Brian J. Sauser, Ph.D.

Professor

University of North Texas
G. Brint Ryan College of Business
Department of Logistics & Operations Management
UNT New College - Frisco
1155 Union Circle #311396
Denton, TX 76203-5017

940-565-4693 (V); 940-565-3803 (F)
brian.sauser@unt.edu
POB: Texas City, TX, USA

Brian Sauser is a Professor at the University of North Texas (UNT) in the G. Brint Ryan College of Business and UNT New College. He currently serves as the Program Coordinator of the Logistics Systems PhD Program and Degree Architect of the BS in Industrial Distribution. He is the founder and former Director of the Complex Logistics Systems Laboratory, and served as the Director of the Jim McNatt Institute for Logistics Research from 2016-2019. Before joining UNT, he held positions as an Assistant Professor with the School of Systems and Enterprises at Stevens Institute of Technology; Project Specialist with ASRC Aerospace at NASA Kennedy Space Center; Program Administrator with the New Jersey – NASA Specialized Center of Research and Training at Rutgers, The State University of New Jersey; and Laboratory Director with G.B. Tech Engineering at NASA Johnson Space Center.

At NASA Johnson Space Center, Dr. Sauser led numerous projects in life sciences and engineering for the research and development of technology solutions for human exploration of the Moon and Mars. At Rutgers, The State University of New Jersey he managed the operations of a $5.2M, multi-institutional, multi-disciplinary NASA-sponsored center conducting collaborative research in life sciences for space exploration. At NASA Kennedy Space Center, he negotiated and assisted in the development of licenses and Space Act Agreements (industry/academic partnerships) in environmental science, biological science, data acquisition, instrumentation, and wireless systems at various stages through the commercialization process. At Stevens Institute of Technology, he served as an Assistant Professor and Director of the Systems Development & Maturity Laboratory for creating research and thought leadership in systems management and assessment for optimal development/maturation of a system through its lifecycle.

Dr. Sauser's research interest is in the engineering, management, and governance of complex systems. Since 2006, Dr. Sauser has lead research in these areas which has resulted in changing the manner in which systems are evaluated and risk is assessed on complex systems. Products from his research have been adopted in Boeing Corporation, Lockheed Martin, Northrop Grumman, Department of Energy, and Department of Defense (National Security Agency, US Navy, US Army), which have resulted in millions of dollars of cost savings and in one instance saved a program from eminent failure.

He teaches or has taught courses in Advanced Logistics Management, Project Management of Complex Systems, Designing and Managing the Development Enterprise, Logistics and Business Analytics, Theory of Logistics Systems, Systems Thinking, and Systems Engineering and Management. In addition, he is a National Aeronautics and Space Administration Faculty Fellow, UNT Faculty Leadership Fellow (2018-2019), Professional Development Institute Business Fellow (2015-16), IEEE Senior Member, Associate Editor of the *IEEE Systems Journal*, and on the Editorial Board for *Systems*. Dr. Sauser has published 66 refereed journal articles; 68 refereed conference proceedings; 4 books; and 9 book chapters (*citations = 5362; h-index = 35; i10-index = 72*).

Dr. Sauser holds a B.S. from Texas A&M University in Agricultural Development with an emphasis in Horticulture Technology, a M.S. from Rutgers, The State University of New Jersey in Bioresource Engineering, and a Ph.D. from Stevens Institute of Technology in Project Management.

Brian J. Sauser, Ph.D.

Curriculum Vitae Contents

1 SCHOLARSHIP AND RESEARCH

1.1 Writings

Google Scholar:
Citations = 5362; h-index = 35; i10-index = 72;
Citation data is from Google Scholar (collected 02/10/2022).

Journals that rank as A or A on the ABDC Journal Quality List[1] or are in the first quartile of the SJR[2] rankings within a discipline area for at least two of the past five years are indicated.*

† *Writings with ten or more citations (i.e. i10-index).*

1.1.1 Refereed Journals

[1] Bani Hani, S., **B. Sauser**, S. Niranjan, and A. Willoughby. (2022). Key Factors That Influence and Enables Patient Empowerment: System Approach. *Systems Research and Behavioral Science.* **[ABDC: A; SJR: Q1]** (accepted)

[2] Cevikparmak, S., **B. Sauser**, S. Adana, S. Celik, H. Uvet, and D. Nowicki. (2022). Scale Development and Validation of Transaction Cost Economics Typology for Contracts: A Systems Thinking Approach. *Journal of Purchasing and Supply Management.* **[ABDC: A; SJR: Q1]** (accepted)

[3] Sadeghi, J., D. Ojha, **B. Sauser**, and V. Pryputok. (2022). Theoretical and Practical Applications of Blockchain in Healthcare Information Management. *Information & Management.* **[ABDC: A*; SJR: Q1]** (accepted)

[4] Wei, X., V. Prybutok, and **B. Sauser** (2021). Review of Supply Chain Management within Project Management. *Project Leadership and Society*. 2

[5] Magnaye, R., **B. Sauser**, S. Chaudhry, and T. Rakotobe-Joel. (2021). An Enhanced Analog Nearest Neighbor Algorithm for Route Planning After a Major Disaster. *International Journal of Operations and Quantitative Management*. 26(4):241-253

[6] Magnaye, R., S. Chaudhry, **B. Sauser**, and N. Varma. (2020). Bridging the Gap between Practice and Undergraduate Teaching of Operations Management: The Case of Public Liberal Arts Colleges. *International Journal of Operations and Quantitative Management*. 26(1):49-64

[7] Warren, S., **B. Sauser**, and D. Nowicki. (2019). A bibliographic and visual exploration of the historic impact of soft systems methodology on theory and research. *Systems*. 7(1):1-10

[8] Clasi, C., D. Nowicki, M. Mansouri, **B. Sauser,** and W. Randall. (2018). A Systems Thinking Approach to Managing Sustainment Phase Redesign Planning for Large-Scale, Complex, Sustainment-Dominated Systems. *Engineering Management Journal*. 30(1):68-81

[9] Glassburner, A.V., J.M. Dickens, **B. Sauser**, D.R. Nowicki, W.S. Randall. (2018). Theory of Paradox within Service-Dominant Logic. *Service Science*. 10(2):111-123

[1] The Australian Business Deans Council (ABDC) Journal Quality List: 'A*' is the highest quality category, and indicatively represents approximately the top 5-7% of the journals in the assigned primary Field of Research (FoR) group. 'A' is the second highest quality category, and indicatively represents approximately the next 15-25% of the journals in the assigned primary FoR group.

[2] SJR is the SCImago Journal & Country Rank database developed from the information contained in the Scopus® database (Elsevier B.V.). Journals with a first quartile (Q1) ranking represent the top 25% of cited journals in a subject area.

[10] John, L., G.B. John, M. Parker, **B. Sauser**, and J. Wade. (2018). Self-Organizing Cooperative Dynamics in Government Extended Enterprises. *IEEE Systems Journal.* 12(3):2905-2916 **[SJR: Q1]**

[11] Kochan, C.G., D.R. Nowicki, **B. Sauser**, W.S. Randall. (2018). Impact of Cloud Based Collaborative Information Sharing on Hospital Supply Chain Performance: A System Dynamics Framework. *International Journal of Production Economics*. 195:168-185 **[ABDC: A*; SJR: Q1]** †

[12] Nowicki, D.R., **B. Sauser**, W.S. Randall, & R. Lusch. (2018). Service Dominant Logic and Performance Based Logistics: A Systems Thinking Perspective. *Service Science*. 10(1):12-24

[13] **Sauser, B.**, W.C. Baldwin, S. Pourreza, W. Randall, and D. Nowicki. (2018). Resilience of Small and Medium-sized Enterprises as a Correlation to Community Impact: An Agent-based Modeling Approach. *Natural Hazards.* 90(1):79-99 **[SJR: Q1]**

[14] Baldwin, W., **B. Sauser**, and J. Boardman. (2017). Revisiting "The Meaning of Of" as a Theory for Collaborative System of Systems. *IEEE Systems Journal.* 11(4):2215-2226 **[SJR: Q1]**

[15] Cloutier, R., **B. Sauser**, A. Taylor, and M. Bone. (2015). Transitioning Systems Thinking to Model-Based Systems Engineering: Systemigrams to SysML Models. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*. 45(4):662-674 **[SJR: Q1] †**

[16] Eigbe, A., **B. Sauser**, and W. Felder. (2015). Systemic Analysis of the Critical Dimensions of Project Management that Impact Test and Evaluation Program Outcomes. *International Journal of Project Management.* 33(4):747-759 **[ABDC: A; SJR: Q1] †**

[17] Magnaye, R., **B. Sauser**, P. Pantanakul, D. Nowicki, and W. Randall. (2014). Earned Readiness Management for Scheduling, Monitoring and Evaluating the Development of Systems. *International Journal of Project Management.* 32(7): 1246-1259 **[ABDC: A; SJR: Q1] †**

[18] Baldwin, W., J. Boardman, and **B. Sauser**. (2013). Expanding a System of System Model via the Schelling Segregation Model. *Systems Research and Behavioral Science.* 30:65-75 **[ABDC: A; SJR: Q1] †**

[19] Crichton-Sumners, C., M. Mansouri, and **B. Sauser**. (2013). Systems Thinking for Knowledge Transfer in Organic and Mechanistic Organizations: State Government Transportation Research Organizations. *Transportation Research Record: Journal of the Transportation Research Board,* 2399:112-120.

[20] Tan, W., **B. Sauser**, J. Ramirez-Marquez, and R. Magnaye. (2013). Multi-Objective Optimization in Multifunction Multicapability Systems Development Planning. *IEEE Transactions on Systems, Man, and Cybernetics: Systems.* 43(4):785-800 **[SJR: Q1]** †

[21] Baldwin, W., T. Ben-Zvi, and **B. Sauser** (2012). Formation of Collaborative System of Systems through Belonging Choice Mechanisms. *IEEE Transactions on Systems, Man, and Cybernetics, Part A: Systems and Humans*. 42(4):793-801 **[SJR: Q1] †**

[22] Gandhi, S., A. Gorod, and **B. Sauser.** (2012). Prioritization of outsourcing risks from a systemic perspective. *Strategic Outsourcing: An International Journal.* 5(1):39-71 **†**

[23] Smith, M., J. Farr, and **B. Sauser**. (2012). Using Process Simulation to Manage New Product Development Pipeline Throughput. *Engineering Management Journal.* 24(1):23-34

[24] Baldwin, W., W. Felder, and **B. Sauser**. (2011). Taxonomy of Increasingly Complex Systems. *International Journal of Industrial and Systems Engineering.* 9(3):298-316 **†**

[25] Concho, L., J. Ramirez-Marquez, T. Hearld, and **B. Sauser**. (2011). Functionally Equivalent COTS for Optimal Component Substitution within System Evolution Planning. *Technology Analysis & Strategic Management.* 23(5):509-526
[26] Epelbaum, S., M. Mansouri, A. Gorod, A. Fridman, and **B. Sauser**. (2011). Target Evaluation and Correlation Method (TECM) as an Assessment Approach to Global Earth Observation System of Systems (GEOSS). *International Journal of Applied Geospatial Research.* 2(1):36-62
[27] Lasfer, K., A. Pyster, and **B. Sauser**. (2011). The Pre-Kindergarten Learning Enterprise (PKLE). *International Journal of Management & Information Systems*. 15(3):19-30
[28] **Sauser, B.**, Q. Li, and J. Ramirez-Marquez. (2011). Systemigram Modeling of the Small Vessel Security Strategy for Developing Enterprise Resilience. *Marine Technology Society Journal.* 45(3):88-102 †
[29] **Sauser, B.**, M. Mansouri, and M. Omer. (2011). Using Systemigrams in Problem Definition: A Case Study in Maritime Resilience for Homeland Security. *Journal of Homeland Security and Emergency Management.* 8(1):1-19 †
[30] **Sauser, B**., J. Ramirez-Marquez, Q. Li, W. Baldwin, and M. Tortorella. (2011). Modeling Zeroth Responders for Resilience in Small Vessel Security. *Journal of Homeland Security*. July:1-10
[31] Tan, W., J. Ramirez-Marquez, and **B. Sauser**. (2011). A Probabilistic Approach to System Maturity Assessment. *Systems Engineering.* 14(3):279-293 †
[32] Tan, W., **B. Sauser**, and J. Ramirez-Marquez. (2011). Analyzing Component Importance in Multifunction Multicapability Systems Developmental Maturity Assessment. *IEEE Transactions on Engineering Management*. 58(2):275-294 **(School of Systems & Enterprises' Best Student Paper Award) [SJR: Q1] †**
[33] Baldwin, C., **B. Sauser**, J. Boardman, and L. John. (2010). A Typology of Systems Paradoxes. *Information, Knowledge, Systems Management.* 9(1):1-15 †
[34] Eigbe, P., **B. Sauser**, and J. Boardman. (2010). Soft Systems Analysis of the Integration of Test and Evaluation and Program Management: A study of a Federal Aviation Administration's Strategy. *Systems Engineering.* 13(3):298-310 †
[35] Eigbe, P., **B. Sauser**, and W. Felder. (2010). Critical Dimensions of Project/Program Management Practices that Impact Operational Test and Evaluation Outcome. *The ITEA Journal of Test and Evaluation.* 31(1):90-98
[36] Magnaye, R., **B. Sauser**, and J. Ramirez-Marquez. (2010). System Development Planning Using Readiness Levels in a Cost of Development Minimization Model. *Systems Engineering.* 13(4):311-323 †
[37] Mansouri, M., A. Gorod, T. Wakeman and **B. Sauser**. (2010). System of Systems Approach to Maritime Transportation Governance. *Transportation Research Record: Journal of the Transportation Research Board*. 2166:66-73
[38] **Sauser, B.J.**, J. Boardman, and D. Verma. (2010). Systomics: Towards a Biology of System of Systems. *IEEE Transactions on Systems, Man, and Cybernetics, Part A: Systems and Humans.* 40(4):803-814 **[SJR: Q1] †**
[39] **Sauser, B.**, R. Gove, E. Forbes, and J. Ramirez-Marquez. (2010). Integration Maturity Metrics: Development of an Integration Readiness Level. *Information, Knowledge, Systems Management.* 9(1):17-46 †
[40] Squires, A., W. Larson, and **B. Sauser** (2010). Mapping Space Based Systems Engineering Curriculum to NASA-Industry Developed Competencies for Improved Organizational Performance. *Systems Engineering.* 13(3):246-260 †
[41] Erol, O., **B. Sauser**, M. Mansouri, (2010). A Framework for Investigation into Extended Enterprise Resilience. *Enterprise Information Systems.* 4(2):111-136 **[ABDC: A; SJR: Q1] †**
[42] Boardman, J., **B. Sauser**, and D. Verma. (2009). In Search of Systems 'DNA'. *Journal of Computers.* 4(10):1043-1052

[43] DiMario, M., J. Boardman, and **B. Sauser**. (2009). System of Systems Collaborative Formation. *IEEE Systems Journal.* 3(3):360-368 **(School of Systems & Enterprises' Best Student Paper Award) [SJR: Q1] †**

[44] Eigbe, P. and **B. Sauser**. (2009). A Systems Approach to Achieving World-Class System Integration and Test Capability: A Federal Aviation Administration's Strategy. *The ITEA Journal of Test and Evaluation*. 30(1):91-98 †

[45] Erol, O., **B. Sauser** and J. Boardman. (2009). Creating Enterprise Flexibility through Service Oriented Architecture. *Global Journal of Flexible Systems Management.* 10(1):11-16

[46] Gandhi, J., A. Gorod and **B. Sauser**. (2009). Effects of Outsourcing on Flexibility of System of Systems. *Global Journal of Flexible Systems Management.* 10(1):33-40

[47] Gorod, A., M. DiMario, **B. Sauser**, and J. Boardman. (2009). Satisficing System of Systems (SoS) using Dynamic and Static Doctrines. *International Journal of System of Systems Engineering.* 1(3):347-366 **†**

[48] Mansouri, M., A. Gorod, T. Wakeman, and **B. Sauser**. (2009). Maritime Transportation System of Systems Management Framework: A System of Systems Engineering Approach. *International Journal of Ocean Systems Management*. 1(2):200-226 **†**

[49] Meentemeyer, S., **B. Sauser**, and J. Boardman. (2009). Analyzing a System of Systems Characterization to Define System of Systems Engineering Practices. *International Journal of System of Systems Engineering.* 1(3):329-346

[50] Ramirez-Marquez, J.E. and **B.J. Sauser**. (2009). System Development Planning via System Maturity Optimization. *IEEE Transactions on Engineering Management.* 56(3):533-548 **[SJR: Q1] †**

[51] **Sauser, B.**, R. Reilly, and A. Shenhar. (2009). Why Projects Fail? How Contingency Theory Can Provide New Insights - A Comparative Analysis of NASA's Mars Climate Orbiter Loss. *International Journal of Project Management.* 27(7):665-679 **[ABDC: A; SJR: Q1] †**

[52] Gandhi, J. and **B. Sauser**. (2008). Knowledge Networks: How Independence and Subject Matter Experts Can Influence Project Reviews. *Engineering Management Journal,* 20(1):19-28 **†**

[53] Gorod, A., J. Gandhi, **B. Sauser**, and J. Boardman. (2008). Flexibility of System of Systems. *Global Journal of Flexible Systems Management*. 9(4):21-31 **†**

[54] Gorod, A., **B. Sauser**, and J. Boardman. (2008). System of Systems Engineering Management: A Review of Modern History and a Path Forward. *IEEE Systems Journal.* 2(4):484-499 **[SJR: Q1] †**

[55] John, L., J. Boardman, and **B. Sauser**. (2008). Leveraging Paradox in Systems Engineering: Discovering Wisdom. *Information, Knowledge, Systems Management*. 7(4):357-376 **(Analytic Services Joseph B. Platt Award for Publication Excellence)** †

[56] **Sauser, B.J.** and J.T. Boardman. (2008). Taking Hold of System of Systems Management. *Engineering Management Journal.* 20(4):44-49 **†**

[57] **Sauser, B.**, J. Ramirez-Marquez, D. Henry, and D. DiMarzio. (2008). A System Maturity Index for the Systems Engineering Life Cycle. *International Journal of Industrial and Systems Engineering.* 3(6):673-691 **†**

[58] **Sauser, B.**, J. Ramirez-Marquez, R. Magnaye, and W. Tan. (2008). A Systems Approach to Expanding the Technology Readiness Level within Defense Acquisition. *International Journal of Defense Acquisition Management.* 1:39-58 **†**

[59] Hammar, P., **B. Sauser**, and J. Boardman. (2008). Soft Systems Methodology Applied to the Process of Systematic Screening at US Airports. *Journal of Homeland Security.* June

[60] Blair, C., J. Boardman, **B. Sauser**. (2007). Communicating Strategic Intent with Systemigrams: Addressing the Network-Enabled Challenge. *Systems Engineering*. 10(4):309-322 †

[61] **Sauser, B.J.** (2006). A Return to the Moon: A System Engineering Management Framework and the Success of Lunar Prospector. *Systems Research Forum*. 1:27-33

[62] **Sauser, B.J.** (2006). Soil, Rock, Lander… The Systems Engineering Leadership of Mars Pathfinder. *Systems Research Forum*. 1:19-26

[63] **Sauser, B.J.** (2006). Attributes of Independent Project Reviews in NASA. *Engineering Management Journal*. 18(4):11-18

[64] **Sauser, B.J**. (2006). Toward Mission Assurance: A Framework for Systems Engineering Management. *Systems Engineering*. 9(3):213-227 †

[65] Shenhar, A., D. Dvir, D. Milosevic, J. Mulenburg, P. Patanakul, R. Reilly, A. Sage, **B. Sauser**, S. Srivannaboon, J. Stefanovic, and H. Thamhain. (2005). Toward a NASA-Specific Project Management Framework. *Engineering Management Journal*. 17(4):8-16 †

[66] **Sauser, B.J.**, G.A. Giacomelli, and H.W. Janes. (1998). Modeling the Effects of Air Temperature Perturbations for Control of Tomato Plant Development. *Acta Horticulturae*. 456:87-92

1.1.2 Books

[1] Gorod, A., B.E. White, V. Ireland, S.J. Gandhi, and **B. Sauser** (eds.) (2014) *Case Studies in System of Systems, Enterprise Systems, and Complex Systems Engineering*. Taylor and Francis/CRC Press. ISBN:978-1-466-50239-0 †

There is an unmet need for understanding System of Systems, Enterprise Systems, and Complex Systems Engineering concepts through real life case studies. The main objective of this book is to set a platform through which analysis, knowledge application and conclusion drawing can take place in order to educate the next generation of engineers and managers to cope with these complex challenges of the 21st century.

[2] Boardman, J. and **B. Sauser**. (2013) *Systemic Thinking: Building Maps for Worlds of Systems*. Wiley & Sons. ISBN:978-1-118-37646-1 †

This book takes the reader through a journey (both practical and abstract) that demonstrates how the marriage of systems concepts and a systemic diagramming technique, i.e. systemigrams, can provide new ways of thinking and new tools to help them think about problems.

[3] **Sauser, B.** (2008). *NASA Strategic Project Leadership in an Era of Better, Faster, Cheaper: Striving for Systems Innovation*. Saarbrücken: VDM Verlag Dr. Müller. ISBN:978-3-639-09938-6

Space science projects in NASA are typically characterized by advanced technology, new types of missions, complex integration of hardware and software systems, and inflexible time frames that are often dictated by launch windows. This book takes an innovative perspective on how to (1) develop a better conceptual understanding of strategic system innovation and (2) provides guidance, recommendations, and lessons learned to NASA and the aerospace industry on potential success criteria for systems innovation projects.

[4] Boardman, J. and **B. Sauser.** (2008). *Systems Thinking: Coping with 21st Century Problems*. Boca Raton, FL: Taylor and Francis/CRC Press. ISBN:978-1-420-05491-0†

This book focuses on the inherent opportunities and difficulties of a systemic approach. Taking an engineering systems view toward systems thinking, it places

a high value on the thinking process and the things applied to this process. In the hopes of initiating critical thinking and encouraging a systems response to problems, the book provides pragmatic mechanisms to understand and address co-evolving systems problems and solutions. This book set publisher sales goals for the life of the book in the first year of publication.

1.1.3 Chapters

[1] **Sauser, B.** and J. Boardman. (2015). Systemigram Modeling for Contextualizing Complexity in System of Systems. *Modeling and Simulation Support for System of Systems Engineering Applications*. A. Tolk and L. Rainey (eds.), Hoboken, NJ: Wiley & Sons. ISBN:978-1-118-46031-3

[2] Gorod, A., S.J. Gandhi, B.E. White, V. Ireland, and **B. Sauser** (2015) Modern History of System of Systems, Enterprise, and Complex Systems. *Case Studies in System of Systems, Enterprise Systems, and Complex Systems Engineering*. Gorod, A., B.E. White, V. Ireland, S.J. Gandhi, and B. Sauser (eds.) Taylor and Francis/CRC Press. ISBN:978-1-466-50239-0 †

[3] Ireland, V., B.E. White, S.J. Gandhi, **B. Sauser**, and A. Gorod. (2015) Relevant Aspects of Complex Systems for Complexity Theory. *Case Studies in System of Systems, Enterprise Systems, and Complex Systems Engineering*. Gorod, A., B.E. White, V. Ireland, S.J. Gandhi, and B. Sauser (eds.) Taylor and Francis/CRC Press. ISBN:978-1-466-50239-0

[4] White, B.E., **B. Sauser**, A. Gorod, S.J. Gandhi, and V. Ireland. (2015) Application of Case Studies to Engineering Leadership/Management and Systems Engineering Education. *Case Studies in System of Systems, Enterprise Systems, and Complex Systems Engineering*. Gorod, A., B.E. White, V. Ireland, S.J. Gandhi, and B. Sauser (eds.) Taylor and Francis/CRC Press. ISBN:978-1-466-50239-0

[5] Erol, O., **B. Sauser**, and J. Boardman. (2013). Creating Enterprise Flexibility through Service Oriented Architecture. *The Flexible Enterprise.* S. Sushil and E. Stohr (eds.), Springer. ISBN:978-81-322-1560-8

[6] Gandhi, J., A. Gorod, and **B. Sauser.** (2013). Towards Understanding the Effects of Outsourcing on the Flexibility Dynamic of System of Systems. *The Flexible Enterprise.* S. Sushil and E. Stohr (eds.), Springer. ISBN:978-81-322-1560-8

[7] Epelbaum, S., M. Mansouri, A. Gorod, **B. Sauser**, and A. Fridman. (2013). Target Evaluation and Correlation Method (TECM) as an Assessment Approach to Global Earth Observation System of Systems (GEOSS). *Emerging Methods and Multidisciplinary Applications in Geospatial Research*. D.P. Albert and G.R. Dobbs (eds.), Hershey, PA: IGI Global. pp. 301-327. ISBN:978-1-4666-1952-4

[8] Shenhar, A. and **B. Sauser**. (2009). Systems Engineering Management: The Multidisciplinary Discipline. In *Handbook of Systems Engineering and Management, 2nd Edition.* A.P. Sage and W.R. Rouse (eds.), Hoboken, NJ: Wiley & Sons. pp. 117-154. ISBN:978-0-470-08353-6 †

[9] **Sauser, B.,** J. Boardman, and A. Gorod. (2008). System of Systems Management. In *System of Systems Engineering: Innovations for the 21st Century,* M. Jamshidi (ed.) Hoboken, NJ: Wiley & Sons. pp. 191-217. ISBN:978-0-470-19590-1 †

[10] **Sauser, B.J.** (2007). "The History of the Microwave Oven." In Chapter 8: Managing Projects for Business Innovation, Shenhar, A. and Dvir, D. *Reinventing Project Management: The Diamond Approach to Successful Growth and Innovation*, Boston: Harvard Business School. pp. 155-158. ISBN:978-1-591-39800-4

1.1.4 Other Journals and Proceedings

[1] Knaggs, M., D. Harkreader, A. Unione, J. Oelfke, J. Ramsey, D. Kearns, **B. Sauser**, and B. Atwater (2017). Nesting in the Evaluation of System Readiness for Complex Systems of Emerging Technologies. *IEEE Systems Conference*, Montreal, Quebec, Canada, April 24-27.

[2] John, L., **B. Sauser**, and J. Wade. (2016). A Computational Model of Cooperation Dynamics: Sensitivity Analysis. *IEEE International Systems Conference.* April 18-21, Orlando, FL

[3] Baldwin, W., **B. Sauser**, and R. Cloutier. (2014). Simulation approaches for System of Systems: Events-based versus Agent-based Modeling. *Procedia Computer Science*. 44: 363-372 ✝

[4] Ireland, V., A. Gorod, B. White, J. Gandhi, and **B. Sauser**. (2013). A Contribution to Developing a Complex Project Management BOK. *Project Perspectives*. 35:16-25 †

[5] White, B.E., S.J. Gandhi, A. Gorod, V. Ireland, and **B. Sauser**. (2013). On the Importance and Value of Case Studies. *IEEE International Systems Conference*. 114-122

[6] Gandhi, S.J., A. Gorod, and **B. Sauser**. (2012). A Systemic Approach to Managing Risk of SoS. *IEEE Aerospace and Electronic Systems Magazine*. 27(5):23-27

[7] Sarfaraz, M., **B. Sauser**, and E.W. Bauer (2012). Using System Architecture Maturity Artifacts to Improve Technology Maturity Assessment. *Procedia Computer Science.* 8:165-170

[8] White, B., **B. Sauser**, J. Gandhi, A. Gorod, and V. Ireland. (2012). Application of Case Studies to Engineering Management and Systems Engineering Education. *American Society of Engineering Education Conference*. June 10-13, San Antonio, TX

[9] Bayuk, J., A. Mostashari, and **B. Sauser**. (2011). Security Verification and Validation. *Conference on Systems Engineering Research.* April 15-16, Los Angeles, CA

[10] Gandhi, J., A. Gorod, and **B. Sauser**. (2011). A Case Study: The New York City Yellow Cab System of Systems. *IEEE International Conference on System of Systems Engineering*. June 27-30. Albuquerque, NM

[11] Gandhi, J., A. Gorod, and **B. Sauser**. (2011). A Systemic approach to managing risks of System of Systems. *IEEE International Systems Conference.* April 4-7, Montreal, Quebec, Canada **(Conference Best Paper-Honorable Mention)**

[12] Lasfer, K., A. Pyster, and **B. Sauser**. (2011). The Pre-Kindergarten Learning Enterprise. *International Academic Conference*. March 14-16, New Orleans, LA

[13] Li, Q., **B. Sauser**, and J. Ramirez-Marquez. (2011). Analyzing the Influence of Zeroth Responders on Resilience of the Maritime Port Enterprise. *IEEE International Systems Conference.* April 4-7, Montreal, Quebec, Canada

[14] Ross, W., M. Ulieru, A. Gorod, and **B. Sauser**. (2011). A Multi-Paradigm Approach to Modeling and Simulation of Meta-Organizational Structure: Case Study Emergency Response Operations. *IEEE International Conference on Systems, Man, and Cybernetics*. October 9-12, Anchorage, Alaska.

[15] **Sauser, B**., J. Ramirez-Marquez, Q. Li, W. Baldwin, and M. Tortorella. (2011). Modeling the Influence of Zeroth Responders on the Resilience of a Transportation System. *Fifth Annual Department of Homeland Security University Network Summit*. March 30 – April 1, Washington, DC

[16] **Sauser, B.,** W. Tan, and J. Ramirez-Marquez. (2011). Analysis of Alternatives in System Capability Satisficing for Effective Acquisition. *Acquisition Research Symposium*. May 11-13, Monterey, CA

[17] Baldwin, C., Q. Li, **B. Sauser**, and M. DiMario. (2010). Simulating a First Responder Scenario. *Conference on Systems Engineering Research.* March 17-19, Hoboken, NJ

[18] Erol, O., D. Henry, and **B. Sauser**. (2010). Exploring Resilience Measurement Methodologies. *International Symposium of the International Council on Systems Engineering*, July 11-15, Chicago, IL

[19] Erol, O., D. Henry, **B. Sauser**, and M. Mansouri. (2010). Perspectives on Measuring Enterprise Resilience. *IEEE International Systems Conference*. April 5-8, San Diego, CA †

[20] Gorod, A., Fridman, A., and **B. Sauser**. (2010). A Quantitative Approach to Analysis of a System of Systems Operational Boundaries. *IEEE International Congress on Ultra Modern Telecommunications and Control Systems*, October 18-20, Moscow, Russia

[21] Mansouri, M., A. Gorod and **B. Sauser**. (2010). A Typology-based Approach to Adopting Effective Management Styles for Enterprise Systems. *IEEE International Systems Conference*. April 5-8, San Diego, CA †

[22] **Sauser, B.J.**, R. Magnaye, W. Tan, J. Ramirez-Marquez, and B.W. Sauser. (2010). Optimization of System Maturity and Equivalent System Mass for Exploration Systems Development Planning. *Conference on Systems Engineering Research*. March 17-19, Hoboken, NJ

[23] **Sauser, B.**, W. Tan, J. Ramirez-Marquez, R. Magnaye, D. Nowicki and A. Deshmukh. (2010). System Capability Satisficing in Defense Acquisition via Element Importance Measures. *Acquisition Research Symposium*. May 17-19, Monterey, CA

[24] Squires, A., A. Pyster, **B. Sauser**, D. Olwell, D. Gelosh, S. Enck, and J. Anthony. (2010). Applying Systems Thinking via Systemigrams for Defining the Body of Knowledge and Curriculum to Advance Systems Engineering (BKCASE) Project. *International Symposium of the International Council on Systems Engineering*, July 11-15, Chicago, IL †

[25] Baldwin, C. and **B. Sauser**. (2009). Modeling the Characteristics of System of Systems. *IEEE International Conference on System of Systems Engineering*. June 1-3, Albuquerque, NM †

[26] Boardman, J., L. John, R. Edson and **B. Sauser.** (2009). The Conceptagon: A Framework for Systems Thinking and Systems Practice. *IEEE International Conference on Systems, Man, and Cybernetics*. October 12-14, San Antonio, TX †

[27] Cuellar, R., and **B. Sauser**. (2009). Dynamic Multipoint Optimization Application to Corporate Portfolio Management. *Acquisition Research Symposium*. May 13-14, Monterey, CA

[28] Eigbe, A.P., **B. Sauser**, and W. Felder. (2009). Critical Dimensions of Project/Program Management Practices that Impact Operational Test and Evaluation Outcome. *Annual ITEA International Symposium*. September 28-October 1, Baltimore, MD

[29] Erol, O., M. Mansouri, and **B. Sauser**. (2009). A Framework for Enterprise Resilience Using Service Oriented Architecture Approach. *IEEE International Systems Conference*. March 23-26, Vancouver, British Columbia, Canada †

[30] Gandhi, S.J., A. Gorod, M. Mansouri, and **B. Sauser**. (2009). Systemic Risks of Outsourcing. *American Society of Engineering Management Conference*. October 14-17, Springfield, MO

[31] Gorod, A., A. Fridman, and **B. Sauser** (2009). Quantitative Analysis of Flexibility of System of Systems (SoS). *3rd Russian Conference on Theory and Practice of System Dynamics*. March 31-April 2, Apatity, Russia

[32] Magnaye, R., **B. Sauser**, J. Ramirez-Marquez, and W. Tan. (2009). Using a System Maturity Index to Monitor and Evaluate the Development of Systems. *Acquisition Research Symposium*. May 13-14, Monterey, CA †

[33] Mansouri, M., A. Gorod, **B. Sauser**, and S.J. Gandhi. (2009). A Systemic Approach to Adopting Effective Management Styles Based on Typology of Systems. *American Society of Engineering Management Conference*. October 14-17, Springfield, MO

[34] Mansouri, M., A. Gorod, T. Wakeman, and **B. Sauser**. (2009). A Systems Approach to Governance in Maritime Transportation System of Systems. *IEEE International Conference on System of Systems Engineering*. June 1-3, Albuquerque, NM †

[35] Mansouri, M., **B. Sauser**, and J. Boardman. (2009). Applications of Systems Thinking for Resilience Study in Maritime Transportation System of Systems. *IEEE International Systems Conference*. March 23-26, Vancouver, British Columbia, Canada †

[36] **Sauser, B.**, E. Forbes, M. Long, and S. McGrory. (2009). Defining an Integration Readiness Level for Defense Acquisition. *International Symposium of the International Council on Systems Engineering*. July 20-23, Singapore **(Best Paper in Government Domain Award) †**

[37] Sivadasan, S. and **B. Sauser**. (2009). Understanding Plagiarism using Boardman's Soft Systems Methodology. *American Society of Engineering Education Conference*. June 14-17, Austin, TX

[38] Tan, W., **B. Sauser**, and J. Ramirez-Marquez. (2009). Monte-Carlo Simulation Approach for System Readiness Level Estimation. *International Symposium of the International Council on Systems Engineering*. July 20-23, Singapore (**Brian Mar Best Student Paper Award**)

[39] Erol, O., **B.J. Sauser**, and J.T. Boardman. (2008). Creating Enterprise Flexibility in a Service Oriented Architecture. *Global Conference on Flexible Systems Management*. June 13-15, Hoboken, NJ

[40] Gandhi, S.J., A. Gorod, and **B. Sauser**. (2008). Effects of Outsourcing on Flexibility of System of Systems (SoS). *Global Conference on Flexible Systems Management*. June 13-15, Hoboken, NJ

[41] Gorod, A., **B. Sauser**, and J. Boardman. (2008). Paradox: Holarchical View of System of Systems Engineering Management. *IEEE International Conference on System of Systems Engineering*. June 2-5, Monterey, CA †

[42] John, L., J. Boardman, and **B. Sauser**. (2008). Leveraging Paradox to Understand Technology Ecosystems: A Question of Balance. *IEEE International Conference on Industrial Informatics*. July 13-16, Daejeon, Korea, pp. 1330-1335

[43] John, L., J. Boardman, and **B. Sauser**. (2008). Technology and Policy: Opposite Ends of the Paradox Spectrum. *IEEE International Conference on System of Systems Engineering*. June 2-5, Monterey, CA

[44] Kober, B. and **B. Sauser**. (2008). A Case Study in Implementing a System Maturity Index. *American Society of Engineering Management Conference*. November 12-15, West Point, NY

[45] **Sauser, B.**, D. Blair, and J. Boardman. (2008). Systomics: The Ultimacy of Design. *IEEE International Conference on Systems, Man, and Cybernetics*. October 12-15, Singapore

[46] **Sauser, B.,** J. Ramirez-Marquez, R. Magnaye, and W. Tan. (2008). System Maturity Indices for Decision Support in the Defense Acquisition Process. *Acquisition Research Symposium*. May 13-15, Monterey, CA, pp. 127-140 †

[47] Squires, A., W. Larson, and **B. Sauser** (2008). Mapping Space Based Systems Engineering Curriculum to NASA-Industry Developed Competencies for Improved Organizational Performance. *International Astronautical Congress*. September 29 – October 3, Glasgow, Scotland

[48] Boardman, J.T., **B.J. Sauser**, and D. Verma. (2007). In Search of the Biology of Systems. *IEEE International Conference on Systems, Man and Cybernetics*. October 7-10, Montreal, Canada

[49] Frederick, C. and **B. Sauser**. (2007). Studies on Systems Engineering Benefits." *Conference on Systems Engineering Research*. March 14-16, Hoboken, NJ
[50] Gorod, A., R. Gove, **B. Sauser**, and J. Boardman. (2007). System of Systems Management: A Network Management Approach. *IEEE International Conference on System of Systems Engineering*. April 14-16, San Antonio, TX †
[51] Gorod, A. and **B. Sauser**. (2007). An Application of Prim's Algorithm in Defining a SoS Operational Boundary. *Conference on Systems Engineering Research*. March 14-16, Hoboken, NJ †
[52] **Sauser, B.** and J. Boardman. (2007). Complementarity: In Search of the Biology of Systems. *IEEE International Conference on System of Systems Engineering*. April 14-16, San Antonio, TX
[53] Tanna, A. and **B. Sauser**. (2007). Network Theory and the Myths of Independent Reviews. *Conference on Systems Engineering Research*. March 14-16, Hoboken, NJ
[54] Boardman, J., M. DiMario, **B. Sauser**, and D. Verma. (2006). System of Systems Characteristics and Interoperability in Joint Command and Control. *2nd Annual System of Systems Engineering Conference*. Defense Acquisition University, Ft. Belvoir, VA †
[55] Boardman, J. and **B. Sauser**. (2006). System of Systems – the meaning of Of. *IEEE International Conference on System of Systems Engineering*. April 24-26, Los Angeles, CA †
[56] Gandhi, S.J., **B.J. Sauser**, and G. Eschbacher. (2006). Identifying Heuristic Knowledge of Project Reviews from Alternative Choices. *American Society for Engineering Management National Conference*. October 26-28, Huntsville, AL
[57] Mikruk, J. and **B. Sauser**. (2006). System Implementation Strategies: A Case Study in Re-engineering a Project for Success. *American Society for Engineering Management National Conference*. October 26-28, Huntsville, AL
[58] **Sauser, B**. and J. Boardman. (2006). From Prescience to Emergence: Taking Hold of System of Systems Management. *American Society for Engineering Management National Conference*. October 26-28, Huntsville, AL †
[59] **Sauser, B.**, J. Ramirez-Marquez, D. Verma, and R. Gove. (2006). Determining System Interoperability using an Integration Readiness Level. *National Defense and Industry Association Systems Engineering Conference*, San Diego, CA †
[60] **Sauser, B.J.**, D. Verma, J. Ramirez-Marquez, and R. Gove. (2006). From TRL to SRL: The Concept of Systems Readiness Levels. *Conference on Systems Engineering Research*. April 7-8, Los Angeles, CA †
[61] Farr, J.V., **B.J. Sauser**, R. Jain, and D. Verma. (2005). Engineering Management Education - Technology Integration, Manufacturing, or the Management of Engineers and Scientists? *American Society of Engineering Management National Conferenc*e. October 26-29, Virginia Beach, VA
[62] **Sauser, B.J.**, A.J. Shenhar, and E.J. Hoffman. (2005). Identifying Differences in Space Programs." in *Technology Management: A Unifying Discipline for Melting the Boundaries*. Proceedings of the Portland International Conference for Management of Engineering and Technology. Portland, OR, pp. 392-402
[63] **Sauser, B.J.** (2005). Using Self-Assessment to Evaluate the Effectiveness of an Engineering Management Course with Cross-Functional Teams. *American Society for Engineering Education Annual Conference* Portland, OR. Paper No.: 2005-197. pp. 5427-15432 (**Best Paper for Engineering Management Division**)
[64] **Sauser, B.J.**, J.W. Quinn, and A. Helminger. (2004). Environmental Remediation Technologies Derived from Space Industry Research. *International Conference on Environmental Systems*. Colorado Springs, CO, SAE Paper No. 04ICES-066
[65] Rodriguez, L., **B.J. Sauser**, and K.C. Ting. (1999). Information Flow Analysis of the Lunar Mars Life Support Test Project. *International Conference on Environmental Systems*, Denver CO, SAE Paper No. 1999-01-2046

[66] **Sauser, B.J.**, G.A. Giacomelli, and P.P. Ling. (1998). Development of the Basis for an Automated Plant-based Environmental Control System. *International Conference on Environmental Systems*. Boston, MA. SAE Paper No. 981551

[67] Giacomelli, G.A., **B.J. Sauser**, P.P Ling, and D. Li. (1997). Automated Machine Vision Monitoring and Feedback Control of Plant Growth. *American Society of Plasticulture Congress.* Tucson, AZ

[68] **Sauser, B.J.** (1997). Investigation of the Effects of Temperature Perturbations on Tomato Plant Development. *Northeast Agriculture and Biological Engineering Conference (NABEC) of the American Society of Agriculture Engineers.* College Park, MD, Paper No.: 9712

1.1.5 Articles Submitted but not yet Accepted for Publication

[1] Warren, S. and **B. Sauser**. The use of Systemigrams with Soft Systems Research Approaches: A Multi Methodology Study of their Impacts on Disciplinary Research with Recommendations for the Future. *IEEE Transactions on Systems, Man, and Cybernetics: Systems.* **[SJR: Q1]**

[2] Brho, M.H., D.R. Nowicki, **B. Sauser**, & W.S. Randall. The Financial Position of Supply Chain Performance: Hidden Economic Value in a Cash-to-Cash Metric. *International Journal of Physical Distribution and Logistics Management.* [**ABDC: A; SJR: Q1]**

1.1.6 Published Reports

[1] **Sauser, B.** and J.E. Ramirez-Marquez. *Multi-Objective Optimization of System Capability Satisficing in Defense Acquisition.* Department of the Navy, Naval Postgraduate School, Acquisition Research Program, December 2012

[2] **Sauser, B.**, R. Cloutier, K. Sullivan, F. Shull, L. Layman, and U. Becker-Kornstaedt. *Systems Engineering for Contingency Basing*. Systems Engineering Research Center Final Technical Report 2012-TR-033**,** Hoboken, NJ, November 2012

[3] **Sauser, B.**, R. Cloutier, B. Barker, W. Robinson, and D. Verma. *Systems Engineering Assessment & Workforce Development Plan*. Systems Engineering Research Center Final Technical Report 2012-TR-026**,** Hoboken, NJ, November 2012

[4] **Sauser, B.** *System Maturity and Architecture Assessment Methods, Processes, and Tools.* Systems Engineering Research Center Final Technical Report 2012-TR-027**,** Hoboken, NJ, March 2012

[5] **Sauser, B.**, and J.E. Ramirez-Marquez. *Analysis of Alternatives in System Capability Satisficing for Effective Acquisition.* Department of the Navy, Naval Postgraduate School, Acquisition Research Program, December 2011

[6] **Sauser, B.**, J.E. Ramirez-Marquez, D. Nowicki, A. Deshmukh, and M. Sarfaraz. *Development of Systems Engineering Maturity Models and Management Tools.* Systems Engineering Research Center Final Technical Report 2011-TR-014**,** Hoboken, NJ, January 2011

[7] **Sauser, B.** and J. Ramirez-Marquez. Enterprise Resiliency Modeling – Architecting Strategic Intent, in *U.S. Department of Homeland Security National Center of Excellence - Center for Secure and Resilient Maritime Commerce (CSR) Annual Report,* November 2011

[8] **Sauser, B.** *Optimization of Equivalent System Mass for Management of the Space Systems Engineering Lifecycle*. New Jersey Space Grant Consortium, 2011

[9] **Sauser, B.,** M. Mansouri, and J. Ramirez-Marquez. Influence of Zeroth Responders on Resilience of the Small Vessel Security Enterprise, in *U.S. Department of Homeland Security National Center of Excellence - Center for Secure and Resilient Maritime Commerce (CSR) Annual Report,* November 2010

[10] **Sauser, B.**, and J.E. Ramirez-Marquez. *System Capability Satisficing in Defense Acquisition via Element Importance Measures.* Department of the Navy, Naval Postgraduate School, Acquisition Research Program, March 2010.
[11] **Sauser, B.**, and J.E. Ramirez-Marquez. *System Earned Readiness Management for Defense Acquisition.* Department of the Navy, Naval Postgraduate School, Acquisition Research Program, December 2009
[12] **Sauser, B.** Collaborative design of resilient extended enterprises, in *U.S. Department of Homeland Security National Center of Excellence - Center for Secure and Resilient Maritime Commerce (CSR) Annual Report,* November 2009
[13] **Sauser, B.**, and J.E. Ramirez-Marquez. *System Maturity Indices for Decision Support in the Defense Acquisition.* Department of the Navy, Naval Postgraduate School, Acquisition Research Program, December 2008.
[14] **Sauser, B.**, W. Yang, and C. Baldwin. *The Truths and Deltas of Autonomous Collaboration for UxVs.* Final Report for Lockheed Martin-MS2, Moorestown, NJ, October 2008
[15] **Sauser, B.** *System Maturity Metrics for Decision Support in Defense Acquisition, Users Guide: Version 1.0.* Final Report for U.S. Army Armament Research Development and Engineering Center (ARDEC), August 2007
[16] **Sauser, B.** and J. Ramirez-Marquez. *Technology Insertion Metrics for Spiral Development, Users Guide: Version 1.0.* Final Report for Northrop Grumman Integrated Systems Section, December 2006
[17] Boardman, J., S. Pallas, **B. Sauser**, and D. Verma, *Report on System of Systems Engineering.* Final Report for the Office of the Secretary of Defense, August 2006
[18] **Sauser, B.J.** *Assessing NASA Strategic Project Leadership in an Era of Better, Faster, Cheaper.* Ph.D. Dissertation, Stevens Institute of Technology, Hoboken, NJ, May 2005
[19] Shenhar, A.J., et al., *Building a Strategic System Approach to NASA's Project and Program Management: Identifying NASA-Specific Strategic Project Types.* Phase I Final Report for the USRA Center for Program and Project Management Research, December 2004
[20] **Sauser, B.J.** *Modeling the Effects of Air Temperature Perturbations for Control of Tomato Plant Development.* M.S. Thesis, Rutgers, The State University of New Jersey, New Brunswick, NJ, 1998
[21] **Sauser, B.J.** *Assessment of the Production Efficiency of the Hydroponics Garden at Fiesta Mart.* NASA Document: JSC-25349, National Aeronautic and Space Administration, Johnson Space Center, Houston, TX, 1991

1.2 Presentation of Papers, Seminars, Lectures

1.2.1 Conference Presentations and Special Seminars

[1] "Simulation Approaches for System of Systems: Events-Based versus Agent Based Modeling." *Conference on Systems Engineering Research*, Hoboken, NJ, March 19, 2015
[2] "Multi-Objective Optimization of System Capability Satisficing in Defense Acquisition." *8th Acquisition Research Symposium*. Monterey, CA, May 20, 2012
[3] "Modeling the Influence of Zeroth Responders on the Resilience of a Transportation System." *Department of Homeland Security University Network Summit*, Washington, DC, March 31, 2011
[4] "System Capability Satisficing in Defense Acquisition via Element Importance Measures." *7th Acquisition Research Symposium*, Monterey, CA, May 19, 2010

[5] "Governing the Maritime Transportation System: System-of-Systems Approach." M. Mansouri, A. Gorod, T. Wakeman, and B. Sauser. *89th Annual Meeting of the Transportation Research Board*, Washington, DC, January 11, 2010
[6] "Dynamic Modeling of Programmatic and Systematic Interdependence for System of Systems Acquisition." D. DeLaurentis, M. Mane, and A. Gorod. *National Defense and Industry Association Systems Engineering Conference*, San Diego, CA, October 29, 2009
[7] "Linking Systems Engineering Artifacts with Complex System Maturity Assessments." E. Forbes, R. Volkert, and L. Harper. *National Defense and Industry Association Systems Engineering Conference*, San Diego, CA, October 28, 2009
[8] "Defining an Integration Readiness Level for Defense Acquisition." *International Symposium of the International Council on Systems Engineering*, Singapore, July 21, 2009
[9] "Modeling the Characteristics of System of Systems." *IEEE International Conference on System of Systems Engineering*, Albuquerque, NM, June 1, 2009
[10] "Maritime System of Systems and Enterprises: Resilience while Balancing on the Edge of Chaos." Department of Homeland Security University Network Summit, Washington, DC, February 17, 2009
[11] "Systomics: The Ultimacy of Design." *IEEE International Conference on Systems, Man, and Cybernetics*, Singapore, October 2008
[12] "A Probabilistic Approach to Maturity Assessment." *Technology Maturity Conference*, Virginia Beach, VA, September 9, 2008
[13] "System Maturity Indices for Decision Support in the Defense Acquisition Process." *5th Acquisition Research Symposium*, Monterey, CA, May 2008
[14] "System Maturity Indices for Decision Support in Life Cycle Acquisition." *Technology Maturity Conference*, Virginia Beach, VA, September 13, 2007
[15] "Complimentarity: In Search of the Biology of Systems." *IEEE International Conference on System of Systems Engineering*, San Antonio, TX, April 2007
[16] "From Prescience to Emergence: Taking Hold of System of Systems Management." *27th American Society for Engineering Management National Conference*, Huntsville, AL, October 2006
[17] "Determining System Interoperability using an Integration Readiness Level." *National Defense and Industry Association Systems Engineering Conference*, San Diego, CA, October 2006
[18] "System of Systems Characteristics and Interoperability in Joint Command and Control." J. Boardman, M. DiMario, B. Sauser, and D. Verma. *2nd Annual System of Systems Engineering Conference*. Defense Acquisition University, Ft. Belvoir, VA, July 2006
[19] "System of Systems – the meaning of Of." *IEEE International Conference on System of Systems*. Los Angeles, CA, April 2006
[20] "Modifications of Dijkstra's Algorithm in Systems Engineering." A. Gorod and B. Sauser, Poster Presentation. *Conference on Systems Engineering Research*. Los Angeles, CA, March 2006
[21] "Identifying Differences in Space Programs." *Portland International Conference for Management of Engineering and Technology*. PICMET 2005, Portland, OR, August 2005
[22] "Using Self-Assessment to Evaluate the Effectiveness of an Engineering Management Course with Cross-Functional Teams." *2005 American Society for Engineering Education Annual Conference and Exposition*. Portland, OR, June 2005
[23] "Environmental Remediation Technologies Derived from Space Industry Research." *34th International Conference on Environmental System*, Colorado Springs, CO, July 2004

[24] "Information Flow Analysis of the Lunar Mars Life Support Test Project." *29th International Conference on Environmental Systems*. Denver, CO, July 1999
[25] "Development of the Basis for an Automated Plant-based Environmental Control System." *28th International Conference on Environmental Systems*. Boston, MA, July 1998
[26] "Modeling the Effects of Air Temperature Perturbations for Control of Tomato Plant Development." Second International Symposium on Models for Plant Growth, Environmental Control and Farm Management in Protected Cultivation. Wageningen, The Netherlands, August 1997
[27] "Investigation of Temperature Perturbations on Tomato Plant Development in Support of the NJ-NSCORT Program." NE-164 working group of the American Society of Agriculture Engineers. Atlantic City, NJ, June 1996

1.2.2 Invited Seminars and Lectures

[1] "The 5 W's of Systemigrams." Systems Engineering Research Center (SERC) Research Review: Systems Thinking Workshop. November 18, 2019
[2] "Critical and Systemic Thinking for Defining Problems." Fidelity Financial Talent Acceleration Program Academy. Westlake, TX. March 29, 2018
[3] "The Bothside: Embracing Paradox." University of North Texas College of Business Commencement. Denton, TX. May 13, 2017
[4] "The Bothside: Embracing Paradox." TEDxUNT. Denton, TX, April 11, 2017
[5] "System Readiness Assessment." 14th Advanced Development for Security Applications Workshop (ADSA14): Development and Deployment of Fusible Technologies for the Checkpoint. Northeastern University, Boston, MA, May 10, 2016
[6] "Systems Readiness Assessment for Fossil Energy." Department of Energy, National Energy Technology Laboratory, Morgantown, WV, July 10, 2015
[7] "Systems Engineering Simplified." Department of Energy, National Energy Technology Laboratory, Morgantown, WV, July 9, 2015
[8] "System Maturity Assessment for Managing Developmental Lifecycles." National Aeronautics and Space Administration – Johnson Space Center, Houston, TX, October 15, 2010
[9] "Architecting the Extended Enterprise in a Network of Alliances." National Security Agency Learning Seminar, August 9, 2010
[10] "System Resilience." American Association of Port Authorities, New Orleans, LA, July 22, 2010
[11] "Dynamic Modeling of Programmatic and Systematic Interdependence for System of Systems." System of Systems Engineering Collaborators Information Exchange (SoSECIE), (webinar), D.A. DeLaurentis (Purdue University) and B. Sauser, April 13, 2010
[12] "System and Integration Readiness Levels for Defense Acquisition." INCOSE Heartland Chapter, Webinar (seminar), November 3, 2009
[13] "System Maturity Assessment for Decision Support in Life Cycle Acquisition." INCOSE Chesapeake Chapter, Applied Physics Laboratory, Johns Hopkins University, October 3, 2009
[14] "Systems Maturity Assessment for Defense." National Security Agency Learning Seminar, September 9, 2009
[15] "System (of Systems) Acquisition Maturity Models and Management Tools." System of Systems Engineering Collaborators Information Exchange (SoSECIE) (webinar), August 18, 2009

[16] "System Maturity Assessment for Decision Support in Life Cycle Acquisition." University of Alabama in Huntsville College of Business Administration, Huntsville, AL, July 7, 2009
[17] "A Review of Frameworks and Models from Maturity to Collaboration in Systems and System of Systems Engineering." Texas A&M University Department of Industrial and Systems Engineering Seminar, College Station, TX, June 29, 2009
[18] "Preparing Technical Papers for Review; Reviewing Technical Papers." International Council on Systems Engineering, Webinar (seminar), April 15, 2009
[19] "System of Systems Engineering: New Paradigms and Old Beginnings." Network Centric Innovation/Operations Workshop, Finnish International Council on Systems Engineering, Helsinki, Finland, November 20, 2008
[20] "Perspectives to Complex Project Management Challenges in the Systems-of-Systems Engineering Context" Complex Project Management Conference, Espoo Dipoli, Finland, November 19, 2008
[21] "What's Important to NASA? Skills… Knowledge… or Me." The City College of New York, New York, NY, November 29, 2007
[22] "NASA Faculty Fellowship in Systems Engineering: Results from a Systems Engineering Capability Assessment." National Aeronautics and Space Administration – Johnson Space Center, Houston, TX, August 9, 2007
[23] "From Systems Biology to Biology of Systems." Rutgers, The State University of New Jersey, Department of Biological Sciences, New Brunswick, NJ, January 19, 2007
[24] "Systems Engineering & Engineering Management Education at Stevens Institute of Technology." University of Illinois at Urbana-Champaign, Department of Agriculture and Biological Engineering, Urbana-Champaign, IL, March 17, 2006
[25] "System of Systems: Do we need a Definition of Definitions." INCOSE Liberty Chapter Meeting on *System of Systems Engineering: Definitions, Challenges, and Methods*, Hoboken, NJ, March 7, 2006
[26] "It's Turtles all the Way Down: Human Exploration of the Universe." Association of Science Writers in New York. New York, NY, March, 2000
[27] "Mission to Mars." Eco-Living Festival – Mission Possible. Westampton, NJ, May 1998
[28] "The NSCORT Experience: Bringing Tomorrow's Frontiers into Today." Space Life Sciences Training Program. Kennedy Space Center, FL. July 1999
[29] "Strategic Systems Innovation: A Case Study of Mars Pathfinder." Stevens Project Management Research Forum. Hoboken, NJ, February 2003
[30] "Bringing Tomorrow's Frontiers into Today: from Exploring to Terraforming Mars." Workshop '99: Attitudes for the New Millennium. College Station, TX. February 1999
[31] "What Temperature Do You Really Want? Getting the Most out of a Growth Chamber." Association of Education and Research Greenhouse Curators Annual Meeting. New Brunswick, NJ, July 1997
[32] "The Use of a Logistic Plant Growth Model for Prediction of Tomato Plant Development Based on Air Temperature." Department of Bioresource Engineering. New Brunswick, NJ, October 1996
[33] "An Approach to the Investigation of Temperature Perturbations on Tomato Plant Development." Advanced Life Support Program at NASA-JSC. Houston, TX, July 1996
[34] "Modeling the Effects of Temperature Perturbations on Tomato Plant Development." Annual Meeting of the Center for Controlled Environment Agriculture. New Brunswick, NJ. July 1996.
[35] "Bioregenerative Life Support at Johnson Space Center." G.B. Tech Engineering and Science. Houston, TX, 1994

1.3 Other Scholarly Activities

1.3.1 Journal Reviewer

Engineering Management Journal	2007-2018
IEEE Systems Journal (Associate Editor)	2009-present
IEEE Transaction on Engineering Management	2010-2020
IEEE Transactions on Systems, Man, and Cybernetics	2011-present
IEEE Transactions on Vehicular Technology	2010
International Journal of Defense Acquisition Management	2009
International Journal of Project Management	2009-2015
Journal of Technology Transfer	2009
Journal of Business Logistics	2012-present
Systems Engineering	2008-present
Space Policy	2016

1.3.2 Journal Editorship

Associate Editor, 2009-present
IEEE Systems Journal, IEEE and the IEEE Systems Council

This journal is created to provide a systems-level focused forum for application-oriented manuscripts that address complex systems and system-of-systems of national and global significance. The journal in intended to stimulate awareness, appreciation and utilization of systems thinking and the supporting systems engineering disciplines. Themes that will be addressed include complexity, integration, inter-operability, dynamics, communication, effectiveness, ethics and completeness. This publication fills a void un-addressed by most other journals, both within IEEE and outside.

Editorial Board, 2022-present
Systems

Systems is an international, peer-reviewed, open access journal on systems theory in practice, including fields such as systems engineering management, systems based project planning in urban settings, health systems, environmental management and complex social systems, published bimonthly online by MDPI. The International Society for the Systems Sciences (ISSS) is affiliated with Systems.

Associate Editor, Part 7 Case Studies, 2013-2016
Guide to the Systems Engineering Body of Knowledge (SEBoK)

The SEBoK is a collaboration between the International Council on Systems Engineering (INCOSE), the Institute of Electrical and Electronics Engineers Computer Society (IEEE-CS), and the Systems Engineering Research Center (SERC). It provides a compendium of the key knowledge sources and references of systems engineering, organized and explained to assist a wide variety of users. It is a living document, accepting community input continuously, and regularly refreshed and updated.

Editor-in-Chief, 2006-2012
System Research Forum, World Scientific Press

As a forum for systems research, the Systems Research Forum invites original research papers and case studies addressing the various aspects of systems engineering, management, analysis, test and evaluation, cost and life cycle analysis, design, integration and interoperability, enterprises, architecting, measurement and

metrics, simulation and modeling, cognition, and thinking. As systems are not restricted to a single domain, the System Research Forum encourages papers from a variety of disciplines, such as aerospace, defense, physical and cyber infrastructure, medical and health care, maritime and border, security, energy, environmental, transportation, finance and economy, information, education and training.

Special Issue Editor, J. Farr and B. Sauser
Engineering Management Journal, American Society of Engineering Management
This issue [2005, 17(4)] provides an overview of NASA's University Space Research Association Center for Program/Project Management Research (CPMR). The articles provide an initial snapshot to the project management research being conducted with CPMR. The intent of this special issue was to provide an opportunity to invite the community in the conversation about project management success.

Special Issue Editor, B. Sauser, R. Cloutier, and E. Gill
Systems Research Forum, World Scientific Press
This issue [2010, 4(1)] marks the eighth anniversary of the Conference on Systems Engineering Research (CSER) in advancing the knowledge-base of systems engineering research. There is no other international conference that is purely dedicated to research in systems engineering, and as a celebration of its success, this issue of the Systems Research Forum is dedicated to the intellectual advancement and maturation of the discipline of systems engineering that this conference has provided.

1.4 Funded Research

1.4.1 Grants and Contracts

1.4.1.1 Government and Foundations

Gulf Intracoastal Waterway Capacity Study
Texas Department of Transportation
$120,000, 2015
PI: T. Pohlen
Co-PI: Center for Transportation Research, Texas A&M University
Co-PI: **B. Sauser**

Transitioning Systems Thinking to Model-Based Systems Engineering
Systems Engineering Research Center
$20,000, May 2015 – August 2015
PI: R. Cloutier
Co-PI: **B. Sauser**

Systems Engineering Assessment and Workforce Development Plan
U.S. Army RDECOM
Systems Engineering Research Center
$160,000, September 2011 – September 2012
PI: **B. Sauser**
Co-PI: R. Cloutier (Stevens Institute of Technology)

Systems Engineering Research in Contingency Basing
U.S. Army RDECOM
Systems Engineering Research Center

$415,000, July 2011 – June 2012
PI: **B. Sauser**
Co-PI: R. Cloutier (Stevens), S. Rifkin (Stevens), F. Shull (Fraunhofer Center for Experimental Software Engineering), and K. Sullivan (University of Virginia)

Resiliency Strategies for Port Systems
Department of Homeland Security
Center for Secure and Resilient Maritime Commerce
$17,500, August 2011 – July 2012
PIs: **J. Ramirez-Marquez**
Co-PI: B. Sauser

Multi-Objective Optimization of System Capability Satisficing in Defense Acquisition
Naval Supply Systems Command – Acquisition Research Program
$120,622, October 2011 – September 2012
PI: **B. Sauser**
Co-PI: J. Ramirez-Marquez

Employing Crowd Sourcing Methodology
U.S. Army Armament Research, Development and Engineering Center
$49,900, January 2011 – April 2011
PI: **B. Sauser**

Systems Engineering Research Development and Architecting
U.S. Army Armament Research, Development and Engineering Center
$392,975, November 2010 – October 2011
PI: **B. Sauser**
Co-PI: R. Cloutier, D. Verma, and J. Wade

Analysis of Alternatives in System Capability Satisficing for Effective Acquisition
Naval Supply Systems Command – Acquisition Research Program
$119,987, October 2010 – September 2011
PI: **B. Sauser**
Co-PI: J. Ramirez-Marquez

System Capability Satisficing in Defense Acquisition via Element Importance Measures
Naval Supply Systems Command – Acquisition Research Program
$128,257, April 2010 – March 2011
PI: **B. Sauser**
Co-PI: J. Ramirez-Marquez

System Maturity and Architecture Assessment Methods, Processes, and Tools
U.S. Army RDECOM
Systems Engineering Research Center
$250,000, September 2010 – September 2011
PI: **B. Sauser**

Enterprise Resiliency Modeling – Zeroth Responders in the Small Vessel Security Enterprise
Department of Homeland Security
Center for Secure and Resilient Maritime Commerce
$72,339, July 2010 – June 2011
PI: **B. Sauser**

Co-PI: M. Mansouri and J. Ramirez-Marquez

Systems Engineering Research Development and Architecting
U.S. Army Armament Research, Development and Engineering Center
$850,063, September 2009 – September 2010
PI: **B. Sauser**
Co-PI: R. Cloutier, A. Mostashari, R. Nilchiani, and D. Verma

Exploration into a Fundamental Architecture for System of Systems
NASA – New Jersey Space Grant Consortium
$25,000, September 2009 – June 2010
PI: **B. Sauser**

Development of Systems Engineering Maturity Models and Management Tools
U.S. Navy NAVSEA PMS 420
Systems Engineering Research Center
$250,000, November 2009 – September 2010
PI: **B. Sauser**
Co-PI: J. Ramirez-Marquez
Senior Researcher: D. Nowicki and A. Deshmukh (Texas A&M University)

Integrated Design and Operations of Resilient Port Infrastructure Systems and Extended Enterprises
Department of Homeland Security
Center for Secure and Resilient Maritime Commerce
$276,000, July 2008 – June 2010
PIs: R. Nilchiani and **B. Sauser**
Co-PI: A. Mostashari

Systems Earned Readiness Management for Defense Acquisition
Naval Supply Systems Command – Acquisition Research Program
$109,684, December 2008 – December 2009
PI: **B. Sauser**
Co-PI: J. Ramirez-Marquez

Systems Engineering Research Development and Architecting
U.S. Army Armament Research, Development and Engineering Center
$575,201, August 2008 – November 2009
PI: **B. Sauser**
Co-PI: R. Cloutier, A. Mostashari, R. Nilchiani, and D. Verma

System Maturity Indices for Decision Support in the Defense Acquisition Process
Naval Supply Systems Command – Acquisition Research Program
$106,011, January 2008 – December 2008
PI: **B. Sauser**
Co-PI: J. Ramirez-Marquez

Systems Engineering Research Development and Architecting
U.S. Army Armament Research, Development and Engineering Center
$824,845, August 2007 – August 2008
PI: **B. Sauser**
Co-PI: J. Boardman, J. Farr, W. Jiang, J. Ramirez-Marquez, and D. Verma

Systems Engineering Capabilities Assessment
National Aeronautics and Space Administration – Johnson Space Center
$21,000, September 2007 – August 2008
PI: **B. Sauser**

Systems Engineering Services and Enterprise-Level Competency Development
U.S. Army Armament Research, Development and Engineering Center
$376,000, August 2006 – November 2007
PI: **B. Sauser**
Co-PI: W. Jiang, R. Jain, J. Ramirez-Marquez, and D. Verma

Systems Engineering Subject Matter Expert
U.S. Army Armament Research, Development and Engineering Center
$599,787, June 2005 – September 2006
PI: D. Verma
Co-PI: **B. Sauser**

Building a Strategic Systems Approach to NASA's Project and Program Management
University Space Research Association Center for Program/Project Management Research
$75,000, June 2004 – December 2004
PI: A.J. Shenhar
Investigators: L. Crawford, D. Dvir, D. Milosevic, G. Mulenberg, J. Oswald, M. Poli, R. Reilly, M. Ryan, A. Sage, **B. Sauser**, J. Stefanovic, H. Thamhain, D. Verma

Faster, Better, Cheaper Management: A Case Study of NASA's Strategy- Concepts, Lessons, and Future Recommendations
Stevens Institute of Technology Center for Technology Management Research
$8,000, 2000-2001
PI: A.J. Shenhar
Co-PI: **B. Sauser**

Spaceflight and Life Sciences Training Program
National Aeronautics and Space Administration, Washington, DC
$51,400, 2000-2002
PI: **B. Sauser**

Graduate Assistantship
New Jersey-NASA Specialized Center of Research and Training
Rutgers, The State University of New Jersey
1996-1997
PI: **B. Sauser**

Graduate Assistantship
Center for Controlled Environment Agriculture
Rutgers, The State University of New Jersey
1995-1996
PI: **B. Sauser**

1.4.1.2 Industry and Private Sector

Modeling and Simulation of the Empowerment of the Patient Healthcare Process
StratiFi Health

$25,000, July 2019 – August 2022
PI: Brian Sauser
Co-PI: Suman Niranjan

Logistics Finance Market Assessment
East-West Bank
$10,000, October 2018 – January 2019
PI: Jonathan Fite
Co-PI: Brian Sauser

Infrastructure Support for Complex Logistics Systems Laboratory
Union Pacific Foundation Board
$10,000, April 2016
PI: Brian Sauser
Co-PI: Terry Pohlen

Advanced Logistics Management Target Case Study
Target Brands, Inc.
$2,000, September 2014 – May 2015
PI: Brian Sauser

Establishing a Long-Standing, Collaborative Relationship between Greyhound and the University of North Texas
Greyhound Lines, Inc. – U.S.
$100,000, August 2013 – August 2015
PI: David Nowicki
Co-PI: S. Kulkarni, T. Pohlen, W. Randall, and **B. Sauser**

Developments of a Systems Maturity Model
Northrop Grumman Integrated Systems – Bethpage, NY
$49,963, August 2009 – October 2009
PI: J. Ramirez-Marquez
Co-PI: **B. Sauser**

Semantic Interoperability and System of Systems
Lockheed Martin – Moorestown, NJ
$75,000, February 2009 – November 2009
PI: **B. Sauser**

Semantic Interoperability
Lockheed Martin – Moorestown, NJ
$84,997, December 2007 – November 2008
PI: **B. Sauser**

System Maturity Assessment
Lockheed Martin Company – Akron, OH
$12,000, August 2007 – January 2008
PI: **B. Sauser**

Technology Maturity Assessment for Spiral Development
Northrop Grumman Integrated Systems – Bethpage, NY
$93,000, October 2006 – December 2007
PI: **B. Sauser**

Co-PI: J. Ramirez-Marquez

1.4.2 Gifts and Service Agreements

NT Logistics
$200,000, 2019-2029
For enhancement of the NT Logistics Case Competition within the Advanced Logistics Management course (LSCM 4860) and to enhance the capability and teaching of data analytics within the undergraduate Logistics program.

NT Logistics
$13,350, 2014-2017
For support of student scholarships in the LSCM 4860 Advanced Logistics Management Case Competition.

JDA Software
$254,000, 2015
For use of the JDA Transportation Modeler software to work on complex logistics problems and train students.

PepsiCo
$17,500, 2014
For development of modeling and simulation capability and undergraduate engagement in the Complex Logistics Systems Laboratory.

Williamson-Dickie Manufacturing Company
$10,000, 2014
For development of the Complex Logistics Systems Laboratory

FQ Logistics
$5,000, 2014
For development of the Complex Logistics Systems Laboratory

Mohr Partners
$1,000, 2013
For development of the Complex Logistics Systems Laboratory

Intermodal Association of North America
$9,000, 2013
For development of the Complex Logistics Systems Laboratory and engaging undergraduates and graduates in intermodal modeling and simulation.

Intermodal Association of North America
$60,000, 2014-2017
For development of the Complex Logistics Systems Laboratory and engaging undergraduates and graduates in intermodal modeling and simulation.

1.5 Honors and Awards

1.5.1 Professional Honors and Awards

University of North Texas Faculty Leadership Fellow, 2018-2019

For supporting individual and organizational skill building in competencies such as increased self-awareness, confidence, broader thinking, relationship building, and interdisciplinary collaborations.

Teaching Excellence Spotlight, September 2018
The Teaching Excellence Spotlight showcases faculty nominated by their peers and/or students who are highly engaged in student learning and pedagogical practice.

Professional Development Institute Business Fellowship, 2015-2016
For excellence in research in the College of Business at the University of North Texas based on scholarly activity, grant record, and evidence of peer acknowledgement.

IEEE Systems Conference, Best Paper: Honorable Mention, 2011
For the paper titled, "A Systemic Approach to Managing Risks of System of Systems."

IEEE Senior Member
For the highest membership position held in the IEEE, only 8% of the IEEE membership hold this honor, elected in 2011.

Analytic Services Joseph B. Platt Award for Publication Excellence, 2010
For the paper titled, "Leveraging paradox in systems engineering: Discovering Wisdom," *Information, Knowledge, Systems Management*. 7(4):357-376.

Jesse H. Davis Memorial Award in Research Excellence, *Stevens Institute of Technology*, 2010
For a publication that has demonstrated measurable impact and been noted by others as having special importance or insight by leaders in the science and technology, academic, business and industry, government and public service communities, "Systems Maturity Assessment via Systems Development Optimization," *IEEE Transactions on Engineering Management.* 56(3):533-546.

International Symposium of the International Council on Systems Engineering, Best Paper in Government Domain, 2009
For the paper titled, "Defining an Integration Readiness Level for Defense Acquisition."

National Aeronautics and Space Administration (NASA) Faculty Fellowship, 2007
For qualified faculty to perform collaborative research projects with NASA colleagues and relevant to the NASA Center and Agency missions.

American Society of Engineering Education Conference, Engineering Management Division Outstanding Paper, 2005
For the paper titled, "Using Self-Assessment to Evaluate the Effectiveness of an Engineering Management Course with Cross-Functional Teams."

John F. Kennedy Space Center Certificate of Appreciation, 2004
For key contributions to the establishment of the Spaceport Research and Technology Institute.

John F. Kennedy Space Center Certificate of Appreciation, 2003
For exceptional support of the 2002 Environmental Cleanup Technology Industry Briefing.

Kennedy Space Center Director's Gold Dollar Award, 2003

For commitment to safety, teamwork, innovation, and willingness to go above and beyond normal job requirements.

American Institute of Aeronautics and Astronautics Space Coast Chapter Medal of Appreciation, 2002
For contributions to the international space settlement design competition.

Dynacs Exploration in Excellence Team Award, 2002
For contributions made to the advancement of commercial partnerships at NASA Kennedy Space Center.

Academic Professional Excellence in Academic Innovation and Creativity, Cook College, Rutgers, The State University of New Jersey, 2000
For incorporating technology, innovation, and team-based learning into the classroom.

1.5.2 Awards and Honors for Students Advised

National Association of Foreign-Trade Zones (NAFTZ) Conference Student Fellowship, Saba Pourreza, 2014

Graduate Assistantship Tuition Scholarship (GATS), University of North Texas, Saba Pourreza, 2014-2015

Economic Development Scholars Scholarship, Center for Economic Development, Saba Pourreza, Summer 2013

Innovation and Entrepreneurship Graduate Fellowship, Qing Li, 2011
For highly motivated doctoral students with strong scientific and technical background and entrepreneurial aspirations.

School of Systems and Enterprises Best Student Paper Award, Weiping Tan, 2011
For a graduate student who has distinguished themselves in the development of scholarly work through the publication of a peer-reviewed conference or journal paper, "Analyzing Component Importance in System Maturity Assessment," *IEEE Transactions on Engineering Management.* 58(2):275-294.

Robert Stanley Crooks Fellowship, Ozgur Erol, 2010
For a graduate student based on their academic and career goals and interests and/or research aspirations.

School of Systems and Enterprises Best Student Paper Award, Michael DiMario, 2010
For a graduate student who has distinguished themselves in the development of scholarly work through the publication of a peer-reviewed conference or journal paper, "System of Systems Collaborative Formation," *IEEE Systems Journal.* 3(3):360-368

Fabrycky-Blanchard Award for Excellence in Doctoral Research in Systems Engineering and Architecting, Alex Gorod, 2009
For the doctoral student who exemplifies a spirit of leadership and research excellence in systems engineering.

School of Systems and Enterprises Outstanding Dissertation Award, Michael DiMario, 2009

For the Ph.D. candidate who has distinguished themselves in the conduct of research. Dissertation: "System of Systems Collaborative Formation"

International Symposium of the International Council on Systems Engineering, Brian Mar Best Student Paper Award, Weiping Tan, 2009
For the paper titled, "Monte-Carlo Simulation Approach for System Readiness Level Estimation."

Robert Stanley Crooks Fellowship, Romulo Magnaye, 2008-2010
For a graduate student based on their academic and career goals and interests and/or research aspirations.

2 TEACHING AND ADVISING

2.1 Doctorate, Masters, Undergraduate-Project Students Directed

2.1.1 Doctorate Dissertation

[1] Sean McConville. "An Agent-Based Simulation Framework for Quantifying the Value of Metric Alignment in Multi-Echelon Distribution Channels."
[2] Rishabh Rana. "Systems Thinking in the Maturation of Logistics Professionals."
[3] Siv Engen. "Architectural Reasoning applied to Concept Studies in Energy Domain." (University of South-Eastern Norway)
[4] Saad Bani Hani. "Modeling and Simulation of the Empowerment of the Patient Healthcare Process."
[5] Sedat Cevikparmak. (2020). "Transaction Cost in the Negotiation of Agents for Logistics Infrastructure."
[6] Scott Warren. (2018). "Learning and Innovation in the Healthcare Supply Chain."
[7] Mazen Brho. (2018). "Supply Chain Finance: Developing a Weighted Cash Conversion Cycle to Proxy the Financial Performance and Enhance Collaboration Decisions."
[8] Saba Pourrezajourshari. (2016). "Constructs and Antecedents to Life Cycle Affordability Decisions."
[9] Robert Barnett. (2013). "The Connotative Meaning of Independence in System Evaluation."
[10] Janet Oren. (2012). "Establishing a Framework for an Information Systems Security Engineering Process."
[11] Weiping Tan. (2012), "System Maturity Assessment and Advancement from a Multifunction Multicapability Perspective" (May 2012)
[12] Romulo Magnaye. (2011). "Using a System Maturity Scale to Monitor and Evaluate the Development of Complex Systems" *Robert Crooks Stanley Fellowship*
[13] Megan Smith. (2011). "Using Process Simulation to Manage New Product Development Pipeline Throughput" Co-Chair: John Farr
[14] Clifton Baldwin. (2011). "Modeling a Decision Mechanism for the Formation of Collaborative System of Systems"
[15] Arekhandia Pat Eigbe. (2010). "Systemic Analysis of Critical Dimensions of Project/Program Management that Impact Test and Evaluation Outcome"
[16] Jimmy Gandhi. (2010). "An Analytical Characterization of Outsourcing Risks"
[17] Alex Gorod. (2009). "System of Systems Engineering Management: A Satisficing Approach" *Robert Crooks Stanley Fellow; Fabrycky-Blanchard Award in Systems Engineering*
[18] Michael DiMario. (2009). "System of Systems Collaborative Formation" *School of Systems and Enterprises Outstanding Dissertation Award*

2.1.2 Masters Thesis

[1] Gary Stephenson. (2011). "Redeployment Options for the International Space Station."
[2] Stephen Malitsky. (2009). "Reengineering of Security Processes to Protect Aircraft within Airport Operating Areas"
[3] David Ingegneri. (2009). "A Multi-objective approach to System Readiness Potential in a Service Oriented Architecture"
[4] Ryan Gove. (2007). "Development of an Integration Ontology for System Operational Effectiveness"

2.1.3 Special Projects – Undergraduate and Graduate

2.1.3.1 Undergraduate

[1] delos Reyos, R. (2010). "A System Analysis of Toyota's Electronic Throttle Control System." Stevens Honors Research Project.
[2] Werner, R. (2010). "System Boundary Constructors and Their Intended and Unintended Consequences." Stevens Honors Research Project**.**

2.1.3.2 Graduate

Masters

[1] Vanosse, C. (2017). "Systemigrams: A Literature Review" M.S. Special Problems in Systems Engineering.
[2] Zielinski, J. (2017). "Systems Thinking Analysis of Disrupting Improvised Explosive Device (IED) Attacks" M.S. Special Problems in Systems Engineering.
[3] Tran, K. (2015). "Using Systems Thinking for Middle School Education: Application of Systemic Thinking for School Subjects" M.S. Special Problems in Systems Engineering.
[4] Legath, M. (2011). "System Lifecycles and the Unpredictable Nature from Conception to Sustainment" M.S. Special Problems in Systems Engineering
[5] Curry, T-J. (2011). "From Systems of Systems to Systemic Media or From 'It Depends' to 'It's Complicated'." M.S. Special Problems in Systems Engineering
[6] Fedde, M. (2011). "Use of System of System Characteristics to Develop Requirements for Virtual Human Terrain Mapping." M.S. Special Problems in Systems Engineering
[7] Tay, K-H. (2011). "Addressing Obsolescence in the System Readiness Level (SRL) Scale to Support Major Defense Acquisition Decisions." M.S. Special Problems in Systems Engineering
[8] Fisher, T. (2011). "Human Rating the Orion Parachute System." M.S. Special Problems in Systems Engineering
[9] Lu, N. (2011). "A Study on System Boundaries in the Context of Enterprise Systems, Network Centric Systems, and System of Systems - Boundary Constructors and Their Intended and Unintended Consequences." M.S. Special Problems in Systems Engineering.
[10] Cheun, L. (2011). "Exploration in Systems Thinking: Systomics in Focus." M.S. Special Problems in Systems Engineering.
[11] Smith, N. (2011). "Utilizing the Conceptagon for Managing Complex Problems via System of Systems Thinking and System Frameworks." M.S. Special Problems in Systems Engineering.

[12] Bruich, G. (2010). "Development of Readiness Level Assessments for Risk Management Throughout a Project Life Cycle." M.S. Special Problems in Systems Engineering.
[13] Nayak, A. (2010). "Determining the Systems Boundary of Ubiquitous Mobile Devices." M.S. Special Problems in Systems Engineering.
[14] Cornish, S. (2010). "Social Network Analysis for FAA Laboratory Service Group: Finding and Fixing Critical Disconnects in Organizations." M.S. Special Problems in Systems Engineering.
[15] Zigner, J. (2010). "Using Architectural Mismatch to Better Understand Boundary-Driven Inefficiencies." M.S. Special Problems in Systems Engineering.
[16] Liebsch, M. (2010). "Knowledge Systems: Analysis, Characterization, Application, & Management." M.S. Special Problems in Systems Engineering.
[17] Peirson, J. (2010). "Assessing and Leveraging the Genius of Systems Engineering." M.S. Special Problems in Systems Engineering.
[18] Carlson, R. (2010). "Assessing and Leveraging the Genius of Systems Engineering." M.S. Special Problems in Systems Engineering.
[19] Sweeton, J. (2009). "Transitioning Innovations into an Agile System Analysis of Cost and Improving Communication." M.S. Special Problems in Systems Engineering.
[20] Jumbo, L. (2009). "Evaluation of Selected DOD Systems Development Using the System Readiness Level (SRL) Concept" M.S. Special Problems in Systems Engineering.
[21] Rainey, B. (2009). "A Conceptagon Analysis of the Smart Electricity Metering System." M.S. Special Problems in Systems Engineering.
[22] Snow, G. (2009). "The Use of System Maturity Indices to Assess & Manage Risk in an Open System from Development through Production." M.S. Special Problems in Systems Engineering.
[23] Ferrer, T. (2009). "Understanding the Application of Systems Engineering to Organizational Design." M.S. Special Problems in Systems Engineering.
[24] Lin, D. (2009). "Develop a Producibility Readiness Level to Complement System Readiness Level within Defense Acquisition Systems." M.S. Special Problems in Systems Engineering.
[25] Van Nostrand, A. (2009). "What can Constellation Learn from Taking a Soft Systems View of the Reliability Success of Apollo?" M.S. Special Problems in Systems Engineering.
[26] Dankulich, G. (2008). "System Readiness Assessment of the Navy's Electromagnetic Aircraft Launch System." M.S. Special Problems in Systems Engineering.
[27] Brennan, T. (2008). "A Systems Thinking Approach and Analysis of the U.S. Health Care System." M.S. Special Problems in Systems Engineering.
[28] Jauregui, C. (2008). "Social Network Analysis of Teaching Assistants and Research Assistants in a Department." M.S. Special Problems in Engineering Management.
[29] McGrory, S. (2008). "Integration Readiness Level: Operational Support in the Systems Environment." M.S. Special Problems in Systems Engineering.
[30] Long, M. (2008). "Development of an Integration Maturity Checklist." M.S. Special Problems in Systems Engineering.
[31] Tan, W. (2008). "A Probabilistic Approach to Reliable System Readiness Level Assessment." M.S. Special Problems in Engineering Management.
[32] Akdag, M. (2007). "Characterization of an Instructor Network using Social Network Analysis." M.S. Special Problems in Engineering Management.
[33] Bauer, E. (2007). "Identifying Developmental State Models for Technology Maturity." M.S. Special Problems in Systems Engineering.
[34] Easom, K., C. Faes, and T. Fanini. (2007). "Social Network Analysis Applied to a Corporate Organization." M.S. Special Problems in Systems Engineering.

[35] Hall, T. (2007). "An Interoperability Perspective on Systems of Systems Architectures." M.S. Special Problems in Systems Engineering.
[36] Kober, B. (2007). "Technology Insertion Metrics for Spiral Development E-2C aircraft." M.S. Special Problems in Engineering Management.
[37] Tanna, A. (2007). "Network Theory and the Myths of Independence in Project Review Teams." M.S. Special Problems in Engineering Management.
[38] Eddings, C. (2006). "System of Systems and Capability Based Engineering." M.S. Special Problems in Systems Engineering.
[39] Fusswinkle, A. (2006). "The Advanced Hawkeye as a System of Systems." M.S. Special Problems in Systems Engineering.
[40] O'Sullivan, D. (2006). "System of Systems: Meanings, Methods, and Metrics." M.S. Special Problems in Systems Engineering.

Doctorate

[1] Friedhoff, G. (2011). "Actual versus Anticipated Value Derived from Vendor Provided Enterprise Application Software Investments Related to Securities Processing Systems." Ph.D. Special Problems in Engineering Management.
[2] Donate, I. (2010). "Determination of Disruptive Technologies and Their Effects on Trusted Systems Integration." Ph.D. Special Problems in Systems Engineering.
[3] Russell, S. (2010). "Long Life Battery and Lithium Ion Battery Charger for Extravehicular Mobility Unit: Project Development and Systems Maturation Analysis." Ph.D. Special Problems in Systems Engineering.
[4] Cilli, M. (2010). "Vision for a Multiple Objectives Decision Support Tool for Assessing Initial Business Cases of Military Technology Investments." Ph.D. Special Problems in Systems Engineering.
[5] Baldwin, C. (2008). "A Typology of Systems Paradoxes." Ph.D. Special Problems in Systems Engineering.
[6] Eigbe, P. (2008). "Soft Systems Analysis of the Integration of Test and Evaluation and Program Management: A study of a Federal Aviation Administration's Strategy." Ph.D. Special Problems in Systems Engineering.
[7] Magnaye, R. (2008). "Cost of Development Minimization Model using a System Maturity Index." Ph.D. Special Problems in Engineering Management.
[8] Gorod, A. (2007). "Modification and Application of Dijkstra's Algorithm in Systems Engineering." Ph.D. Special Problems in Systems Engineering.
[9] Gandhi, J. (2007). "State of Knowledge in Project Reviews." Ph.D. Special Problems in Engineering Management.
[10] Mikruk, J. (2005). "System Implementation Strategies: A Case Study in Re-engineering a Project for Success." Ph.D. Special Problems in Engineering Management.

2.2 Responsibilities in Advising and Counseling

2.2.1 Ph.D. Dissertation Committee

[1] Himali Patel. "Implications of Additive Manufacturing on Supply Chains" Chair: Suman Niranjan
[2] Blair Copeland. "Strategic Intent of the Reverse Supply Chain." Chair: David Nowicki
[3] Vipul Garg. "Implementation of drones/UAV's in last-mile delivery." Chair: Suman Niranjan
[4] Brian Hiatt. "Medical Supply Chain." Chair: Ted Farris

[5] Hasan Celik. (2019). “Implications of Performance-Based Contracting on Logistics and Supply Chain Management: A Multi-Method Approach.” Chair: David Nowicki
[6] Mohammad Bairalmal. “A Grounded Theory Model of the Relationship between Big Data and an Analytics Driven Supply Chain Competitive Strategy.” Chair: Wesley Randall
[7] John Dickens. (2018). “Construct Development in Value Creation.” Chair: Wesley Randall
[8] Aaron Glassburner. (2018). “Building resilience into supply chain operations" Chair: David Nowicki
[9] Ashraf Salem Zaghwan. (2017). “The Contribution of Complexity Theory in Resolving Energy Losses in Electrical Smart Grid Systems: A Case Study of Electricity Supply and Use in Regional New South Wales – Australia” Chair: Vernon Ireland (University of Adelaide)
[10] Yolanda Obaze. (2016). “Community Based Logistics and Supply Chain Management: Development, Testing, and Validation of Conceptual Models.” Chair: Victor Prybutok
[11] Larry John. (2016). “Self-organizing Cooperative Dynamics in Government Extended Enterprises” Chair: Jon Wade
[12] Cal Classi. (2016). “Large Scale Complex System Design Optimization Though Strategic Technology Refresh Planning.” Chair: David Nowicki
[13] Rebecca Scott. (2015). “The Impact of End-user Decision Making on Public Transportation.” Chair: Victor Prybutok
[14] Cigdem Kochan. (2015). “Impact of Cloud Computing on Supply Chain Resilience.” Chair: David Nowicki
[15] James Cowling. (2014). “Open Development System Engineering: Toward a Management Paradigm via the Governance of Open Source Software Projects.” Chair: Robert Cloutier
[16] Portia Crowe. (2013). “Agile Systems Engineering Governance Framework for Net-Centric Environments.” Chair: Robert Cloutier
[17] Lisbeth Concho. (2013) “Design of Inspection Strategies under Reliability, Cost, and Time Considerations for Multiple Applications.” Chair: Jose Ramirez-Marquez
[18] Stuart Van Weele. (2013). “Inspection Strategies for a Reliable and Secure Port-of-Entry.” Chair: Jose Ramirez-Marquez
[19] MaryAnne Rizk. (2012). “A Model of Key Indicators to Predict a Successful CRO Transition from Transactional Outsourcing to Preferred-Provider Partnership.” Chairs: Ted Stohr and Carol Brown
[20] Kahina Lasfer. (2012). “An Open Academic Model for Systems Engineering.” Co-Chair: Arthur Pyster
[21] Sarah Sheard. (2012). “Measuring System Complexity in Systems Engineering.” Chair: Ali Mostashari
[22] Jennifer Bayuk. (2012). “Security Architecture Metrics.” Chair: Ali Mostashari
[23] Piyasi Choudhury. (2011). “Effects of Mobility on Inventors’ Performance.” Chair: M. Hosein Fallah
[24] Alice Squires. (2011). “Investigating the Relationship Between Online Pedagogy and Student Perceived Learning of Systems Engineering Competencies.” Chair: Robert Cloutier
[25] Heidi Bertels. (2010). “The Incumbent’s Exploration Performance.” Chair: Peter Koen
[26] Ming Huang. (2010). “Virtual Team Leadership.” Chair: Peter Dominick
[27] Mayada Omer. (2010). “Defining and Measuring Infrastructure Resiliency.” Chair: Roshanak Nilchiani
[28] Ozge Doguc. (2010) “Applications of Bayesian Networks in Complex System Reliability Analysis.” Chair: Jose Ramirez-Marquez

[29] Jiang He. (2009) "Dynamics of Inventor Networks and Evolution of Technology Clusters." Chair: M. Hosein Fallah
[30] Tongkarn Kaewchalermtong. (2009). "Application of a Value-based Model for Quantifying Container Vulnerability at a Marine Terminal in the Port of New York and New Jersey." Chairs: Thomas Harrington and Thomas Wakeman
[31] Michael Ryan. (2008). "Ambassadorial Leadership Behavior: A New Paradigm for Virtual Team Performance." Chair: Richard Reilly
[32] Thomas Day. (2007). "A Systems Approach to Privatization and Outsourcing of Publicly Owned Treatment Works." Chair: John Farr
[33] Jiyao Chen. (2007). "Understanding Speed in Development of New Products: A Meta Analysis." Chair: Richard Reilly

2.2.2 Masters Thesis Committee

[1] Robert Pitsko. (2010). "Motivation and Methodology for Enabling an Adaptable System of Systems Architecture with Mashups." Chair: Robert Cloutier
[2] Christopher Reilly. (2009). "Application of Patterns in the Operational Evaluation of an Air Traffic Control System." Chair: Robert Cloutier
[3] Donny Blair. (2008). "A Methodology of Systemic Modeling for Heuristics Capture." Chair: John Boardman

2.3 Courses Taught

2.3.1 Undergraduate

Integrated Capstone:
Advanced Logistics Management (LSCM 4860) and *Marketing Problems (MKTG 4890)*
University of North Texas, 2018-2019
This course is an important component of UNT's Core Curriculum. This course was designed to bridge the STEM (science, technology, engineering, mathematics) and Business core courses (accounting, finance, management, information systems, and marketing) covered in your program of study with key social and behavioral aspects to provide the students with a holistic and comprehensive understanding of how their degree program knowledge has human and societal impacts. As part of this capstone experience, students will focus on the application of empirical and scientific methods that contribute to the understanding of how the "human activity system" (issues of culture and world view and their impact on learning and working in engineering, science and technology) impacts their STEM and Business knowledge. It is built on a fundamental that the successful development of STEM and Business knowledge is directly contingent on the human activity system. Case studies, academic research, and "real world" project work are used to provide a practical and advanced understanding.

Logistics Systems Modeling and Simulation (LSCM 4550)
University of North Texas, 2015-present
This course introduces decision modeling and simulation approaches for logistics and supply chain management. Modeling includes the physical, mathematical or otherwise logical representation of a system, entity, phenomenon or process, and simulation is a method for implementing a model over time in an effort to design, test, or analyze a "real-world" system. Modeling tools will be used with a focus on a general purpose and a specialization with specific software tools (i.e. SIMIO). Along with individual assignments, students will work in groups partnered with industry to build a simulation that addresses a "real-world" problem.

Advanced Logistics Management (LSCM 4860)
University of North Texas, 2013-2017, 2019-present
Application of logistics decision-making tools and skills as they apply to inventory, transportation, and warehouse management. Course stresses hands-on application of analytical tools useful in logistics; analysis of the characteristics of logistics system elements and their interrelationships within a company; developing skills to analyze technical logistics problems; and developing executive-level communications skills leading to the concise statement of problems and proposed solutions. Prerequisite(s): LSCM 3960. Capstone course to be taken during the last term / semester of course work.

Logistics and Business Analytics (LSCM 4510)
University of North Texas, 2012
This course focuses on the development and application of decision models in supply chains with emphasis on demand forecasting, aggregate planning, inventory management (cycle and safety), supply network design, transportation, coordination and sourcing. Spreadsheet based tools and techniques will be utilized in building various decision models for effective decision making in supply chains. In addition, this coarse will rely on case studies to better understand the tangible application of supply chain management.

Logistics and Supply Chain Management (LSCM 3960)
University of North Texas, 2020-present
Analysis and design of domestic and international logistics systems. Topics include transportation, warehousing, inventory control, materials handling and packaging, and plant and warehouse locations within and between firms. Emphasis on concepts and practices that provide firms with a competitive advantage.

Business Process Reengineering (EM 435)
Stevens Institute of Technology, 2010-2012
This undergraduate course discusses the role of Business Process Reengineering (BPR) in managing technology and the engineering functions. This course covers the strategic, operational and technological aspects of BPR by relating BPR to quality improvement and Information Technology. Students are provided with the success and failure factors of BPR through case studies to be able to relate the course topics to real-world contexts. The course is designed to teach students BPR methodologies and the modeling technique that accompanies the methodology. Students identify an organization (or part of an organization) that needs improvement, and analyze the current system, investigate possible Information Technology solutions, redesign the current system and propose a plan to move from the "As-Is" system to the "To-Be" system.

Advanced Life Support Systems – Undergraduate Capstone Course (11:015:418)
Rutgers, The State University of New Jersey, Spring 1998-2002
Taught to undergraduate juniors and seniors as an interdisciplinary industry simulation course using engineering management principals and cross-functional teams applied to advanced life support systems. The content was an introduction to life support systems, space, colonization and exploration of Mars, artificial ecosystems, and NASA's mission to explore the solar system. Teams of students were required to develop an oral and written response to a Request for Proposal to colonize Mars.

2.3.2 Graduate

Systems Theory and Experimentation (LSCM 6051)
University of North Texas, 2013-present

Provides an in depth synthesis of logistics research based upon the systems view of the firm and the supply chain. The course investigates, analyzes, and discusses the nature of logistics and the supply chain based upon a systems approach. Engineering, business and complex adaptive approaches to systems theory are explored as a framework for logistics and supply chain research.

Systems Thinking (ES 684)
Stevens Institute of Technology, 2007-present
It takes something special for the term system to have such ubiquity. The downside is that it is overused, improperly so, detracting from its power. This class builds upon a solid conceptual foundation to ensure that the system/enterprise is properly defined, conceived, and realized. Uniquely, the class shows how it is possible to use systems in order to think more deeply and to act more decisively. This approach is made possible by emphasizing the simultaneity of perspectives, the role of paradox, and the centrality of soft issues in resolving complexity. The Systemitool™ is used to structure and conduct analysis of decisions. This class is aimed at policy and decision-makers at all levels in an organization.

Designing and Managing the Development Enterprise (EM 680)
Stevens Institute of Technology, 2006-2012
This graduate course introduces the attributes associated with the design and management of the human activity system that is responsible for designing, developing, testing, operating, and maintaining the system. It is built on a fundamental that the successful development of a system is directly contingent on the human system. Using foundational constructs related to network theory and the extended enterprise, it covers topics in Globalization and the Extended Enterprise; Structure and Design of Organizations; Organizational Diversity; Leadership and Power; Personality, Attitude, and Values; Learning and Perception; Work Motivation; Group Behavior and Teamwork; Conflict and Politics; Managing Communication Process; Decision Making; and Organizational Change and Development. Case studies and academic research are used to provide a practical and advanced understanding of the subject.

Project Management of Complex Systems (EM 612)
Stevens Institute of Technology, 2005-2012
This graduate course is a project-based course that exposes students to tools and methodologies useful for the effective management of systems engineering and engineering management projects. This course presents the tools and techniques for project definition, work breakdown, estimating, resource planning, critical path development, scheduling, project monitoring and control, and scope management. Reinforcing these fundamentals in project management, the course will introduce advanced concepts in project management, and establish the building blocks for the management of complex systems.

Advances in System of Systems Engineering (SYS 725)
Stevens Institute of Technology
The discipline of Systems Engineering (SE) provides us with necessary engineering and management guidance to successfully design and develop a system rather than focus on its separate individual components. However, due to the rapidly increasing complexity of today's dynamic environment, we are faced with the need to engineer multiple integrated complex systems. In response to this emerging paradigm shift, a new discipline of System of Systems Engineering (SoSE) has evolved. This course serves as an overview of the advances in SoSE and provides the students the capability to apply this knowledge in the synthesis, analysis, and evaluation of activities during the lifecycle of a System of Systems (SoS) through case study analysis.

2.4 Teaching Activities in Special Programs or Guest Lectures

Engineering Senior Design (EENG 4910)
University of North Texas, College of Engineering, 2017-present\
Guest Lecturer on systems thinking and project management.
Logistics and Supply Chain Management (LSCM 3960)
University of North Texas, College of Business, 2014-2019
Guest Lecturer on the application of systems thinking to logistics.

Energy Technology and its Environmental Impact (11:375:322, section 01)
Rutgers, The State University of New Jersey, Fall 2009, 2010
Guest Lecturer on systems analysis.

Systems Engineering Lead Training (SDOE 501)
Stevens Institute of Technology, 2005-2008
Instructor of short course on the fundamentals of the systems engineering process and how it applies to the Department of the Army - U.S. Army Armament Research, Development, and Engineering Center. The course was offered four times per year.

Systems Engineering for Non-Practitioners
Stevens Institute of Technology, 2006-2008
Instructor of one-day introductory course to systems engineering for the Department of the Army - U.S. Army Armament Research, Development, and Engineering Center workforce. The course was offered four times per year.

Systems Operational Effectiveness and Life Cycle Analysis (SYS 625)
Stevens Institute of Technology, Fall 2005, 2006
Guest Lecturer on risk management

Environmental Systems Analysis for Engineers (11:127:495)
Rutgers, The State University of New Jersey, Spring 1999-2001
Guest Lecturer on systems engineering for advanced life support systems in space.

2.5 Courses, Programs, Symposia Developed or Revised

2.5.1 Undergraduate

Integrated Capstone: Advanced Logistics Management (LSCM 4860) and Marketing Problems (MKTG 4890)
University of North Texas, 2018-present
Developer and Instructor: Marketing and Logistics students are integrated together to address some cross-disciplinary problems in a more realist environment. While strongly Team-Based Learning, it is a clear representation of what they will encounter in "the real world."

Logistics Systems Modeling and Simulation (LSCM 4550)
University of North Texas, 2015-2019
Developer and Instructor: Created the course to introduce decision modeling and simulation approaches for logistics and supply chain management to undergraduates.

Advanced Logistics Management (LSCM 4860)
University of North Texas, 2013-present

Instructor: Revised the course to be compliant with the UNT and Texas state core curriculum standards. Added live case study competition with industry sponsors.

Advanced Life Support Systems – Undergraduate Capstone Course (11:015:418)
Rutgers, The State University of New Jersey, 1998-2001
Developer and Instructor: An industry simulation course using engineering management principals and cross-functional teams applied to advanced life support systems. This course was offered to all majors and part of a capstone requirement in the College of Environmental and Biological Sciences.

2.5.2 Graduate

Systems Theory and Experimentation (LSCM 6051)
University of North Texas, 2013-present
Course Developer and Instructor: Introduced as a new graduate course in the spring of 2014; This course is a core course in the logistics PhD program.

Complex Logistics Systems Management (LSCM 5570)
University of North Texas
Course Developer and Instructor: As logistics systems become more complex and emphasis is placed on the modern enterprise characterized by geographically dispersed and multi-cultural organizations, traditional concepts have to be re-examined in how they apply to technical (engineering) and managerial processes of logistics systems. LSCM 5570 Complex Logistics Systems Management introduces students to the principles and processes of complex systems engineering and management, so they may be able to identify an operational need (in a commercial or military area, and in the public or private sector), together with a marketing, business, and technological opportunity that can lead to the creation of a system that will address this need. The course provides students with a disciplined approach for identifying a customer or stakeholder need and translating that need into a complete set of requirements or specifications for a system that meets the need. The course helps students understand how to think through the choices at each step of the systems engineering and management process. What decisions have to be made during the process? What factors should be considered in making those decisions? In particular, students will learn the system's life cycle and the process of system requirements writing, methods of functional analysis and decomposition, and the iterative nature of the process for various types of systems.

Systems Thinking (ES 684)
Stevens Institute of Technology, 2007-present
Principal Developer and Instructor: Revised this graduate course from a modular format to be offered for the first time on campus in fall 08 and online spring 08. This course became a core course to the School of Systems and Enterprises' Ph.D. program in spring 11.

Advances in System of Systems Engineering (SYS 725)
Stevens Institute of Technology
Course Developer and Instructor: Approved by the University Graduate Curriculum Committee in spring 2011, this course was introduced as a new graduate course in the spring of 2012 as an advanced topics course on how systems engineering applies to system of systems (SoS). This offering will meet an unmet need in scholarship and practice as SoS are having increased attention in the economic activities of firms, industries, and nations.

Project Management of Complex Systems (EM 612)
Stevens Institute of Technology, 2006-2012

Course Developer and Instructor: Revised this graduate course to incorporate advanced concepts in project management and emerging issues in project management of complex system. Also formatted the course to be available as a web campus offering in summer 2006.

Designing and Managing the Development Enterprise (EM 680)
Stevens Institute of Technology, 2005-2012
Principal Curriculum Developer and Instructor: Introduced EM 680 as a new graduate course in the spring of 2006; introduced as a web campus offering in fall 2006; and introduced as a modular course in October 2006. This course is a core course in the Engineering Management program.

2.5.3 Special Programs

System of Systems Engineering Training
U.S. Army RDECOM – April 4-7, 18-21; May 2-5, 2011
Principal Technical Lead and Instructor: Coordinated all workshop activities and content. Workshops were a series of foundational topics in System of Systems Engineering (SoSE) for the U.S. Army RDECOM. The purpose was to build a cross-functional knowledge-base in SoSE for a major US Army program.

Architecting the Extended Enterprise in a Network of Alliances
National Security Agency Learning Seminar, August 9, 2010
Principal Developer and Instructor: One-day course that explores extended enterprises and how we may achieve enterprise integration both within and between corporate/organizational boundaries.

Systems Maturity Assessment for Defense
National Security Agency Learning Seminar, September 9, 2009
Principal Developer and Instructor: One-day course focusing on the development of a System Readiness Level (SRL) index that incorporates the maturity level of specific components, and the interoperability of the entire system.

NASA Seminar Series in Systems Engineering
National Aeronautics and Space Administration – Johnson Space Center, Summer 2007
Principal Developer: Coordinated and hosted a seminar series in systems engineering during my Faculty Fellowship at NASA-Johnson Space Center. This weekly seminar series brought in leading systems engineering scholars and practitioners from around the United States and was open to the entire Johnson Space Center workforce.

Systems Engineering for Non-Practitioners
Stevens Institute of Technology, 2006-2008
Developer and Instructor: One-day introductory course on systems engineering for the U.S. Army Armament Research, Development, and Engineering Center (ARDEC) workforce.

Systems Engineering Lead Training (SDOE 501)
Stevens Institute of Technology, 2005-2008
Course Owner and Instructor: Short course on the fundamentals of the systems engineering process and how they apply to the Department of the Army - U.S. Army Armament Research, Development, and Engineering Center (ARDEC). This course was a requirement for any ARDEC employee performing systems engineering activities.

Eco-Lab Space Program

New Jersey – NASA Specialized Center of Research and Training, 1998-2001
Program Director: Guided the development of science and math curriculum for grades 5-8. This program was deployed in school across New Jersey to meet STEM requirements.

2.6 Professional Development Activities

Protecting Human Research Participants, July 28, 2017
National Institutes of Health (NIH) Office of Extramural Research
Online training to prepare investigators involved in the design and/or conduct of research involving human subjects to understand their obligations to protect the rights and welfare of subjects in research.

WebCampus Colloquium, October 2011; March 2011
Stevens Institute of Technology
Half day training in new and emerging approaches in on-line pedagogy.

ITAR International Traffic in Arms Regulations (ITAR) and Export Administration Regulations (EAR), April 2010
Stevens Institute of Technology
Half day training in the Department of State ITAR and Department of Commerce EAR to promote understanding and compliance with regulations related to export control laws that affect the manufacturing, sales, and distribution of technology.

International Traffic in Arms Regulations (ITAR), September 2009
Stevens Institute of Technology
Half day training in ITAR compliance regulations related to the export control laws that affect the manufacturing, sales, and distribution of technology.

Technology Assessment, 2002
Robert C. Byrd National Technology Transfer Center – Kennedy Space Center, FL
Five day training in review and analysis of government, university, and privately held technologies. Content covered technology screening, competitive intelligence, patent searching, identifying competing products, reviews of the technology's performance, and identifying improvements over the current state of the art.

Commercialization and Marketing Technologies, 2002
Robert C. Byrd National Technology Transfer Center – Kennedy Space Center, FL
Five day training in market and technology assessment services designed to determine which technologies have commercial potential. Content covered assesses the merit and novelty of a technology, identifying and comparing competing technologies, evaluating markets to recognize opportunities and identifying potential partnership organizations.

NASA Advanced Project Management Training Program (APM-43), 2000
NASA Academy of Program and Project Learning – Wallops Island, VA
This eleven-day course is designed as a graduate-level seminar focused on advanced concepts of project management and systems engineering and their integration in the management of all phases and facets of the project life cycle. As a participant-driven course it uses a case study approach to examine such topics as system architecting, performance, risk, cost, schedule, reliability and operability, as well as stakeholder management and acquisition strategies.

3 SERVICE

3.1 University Committees and Administrative Activities

3.1.1 University of North Texas

Degree Architect, BS in Industrial Distribution, 2020-present
Responsible for building and developing an undergraduate degree in Industrial Distribution to be offered at UNT New College. Industrial Distribution applies mathematics, science, applied technology, business, data processing, communications, quality, and supply chain management to industrial and commercial products.

Intellectual Property Committee, 2017-present
Appointed by the Associate Vice President for Innovation and Commercialization; responsible for assessing invention disclosure and advising on commercialization strategies.

Director, Complex Logistics Systems Laboratory, 2014-2022
Responsible for the strategic and operational direction of the laboratory and its supporting faculty. This includes building an externally funded research program from industry and government.

Director, Jim McNatt Institute for Logistics Research, 2016-2020
Appointed by the Vice President for Research and Innovation; responsible for the strategic and operational direction of Jim McNatt Institute for Logistics Research. The McNatt Institute is an Institute of Research Excellence at the University of North Texas focused on multi-disciplinary collaborative research programs.

Search Committee for the Dean of the College of Information, 2015-2016
Appointed by the Provost, the committee is responsible for supporting a national search that will review and nominate of a suitable candidate.

Visioning Team to Develop an Interactive Design Degree Program, 2015-2016
Appointed by the Vice President for Research and Economic Development, the team is responsible for designing an interdisciplinary degree that is distinctive to UNT and the north Texas region, and provides a unique set of university-level learning experiences and approaches.

UNT Research Policy Task Force, 2013
Convened by the Vice President of Research and Economic Development (VPRED) to make recommendations regarding policies that impact the research enterprise at the University of North Texas.

Search Committee for the Vice President of Research and Economic Development, 2013
Charted by the President with the review and nomination of a suitable candidate for the VPRED. The Committee was responsible for review and nomination of an interim and permanent VPRED.

3.1.2 Stevens Institute of Technology

President's Strategic Planning Steering Committee, 2011-2012
Charted by the President with planning a road map for Steven's over the next decade. The Committee will steer Stevens toward a destination that places a premium on excellence in everything it does: its educational programs; its research and innovation activities; the values

it instills in the members of its community; its technology commercialization programs; and its impact on the region, nation and the world.

Task Force on Architecting the Ph.D., 2010-2012
Charted under the Provost and Chaired by the Dean of Graduate Studies, this task force is to: (1) review and benchmark current university requirements for the Ph.D. degree and (2) propose means of creating a distinctive 'Stevens signature' for the Ph.D. that reflects the University's vision and comparative strengths.

Graduate Curriculum Committee, 2010-2012
Responsible for degree verifications; approval and review of all graduate programs, approval of continuing professional development programs, and formulation and review/revisions of graduate academic policies.

Research and Entrepreneurship Day Program Board, 2007-2012
Annual campus event designed to bring greater exposure to the university's research programs, capabilities and achievements, and foster relationships with industry to offer insight and solutions to their business needs.

Health Insurance Advisory Committee, 2007-2012
Responsible for advising the Department of Human Resources on all issues and decisions related to the issuance of employee health insurance.

Office of Sponsored Programs and Research, *Faculty Advisory Board*, 2008-2012
Responsible for advising the Office of Sponsored Research on all issues and decisions related to the current and future direction of the office.

Library Committee, 2010-2012
Responsible for working with the Librarian and the Academic Planning and Resources Committee to ensure that the library is capable of meeting the present and future educational and scholarly requirements of students and faculty.

Undergraduate Student Affairs Committee, 2009-2011
Responsible for making recommendations of improvement and governance over the activities and constitutions of all undergraduate organizations, including fraternities.

Committee on Committees, 2007-2009
Responsible for soliciting and proposing nominees from the regular faculty for the standing committees of the Faculty and conduct the elections, and shall from time to time review election procedures.

3.1.3 College of Business, University of North Texas

Doctoral Program Committee, 2018-present
Responsible for setting the strategic and policy direction of the College of Business PhD Program.

Doctoral Program Committee, Chair, 2020-2021
Responsible for setting the strategic and policy direction of the College of Business PhD Program.

AACSB Strategic Planning Committee, Chair, 2016

Chaired the College committee to reevaluate and define the Mission, Vision, Values, and Goals for the College of Business.

Scholarship Committee, 2014-2015
Responsible for serving on the college scholarship committee to select candidates for the College of Business.

3.1.4 Department of Marketing and Logistics, University of North Texas

Promotion and Tenure Committee (PAT), 2017-2018, 2021-2022 (Chair)
Responsible for the review and recommendation to the department chair for annual promotion, tenure, and post-tenure review.

Personnel Affairs Committee (PAC), 2016-2017; 2021-2022
Responsible for peer evaluation of department faculty and advising the Department Chair on the appointment, reappointment, promotion, and merit pay of faculty.

G. Brint Ryan Endowed Chair of Logistics Search Committee, 2020-2021
Responsible for serving on a search for an endowed chair in logistics from the G. Brint Ryan College of Business Endowment.

Logistics Faculty Search Committee, 2018-2019 (Chair)
Responsible for leading a search for two faculty positions in logistics at the Assistant, Associate, or Full Professor Rank.

Marketing Faculty Search Committee, 2017-2018 (Co-Chair)
Responsible for leading a search for an Open Rank Faculty hire in the Marketing Program.

Marketing Faculty Search Committee, 2017-2018
Responsible for serving on a search for an Open Rank Faculty hire in the Marketing Program.

Operations and Supply Chain Management Faculty Search Committee, 2016-2017 (Chair)
Responsible for leading a search for a Lecturer and Open Rank Faculty hire in the Operations and Supply Chain Management Program.

Scholarship Committee, 2014-2016
Responsible for chairing the selection of candidates to receive departmental scholarships.

Logistics PhD Program Committee, 2012-2017
Responsible for guiding the overall direction and policies of the program and reviewing applicants for consideration into the PhD program.

Curriculum Committee, 2012, 2016-2018
Responsible for degree verifications; approval and review of all curriculum programs; and formulation and review/revisions of academic policies.

3.1.5 School of Systems and Enterprises, Stevens Institute of Technology

Engineering Management, Department Director, 2011-2012
Responsible for administering faculty teaching loads, defining the strategic direction of the program, and supervising the advancement of curriculum.

Engineering Management Program Assessment Committee, 2011-2012 (Chair)

Commissioned by the Dean to chair a committee to evaluate the undergraduate and graduate Engineering Management programs and provide an assessment of the current state as well as provide a vision going forward to prepare the Engineering Management program for the next decade.

Engineering Management Faculty Search Committee, 2011-2012 (Chair)
Responsible for leading an international search for three new faculty hires in the Engineering Management Program.

SSE Research Days, 2008, 2010 (Co-Chair)
This is a mini-conference of SSE Ph.D. student researchers. Responsible for organization of program and coordination of events.

Graduate Curriculum Committee, 2010-2012 (Chair)
Responsible for degree verifications; approval and review of all graduate programs, approval of continuing professional development programs, and formulation and review/revisions of graduate academic policies.

Systems Engineering Management Graduate Certificate, 2005-2008 (Director)
Responsible for the establishment, sustainment and strategic direction of the program.

SEEM Research Administration, Director, 2006-2007
Responsible for establishing procedures in research administration for the Department of Systems Engineering and Engineering Management (SEEM).

3.2 Professionally Related Service Activities

3.2.1 Professional Society Membership and Activities

IEEE Senior Member, 2011-present
Hold executive IEEE volunteer positions, serve as a reference for other applicants for senior membership, and invited to be on the panel to review incoming senior member applications. This is the precursory step to becoming an IEEE Fellow.

IEEE Systems, Man, and Cybernetics Society, 2007-present
Service on numerous IEEE Systems, Man, and Cybernetics Society sponsored conference program committees and an active member of the System of Systems Engineering Working Group.

IEEE Engineering Management Society/Technology Management Council, 2004-2015

International Council on Systems Engineering (INCOSE), 2005-2012
Service on the INCOSE Systems Science Working Group (2010-present), INCOSE Enterprise Working Group (2006-present), INCOSE Liberty Chapter, SE Development Chair (2006), and INCOSE Liberty Chapter Board of Directors representative to the Stevens INCOSE Student Chapter (2006)

American Society of Engineering Education, 2005-2006; 2011-2012

3.2.2 Committees and Working Groups

New Jersey Space Grant Consortium Program Council (NJSGC), 2007-2012

Council Member: Responsible for establishing NJSGC governance and representing Stevens Institute of Technology at NJSGC activities.

Managing and Engineering Complex Situations
National Centers for System of Systems Engineering, 2006-2012
Advisory Board: Responsible for establishing organizational governance and setting the strategic direction of the center.

University Space Research Association (USRA) Center for Program and Project Management Research Student Council, Founding Member and Steering Committee, 2003-2005

NASA Advanced Life Support Education and Outreach Working Group, Secretary, 2001-2002

NASA Spaceflight and Life Sciences Training Program, National Recruitment Coordinator, 2000-2002

NASA Advanced Life Support Education and Outreach Working Group, Chair, 2000

3.2.3 Conference Activities

3.2.3.1 Conference/Program Chair

IEEE International Conference on System of Systems Engineering, 2011
Albuquerque, NM
Special Session and Workshop Program Chair
The conference theme was "System of Systems Engineering in Cloud Computing, Smart Grid, and CyberSecurity." Responsible for the review of special session proposals and subsequent papers. Invited sessions were to provide a forum for focused discussions on new topics, or innovative applications of established approaches.

Conference on Systems Engineering Research, 2010
Hoboken, NJ
Conference Chair
Conference on Systems Engineering Research has attracted systems engineering and architecting research throughout the world and has become the primary conference for disseminating systems engineering research and germinating new research ideas in the discipline. Responsible for all conference development, organization, and execution.

Conference on Systems Engineering Research, 2007
Hoboken, NJ
Technical Program Chair
The primary conference objective was to provide practitioners and researchers in academia, industry, and government a common platform to present, discuss and influence systems engineering research with the intent to enhance systems engineering practice and education. Responsible for architecting the technical program and administering the review of papers.

International Conference on Life Support and Biospherics, 2000
Baltimore, MD
Technical Program Chair

The purpose of this conference is to assemble an international community committed to the advancement of life support and biospherics science and engineering. Responsible for organization and execution of the technical program.

3.2.3.2 Program Committee

Complex Systems Design & Management Conference, 2015
Paris, France
Program Committee
CSD&M conference brings together 300 academics and practitioners from many diverse areas to discuss about complex systems. The Program Committee is 15 researcher professors from academia and 15 experts from industry. Their role is to guarantee the quality of the conference program by reviewing the scientific and industrial papers and identifying the invited speakers.

Conference on Systems Engineering Research, 2015
Hoboken, NJ
Technical Program Committee
The primary conference objective is to provide practitioners and researchers in academia, industry, and government a common platform to present, discuss and influence systems engineering research with the intent to enhance systems engineering practice and education. Responsible supporting the architecting of the technical program and administering the review of papers.

Conference on Systems Engineering Research, 2012
St. Louis, MO
Technical Program Committee
The primary conference objective is to provide practitioners and researchers in academia, industry, and government a common platform to present, discuss and influence systems engineering research with the intent to enhance systems engineering practice and education. Responsible supporting the architecting of the technical program and administering the review of papers.

IEEE International Conference on System of Systems Engineering, 2010
Loughborough, United Kingdom
Program Committee
The theme of the conference was "System of Systems Engineering in Sustainable Systems for the 21st Century," reflecting the growing recognition that significant changes in large-scale systems integration are needed. Responsible for conference program strategic direction and administering the review of papers.

Global Conference on Flexible Systems Management, 2008
Hoboken, NJ
Program Committee
The theme of the conference was "Flexible Enterprises for Global Business" in an effort to provide a global forum for practitioners, policy makers, teachers, researchers and learners to share insights in flexible enterprises. Responsible for organizing a roundtable for scholars from the U.S. and IIT Delhi on opportunities and challenges confronting the U.S. and India in research on flexible systems.

International Symposium on Intelligent Automation and Control, 2008
Waikoloa, Hawaii
Program Committee

The conference brings together researchers from multiple disciplines to advance the use of artificial intelligence in the control and/or development of automated systems. Responsible for conference program strategic direction and administering the review of papers.

Managing and Engineering Complex Situations Summit, 2007
Virginia Beach, VA
Program Committee
The purpose of the summit was to capture real problems faced by in the managing and engineering of complex situations to better understand the challenges practitioners are facing in management and engineering. Responsible for guiding summit's strategic program.

3.2.3.3 Session/Workshop Chair

Conference on System Engineering Research, 2015
Hoboken, NJ
Session Chair: "Analysis and Analytics"

IEEE International Conference on System of Systems Engineering, 2011
Albuquerque, NM
Session Co-Chair: "System of Systems Engineering Case Studies"

IEEE International Congress on Ultra Modern Telecommunications and Control Systems, 2010
St. Petersburg, Russia
Special Session Co-Chair: "System of Systems"

Department of Homeland Security Workshop on Port Systems Resiliency, 2009
Washington, DC
Workshop Organizer: "Using Systemic Diagrams for Defining Maritime Resiliency"

Department of Homeland Security Maritime Homeland Security Summit, 2009
Washington, DC
Workshop Organizer: "Resilience for Maritime Transportation Systems: Dispelling the Myths; Exploring the Truths"

IEEE International Conference on System of Systems Engineering, 2008
Monterey, CA
Panel Organizer and Chair: "Paradox in System of Systems"

IEEE International Conference on Systems, Man, and Cybernetics, 2008
Singapore
Workshop Chair: "eNetworks Cyberengineering: Infrastructure for Cyber-Physical Ecosystems"

IEEE International Conference on System of Systems Engineering, 2006
Los Angeles, CA
Session Chair: "System of Systems Communications"

Conference on Systems Engineering Research, 2005
Hoboken, NJ
Moderator: "Doctoral Research in Systems Engineering"

Second International Symposium on Models for Plant Growth, Environmental Control and Farm Management in Protected Cultivation, 1998
Wageningen, Netherlands
Poster Session Moderator

3.2.3.4 Invited Panelist

Texas National McNair Research Conference, 2017
Panelist: "The Research Apprenticeship of the Graduate Student"

Annual Systems Engineering Research Center Research Conference, 2014
Panelist: "Research Transition Success Stories"

Aviation & Aerospace Industry Manufacturing Summit, 2013
Panelist: "Challenges in Workforce Development"

Department of Homeland Security University Network Summit, 2011
Panelist: "The Role of Transportation in Community- and Individual-level Resilience"

Department of Homeland Security University Network Summit, 2009
Panelist: "Marine Transportation Systems (MTS) Resiliency and Continuity of Operations"

IEEE International Conference on System of Systems Engineering, 2007
Panelist: "*Is Systems Engineering Different from System of Systems Engineering?*"

4 PROFESSIONAL EXPERIENCE

Professor (tenured, 2018-present); Associate Professor (tenured, 2012-2018)
University of North Texas
G. Brint Ryan College of Business
New College
Department of Marketing, Logistics, and Operations Management, Denton, TX, 8/12-present

- Teaching undergraduate and graduate courses.
- Supporting, mentoring and advising doctoral students.
- Developing new and support existing externally funded research activities within the Department and the University.
- Creating and maintaining a collegial atmosphere that enhances student-faculty interactions.
- Working effectively with other faculty to develop College-wide and University-wide initiatives.

Adjunct Professor
Stevens Institute of Technology
School of Systems and Enterprises, Hoboken, NJ, 2012-present

Adjunct Professor
University of Central Florida
College of Engineering and Computer Science
Department of Industrial Engineering and Management Systems, 2018-present

Associate Professor (tenured, 2012); Assistant Professor (9/06-2011)
Director, Systems Development and Maturity Laboratory
Stevens Institute of Technology

School of Systems and Enterprises, Hoboken, NJ

- Teaching undergraduate and graduate courses via any combination of on-campus, regional, or modular channels.
- Mentoring and advising undergraduates students.
- Supporting, mentoring and advising doctoral students.
- Developing new and support existing externally funded research activities within the Department and the Institute.
- Creating and maintaining a collegial atmosphere that enhances student-faculty interactions.
- Developing and cultivating relationships with various constituencies including professional societies, research and educational organizations that will result in further advancing professional standing and will have benefits to the Institute.
- Working effectively with other faculty to develop School-wide and Institute-wide initiatives.

Research Assistant Professor
Stevens Institute of Technology
Charles V. Schaefer, Jr. School of Engineering
Systems Engineering & Engineering Management Department, Hoboken, NJ, 1/05-8/06

- Developed a certificate program in Engineering Management of Complex Systems.
- Developed a research program in Engineering Management of Complex Systems.
- Managed all research programs between the School and the U.S. Army Armament Research Development and Engineering Center related to engineering management and systems engineering.
- Taught one course per semester (EM612 Project Management of Complex Systems; EM680 Designing and Managing the Development Enterprise).
- Working effectively with other faculty to develop School-wide and University-wide initiatives.

Account Manager
ASRC Aerospace, NASA-Kennedy Space Center, FL, 3/03-12/04

- Participated as a member of the strategic advisory board for the university-affiliated Spaceport Research and Technology Institute.
- Negotiated and assisted in the development of industry partnerships, licenses and Space Act Agreements (cooperative agreements) for Kennedy Space Center.
- Cultivated invention disclosures in environmental science, biological science, data acquisition, instrumentation, and wireless systems at various stages through the commercialization process.
- Provided assistance in the development of the University Spaceport and Technology Development Contract metrics and refinement of processes.

Project Administrator
Dynacs Corporation, NASA-Kennedy Space Center, FL, 3/02-2/03

- Negotiated and fostered over 15 partnerships, licenses and Space Act Agreements for Kennedy Space Center.
- Cultivated over 100 invention disclosures at various stages through the commercialization process.
- Developed and implemented industry focused marketing strategies for Kennedy Space Center technologies in environmental science, biological science, data acquisition, instrumentation, and sensors.

Senior Program Administrator
New Jersey – NASA Specialized Center of Research and Training (NJ-NSCORT)
Rutgers, The State University of New Jersey, New Brunswick, NJ, 9/97-3/02

- Managed the operations of a $5.2 million, multi-institutional research center (New Mexico State University, Ohio State University, Rutgers University, Stevens Institute of Technology, Tuskegee University, Utah State University).

- Developed and implemented multi-institutional, collaborative research and technology programs aligned with NASA strategic plans.
- Fostered a synergistic relationship between NASA engineers and scientists and university researchers.
- Directed the integration and application of 20 different projects in 5 multi-institutional research and technology programs.
- Program Director for all K-12 education and outreach programs.

Scientist, Associate
G.B. Tech Science and Engineering, NASA-Johnson Space Center, Houston, TX, 12/93-8/95

- Managed laboratory budgets and personnel for the NASA-Johnson Space Center Advanced Life Support Laboratory.
- Directed over 15 applied research and technology development projects.
- Responsible for the investigation, study, analysis and reporting of all laboratory operations.

5 EDUCATION

Ph.D., Technology Management, 2005
Stevens Institute of Technology – Hoboken, NJ
Dissertation: *Assessing NASA Strategic Project Leadership in an Era of "Better, Faster, Cheaper"*
Advisors: Drs. Aaron Shenhar (College of Business) and George Korfiatis (Schaefer School of Engineering)

M.S., Bioresource Engineering, 1998
Rutgers, The State University of New Jersey – New Brunswick, NJ
Thesis: *Modeling the Effects of Air Temperature Perturbations for Control of Tomato Plant Development*
Advisor: Dr. Gene Giacomelli

B.S., Agricultural Development with an emphasis in Horticulture Technology, 1993
Texas A&M University – College Station, TX