive attention to the School and Department and helping to establish NPS as worldwide center of acquisition research (1998 – 2000).
- Web-based instructional workshop. Presented Web-based instructional techniques and technologies in a workshop presentation for SM faculty (1998).
- Winning proposal for NPS to serve as Executive Agent of DAU External Research Program (1997).
- Naval Postgraduate School representative to the Defense Acquisition University (DAU) Acquisition Research Coordination Committee, 1996 – 1997; work toward establishing an inter-university program of research on acquisition that extends beyond defense-oriented institutions and processes.
- Acquisition group focal point for research, 1996 – present; includes proposal coordination and assisting non-Ph.D. faculty with research. Coordinate development of the five-year program of acquisition research.

University of California at Berkeley

- UC Berkeley coordinator for executive lecture series and technology venture series events, Fisher Center for Information Technology and Management (1996).
- UC Berkeley coordinator for "IS Core Improvement Project," Haas School of Business (1995

– 1996).

University of Southern California

- USC laboratory liaison, ATRIUM Project (1993 – 1995); conduct lab demonstrations for, and provide technical support to, industry clients, faculty and students.
- USC coordinator, Doctoral students of Information Systems in Southern California (DISSC); Ph.D. student consortium of the four major universities in Southern California with doctoral programs in information systems (1993 – 1995).

Select Program Committees

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2023).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2022).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2021).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2020).

- Track Co-Chair, Autonomy, International Command & Control Research & Technology Symposium, Alexandria, VA (June 2014).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2014).

- Track Co-Chair, Autonomy, International Command & Control Research & Technology Symposium, Alexandria, VA (June 2013).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2013).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2012).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2011).

- Track Co-Chair, Organizational Issues, International Command & Control Research & Technology Symposium, Santa Monica, CA (June 2010).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2010).

- Track Associate Editor, Knowledge Management, International Conference of Information Systems, Phoenix, AZ (December 2009).

- Track Co-Chair, Organizational Issues, International Command & Control Research & Technology Symposium, Washington, DC (June 2009).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii

International Conference of System Sciences (January 2009).

- Track Co-Chair, Organizational Issues, International Command & Control Research & Technology Symposium, Seattle, WA (June 2008).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2008).

- Track Co-Chair, Organizational Issues, International Command & Control Research & Technology Symposium, Newport, RI (June 2007).

- Program Organizer, Edge Research Workshop 5, Naval Postgraduate School, Monterey, CA (February 2007).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2007).

- Program Organizer, Edge Research Workshop 4, Naval Postgraduate School, Monterey, CA (August 2006).

- Track Chair, C2 Organizations, Command & Control Research & Technology Symposium, San Diego, CA (June 2006).

- Minitrack Co-Chair, Knowledge Flows, Knowledge Sharing and Knowledge Transfer, Hawaii International Conference of System Sciences (January 2006).

- Program Organizer, Edge Research Workshop 3, Naval Postgraduate School, Monterey, CA (December 2005).

- Program Organizer, Edge Research Workshop 2, Naval Postgraduate School, Monterey, CA (July 2005).

- Minitrack Co-Chair, Knowledge Flows, Hawaii International Conference of System Sciences (January 2005).

- Program Organizer, Edge Research Workshop 1, Stanford University, Stanford, CA (December 2004).

- Associate Editor, International Conference on Information Systems (December 2003).

- Session Chair, Minnesota Knowledge Management Symposium, Minneapolis, MN (March 2003).

- Co-Chair, Minitrack on Decision Technologies for Supply Chain Management, Hawaii International Conference on System Sciences, Hawaii, HI (January 2002).

- Program Committee Member, International Conference on Information Systems, Workshop on Information Technology and Systems, New Orleans, LA (December 2001).

- Program Committee Member, International Conference on Information Systems, Workshop on Information Technology and Systems, Brisbane, Australia (December 2000).

- Chair, Interim Workshop on Acquisition Research, DAU External Acquisition Research Program, Ft. Belvoir, VA (November 2000).

- Chair, Workshop on Acquisition Research, DAU External Acquisition Research Program, Monterey, CA (May 2000).

- Program Committee Member, American Association for Artificial Intelligence Conference, Workshop on AI in Knowledge Management, Austin, TX (July 2000).

- Chair, Inaugural Workshop on Acquisition Research, DAU External Acquisition Research Program, Monterey, CA (May 1999).

- Program Committee Member, Pacific Asia Conference on Expert Systems, Los Angeles, CA (February 1999).

- Program Committee Member, National Contract Management Association, National Academic Conference, Monterey, CA (October 1998).

- Program Committee Member, American Association for Artificial Intelligence Conference, Workshop on AI in Reengineering and Knowledge Management, Madison, WI (July 1998).

- Program Committee Member, Bay Area Information Systems Research Symposium, Workshop on Innovative Research In Progress, Monterey, CA (September 1997).

- Program Committee Member, American Association for Artificial Intelligence Conference, Workshop on Using AI in Electronic Commerce, Virtual Organizations & Enterprise Knowledge Management to Reengineer the Corporation, Providence, RI (July 1997).

- Program Committee Member, American Association for Artificial Intelligence Conference, Workshop on AI in Electronic Commerce and Reengineering, held in Portland, OR (August 1996).

Paper Review

Acquisition Review Quarterly; Decision Science; Information Resources Management Journal; Information Systems Research; *International Journal of Intelligent Systems in Accounting, Finance and Management; Management Science; Journal of Computational & Mathematical Organization Theory; Journal of Information Technology Management; Journal of Management Information Systems; MIS Quarterly; Organization Studies; Academy of Management; Proceedings of the International Conference on Information Systems; Project Management Journal* and other academic journal and conference publications.

Community

- Second Assistant Treasurer, Point Loma Community Presbyterian Church (2019 – Present).

- Missions Coordinator, Prunedale Grace Community Church (2006 – 2008).

- Board Member, Coach and Referee, American Youth Soccer Organization (AYSO), Prunedale-Manzanita Park Region 256 (2000 – 2009).

Relatively current as of 9 August 2023