Dr. James R. Burns

Texas Tech University
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Education and Post Graduate Training

Ph D, Purdue University, 1973.
Major: Systems, Operations Research
Supporting Areas of Emphasis: Control Theory, Optimization, Simulation
Dissertation Title: Applications of Control Theory to System Dynamics Models of Social Systems

MS, Purdue University, 1967.
Major: Astronautics

BS, University of Colorado, 1966.
Major: Engineering

Academic and Professional Experience

Full Professor of Practice, Texas Tech University -- Rawls College of Business Administration. (September 1, 2016 - Present).
I continue to teach courses in operations management and project management. I continue to do research and to write in these areas.

Full Professor, Texas Tech University -- College of Business Administration. (September 1, 1994 - August 31, 2016).
Taught courses in operations management, project management and information systems. Performed research in these areas as well. Wrote a textbook on Information Technology Project Management. Published many articles in peer reviewed journals. Served as Co-editor of the International journal of Information Systems and Change Management.

Area Coordinator of ISQS and Full Professor, Texas Tech University -- College of Business Adminnistration. (July 1, 1990 - August 31, 1994).
Directed the Area of Information Systems and Quantitative Sciences. During this time more than $1,000,000 in research dollars were brought in. Upwards to 25 doctoral students were in Area doctoral programs--management information systems, operations management, statistics, management science. Dozens of research articles were published during this time.

Full Professor, Texas Tech University -- College of Business Administration. (September 1, 1984 - June 30, 1990).
Taught courses in operations management and information systems. Performed research in areas related to operations and information systems.

Summer Faculty Fellow -- Consultant, Los Alamos National Laboratories. (June 1, 1987 - August 31, 1987).
Developed algorithms for random variate generation and for statistics collection and reporting in pseudo-code for inclusion within Lisp-based KEE simulation models. Developed code for independence and correlation tests of 0-1 uniform random variate generators. Wrote meta-specification for formulation of intelligent, discrete, next-event simulation models. Formalized concepts of cognitive event, cognitive activity, and decision sets. Investigated the possibility for developing a specification language for formulation of intelligent task

simulations. Initiated a thorough review of all relevant literature. Helped develop a knowledge-based simulation for manufacturing management.

DOE Summer Faculty Fellow -- Consultant, Los Alamos National Laboratories. (June 1, 1986 - August 31, 1986).
Developed algorithms for random variate generation and for statistics collection and reporting in pseudo-code for inclusion within Lisp-based KEE simulation models. Developed code for independence and correlation tests of 0-1 uniform random variate generators. Wrote meta-specification for formulation of intelligent, discrete, next-event simulation models. Formalized concepts of cognitive event, cognitive activity, and decision sets. Investigated the possibility for developing a specification language for formulation of intelligent task simulations. Initiated a thorough review of all relevant literature. Helped develop a knowledge-based simulation for manufacturing management.

DOE Summer Faculty Fellow -- Consultant, White Sands Missile Range. (June 1, 1985 - August 31, 1985).
Developed an inference engine for a knowledge base whose objective is to provide meteorological intelligence in relation to terrain, equipment, personnel, and operations. Coded design in U.C.S.D. PASCAL for operation on field-hardened microcomputers.

Associate Professor, Texas Tech University -- College of Business Admnistration. (September 1, 1980 - August 31, 1984).
Taught courses in operations management and information systems. Performed research and wrote textbooks in management science and information technology

DOE Summer Faculty Fellow -- Consultant, Sandia National Laboratories. (June 1, 1980 - August 31, 1980).
Developed simulation model of solar energy. Using a popular national energy model, the effects of market penetration by solar energy were characterized in terms of reduced dependence upon foreign crude, reduction in usage rates of fossil fuels, etc. Results are published in article.
Developed a model of a photovoltaic cell string which is illuminated by a parabolic trough reflector. The model shows what effect gaps have on cell illumination and how this effect influences the shunting of diode strings for various angles of solar incidence. The model was formulated to study diode string length and to determine how best to maximize power under variant incidence angles. Results are published in articles.

Assistant Professor, Texas Tech University -- College of Engineering. (September 1, 1973 - August 31, 1980).
Taught classes in systems and computer programming. Performed research into using systems theory, thinking and modeling in societal systems

Consultant, Texas Instruments. (October 1, 1978 - September 30, 1979).
Developed expert system to schedule plastic piece-part shop orders onto injection molding machines. Problem involved roughly 50 presses with over 1000 different piece parts. Program assigns shop orders to appropriate and available presses in such a fashion as to meet due date requirements while minimizing the number of setups required. Incorporates over 30 scheduling rules.

NASA Summer Faculty Fellow, NASA Langely Research Center. (June 1, 1978 - August 31, 1978).
Developed scheduling/ routing/fleet-sizing models for a proposed national air cargo system. Results are published in articles

Graduate Assistant, Purdue University -- College of Engineering. (September 1, 1970 - August 31, 1973).

Software Engineer, The Boeing Company. (June 15, 1969 - March 15, 1970).
Helped design, develop, codify, verify, and implement a simulation of the AWACS airplane. Used simulation models to evaluate vendor radar, and avionics designs. Used Kalman filtering to track aircraft. Wrote 3000 lines of code in Fortran.

Research Engineer, The Boeing Company. (September 1, 1967 - June 15, 1969).
Worked within Lunar Orbiter program. Smoothed Lunar Orbiter doppler data. Developed satellite navigation system through utilization of a Kalman filter. Performed error analyses of models of several different satellite navigation system configurations.

Associate Research Engineer, The Boeing Company. (June 5, 1966 - August 22, 1966).
Developed computer model to determine the stress loads on the shell of the Saturn V rocket under varying wind dynamics during launch.

TEACHING

Courses Taught

Texas Tech University

5343, Operation Management and Management Science, 1 course.
7000, Research, 1 course.
8000, Doctor's Dissertation, 1 course.
BA 3304, Operations Management, 3 courses.
BA 7000, Research, 9 courses.
BA 8000, Doctor's Dissertation, 14 courses.
ISQS 3344, Introduction to Production and Operations Management, 10 courses.
ISQS 4350, Information Systems Project Management, 19 courses.
ISQS 5343, Operations Management and Management Science, 9 courses.
ISQS 6337, Business Programming Languages, 2 courses.
ISQS 7342, Advanced Topics In ISQS:Project Management, 2 courses.

RESEARCH

Published Intellectual Contributions

Book, Textbook-New

Burns, J., Eubanks, D. (1988). In Mary Schiller (Ed.), *Microcomputers: Business and Personal Applications* (pp. 630).

Burns, J., Austin, L. (1985). In Jack Repcheck (Ed.), *Management Science Models and the Microcomputer* (pp. 432). Macmillan Publishing Company.

Burns, J., Austin, L. (1985). In Jack Repcheck (Ed.), *Management Science: An Aid for Managerial Decision Making* (pp. 605). Macmilllan Publishing Company.

Conference Proceeding

Burns, J., Sirisomboonsuk, P., Janamanchi, B. (2016). *Applications of Concepts from Maturity, Learning and Leanness to Improvements in Project Quality, and Reductions in Duration and Cost.*. Decision Sciences Institute.

Burns, J., Janamanchi, B. (2016). *Fast Track vs Crash: A System Dynamics Model Based Study*. Decision Sciences Institute.

Burns, J., Sirisomboonsuk, P., Cao, Q., Gu, V. (2016). *Relationships between Project Governance and Corporate Governance and their Impacts on Project Performance*. Decision Sciences Institute.

Burns, J., Sirisomboonsuk, P., Cao, Q., Gu, V. (2016). *Understanding the Dynamics of High-Performing Project Teams as Driven by Governance, Organizational Structure and Organizational Culture*. Southwest Decision Sciences Institute Conference Proceedings.

Burns, J., Janamanchi, B. (2014). *A Reconciliation of Dynamic Models of Supply Chains: Applications of Systems Dynamics and Control Theory*. Decision Sciences Institute.

Burns, J., Janamanchi, B. (2014). *Three Echelon Retail Supply Chain Dynamics: A System Dynamics Model Based Study*. Decision Sciences Institute.

Burns, J., Sirisomboonsuk, P. (2014). *Teaching MIS Majors How to Calculate the Value of Additional Information*. Southwest Decision Sciences Institute.

Burns, J. (2013). *Mathematical Models for Planning, Batching and Scheduling Lean-Agile Product Development*.

Burns, J., Janamanchi, B. (2013). *Supply Chain Performance Metric Optimization Recommends Collaborative Planning Forecasting and Replenishment: A System Dynamics Model Based Study*.

Burns, J., Janamanchi, B. (2012). *Estimating optimal project duration and cost for software development projects under conditions of team size dependent productivity: System Dynamics Perspective*. Decision Sciences Institute.

Burns, J., Janamanchi, B. (2011). *Project Dynamics -Time Varying Team Size Effect on Productivity: A System Dynamics Model-based Study*. Decision Sciences Institute.

Burns, J., Janamanchi, B. (2010). *Strategies to Tackle Trends in Customer Orders in a Supply Chain: A System Dynamics Model-based Study*. Decision Sciences Institute.

Burns, J., Oh, D. (2010). *Estimating the Home Purchase Costs of Seoul Citizens*. Proceedings of the 28th International Conference of the System Dynamics Society, Soul, Korea.

Burns, J., Liu, A. (2009). *The National Energy Dilemma: Models for Policy Evaluation*. Decision Sciences Institute.

Janamanchi, B., Burns, J. (2008). *Mean Time Between Failures Estimation: A System Dynamics Model-based Study*. DSI (Decision Sciences Institute) National Conference in Baltimore.

Burns, J., Janamanchi, B. (2008). *Strategies for Removal of the Federal Budget Deficit and Payoff of the National Debt: Analytical and Simulation Studies*. DSI (Decision Sciences Institute) National Conference in Baltimore.

Janamanchi, B., Burns, J. (2008). *Inventory Strategies for Supply Chains in a JIT Context: A Simulation Study*. Southwest DSI Regional Meeting, Houston.

Janamanchi, B., Burns, J. (2008). *Optimal Pricing Strategy: A System Dynamics Simulation Study*. Southwest DSI Regional Meeting, Houston.

Burns, J., Janamanchi, B. (2007). *Customer Order Forecasting in Supply chains: A simulation Study*.

Janamanchi, B., Burns, J. (2007). *Counterintuitive Benefits of Relaxing Inventory replenishment requirements: A system Dynamics Model-based Study*. Decision Sciences Institute National Meeting in Scottsdale, AZ.

Burns, J., Janamanchi, B. (2007). *Dynamics of a Democracy Deeply in debt: Simulation Studies of Federal Revenue and the Capacity of the U.S. to Service its Debt*. Systems Dynamics Society Conference in Boston.

Burns, J., Janamanchi, B. (2007). *Optimal Control and Optimization of System Dynamics Models: some Experiences and Recommendations*.

Burns, J., Janamanchi, B. (2006). *Offshoring Knowledge Worker Jobs—Boom or Burst for the US Economy*. Proceedings of the 23rd International Conference of the System Dynamics Society.

Burns, J., Janamanchi, B. (2006). *Simulation Studies of the Federal Budget Deficit and the National Debt: Will they be Serviceable, and if so, Under What Assumptions?*. IABPAD Spring Conference, Dallas, TX.

Burns, J., Janamanchi, B. (2006). *National Energy Modeling with Implications for a Sustainable Energy Policy*. Southwest DSI (Decision Sciences Institute) Conference Proceedings.

Burns, J., Janamanchi, B. (2006). *Strategies for Reducing Inventory Costs and Mitigating the Bullwhip Effect in Supply Chains: A Simulation Study*. Southwest DSI (Decision Sciences Institute).

Burns, J., Janamanchi, B. (2005). *Support for Meta-Project Definition, Planning, Resourcing and Execution*. Decision Sciences Institute.

Burns, J., Janamanchi, B. (2005). *Project Dynamics with Applications to Change Management and Earned Value Tracking*. Proceedings of the 23rd International Conference of the System Dynamics Society.

Burns, J., Ulgen, O. (2003). *Fully Supporting the Entire Project Lifecycle with Information Technology*. Proceedings of the USP 2003 Conference, Dearborn, Michigan.

Burns, J., Ulgen, O. (2003). *Supply and Value Chain Support Through Scheduling and Simulation: Applications to the Semiconductor Industry*. Proceedings of the USP 2003 Conference, Dearborn, Michigan.

Burns, J., Ulgen, O. (2002). *A Component Strategy for the Formulation of System Dynamics Models*. Proceedings of the 2002 System Dynamics Society Conference, Palermo, Italy.

Burns, J., Ulgen, O. (2002). *A Matrix Architecture for Development of System Dynamics Models*. Proceedings of the 2002 System Dynamics Society Conference, Palermo, Italy.

Burns, J., Gibson, D. (2002). *Comprehensive, Enterprise-wide Data Modeling: The Foundation of Organizational Integration*. Proceedings of the USP 2002 Conference, Lubbock, TX.

Burns, J., Jung, J.-d. (2002). *Partial Automation of Technology Upgrades Applied to Legacy Software*. Proceedings of the USP 2002 Conference, Lubbock, TX (Received $5000 first prize award).

Burns, J., Jung, J.-d. (2002). *Understanding and Controlling the Behavioral Implications of an ERP Implementation/Installation*. Proceedings of the USP 2002 Conference, Lubbock, TX.

Burns, J., Musa, P., Beruvides, M. (2001). *Comparative Analysis of Systems Thinking and Goldratt's Thinking Processes: Task analysis for Enhancing Organizational Knowledge Management*. PICMET2001 Conference Proceedings.

Burns, J. (2001). *Simplified Translation of CLD's into SFD's*. Proceedings of the 2001 System Dynamics Society, Atlanta.

Burns, J. (2001). *Structural Validation of Causal Loop Diagrams*. Proceedings of the 2001 System Dynamics Society, Atlanta.

Burns, J., Huang, I.-L. (2000). *A Cognitive Comparison of Modeling Behaviors between Novice and Expert Information Analysts*. Proceedings of the 2000 Americas Conference on Information Systems, Long Beach, CA.

Burns, J., Huang, I.-L. (1999). *A Classification of Requirement Analysis Techniques on the Basis of Human Cognition*. Proceedings of the 1999 Southwest Decision Sciences Institute Conference.

Burns, J., Huang, I.-L. (1999). *Modeling Information Requirement Analysis as a Text Comprehension Process*. Proceedings of the 1999 Southwest Decision Sciences Institute Conference.

Burns, J., Huang, I.-L. (1998). *An Evolution View of Domain Knowledge Support for Organizational Information Requirement Analysis*. Proceedings of the 1998 Americas Conference on Information Systems, Atlanta, Georgia.

Burns, J., Huang, I.-L. (1997). *Organizational Information Requirement Topology as the Basis for Organizational Information Requirement Specification Reuse*. Proceedings of the 1997 Americas Conference on Information systems.

Burns, J., Kenyon, G. (1996). *Redefining Holding Costs*. Proceedings of the 1996 Decision Sciences Conference in Orlando.

Burns, J., Haddix, S. (1992). *Component Models for Integrated System Performance Analysis*. Second International Conference on Systems Integration, Morristown, NJ.

Burns, J., Hennessey, K. (1989). *Automated Visual Inspection Using Syntactic Representation of Images*. Proceedings of the 1989 American Society for Mechanical Engineers.

Burns, J., Morgeson, D. (1987). *A Methodology for Fabrication of Intelligent Discrete-event Simulation Models*. Proc. 1987 IEEE Systems, Man and Cybernetics Conference.

Burns, J., Morgeson, D. (1987). *Relevant Literature in Support of Knowledge-based Simulation Models*. Proc. 1987 IEEE Systems, Man and Cybernetics Conference.

Burns, J., Goryunov, V. (1985). *Modeling Infimal Management Systems: Applications to Production Planning* (pp. 194-199). Proceedings of the 1985 IEEE International Conference on Systems, Man and Cybernetics, Tucson, Arizona.

Burns, J. (1983). *A Dual-Primal Revised Simplex Algorithm*. Proceedings of the 1983 IEEE International Conference of Cybernetics and Society -- Bombay.

Burns, J., Mahmood, M. (1982). *Toward the Development of a Decision Support System for Curriculum Design*. DSI Proceedings, San Francisco -- Decision Sciences Institute.

Burns, J., Winstead, W. (1982). *M-Labeled Digraphs and Forrester-Style Causal Models*. Proceedings of the IEEE International Conference on Cybernetics and Society, Seattle.

Burns, J., White, L. (1981). *CSF-DSS: A Decision Support System for Identifying Critical Success Factors*. Proceedings of the 1981 Decision Sciences Institute -- Boston.

Burns, J., Meile, L. (1981). *Design of an Interactive Simulation System for Decision Support*. 1981 Proceedings of the Decision Sciences Institute.

Burns, J., Edenburn, D. (1981). *Shading Analysis of a Photovoltaic Cell String Illuminated by Parabolic Trough Concentrator*. Proceedings of the IEEE Photovoltaics Specialists Conference, Kissimmee, Florida.

Burns, J. (1980). *From Flow Diagram to Simulation Model*. Proceedings of the 1980 IEEE International Conference on Cybernetics and Society.

Burns, J. (1980). *Interactive Conversational Formulation of Dynamical Models by Computer Assistance*. Proceedings of the 1980 Summer Computer Simulation Conference, Seattle.

Burns, J. (1979). *Scheduling/Routing/Fleet-sizing Models for Air Transportation Systems*. Proceedings of the Tenth Annual Pittsburgh Conference on Modeling and Simulation.

Burns, J., Winstead, W. (1979). *On Reachability and its Relationship to Uncontrollability, Unobservability and Redundancy*. Proceedings of the 1979 IEEE International Conference on Cybernetics and Society.

Burns, J. (1978). *Techniques for Optimization and Curve (Data) Fitting of Continuous Simulations*. Proceedings of the Twenty-first Midwest Symposium on Circuits and Systems.

Burns, J. (1978). *Computer-aided Design of Simulation Models for Societal Systems*. Proceedings of the Twenty-first North American Meeting of the Society for General Systems Research.

Burns, J. (1977). *A System-Theoretic Approach to the Computer-Aided Design of Nonlinear Dynamic Models for Societal Systems*. Proceedings of the Twentieth Midwest Symposium on Circuits and Systems,.

Burns, J., Ulgen, O. (1977). *Adjacency Matrices and System Dynamics*. Proceedings of the Eighth Annual Pittsburgh Conference on Modeling and Simulation, Pittsburgh.

Burns, J. (1977). *Component Connection Concepts and Systems Dynamics*. Proceedings of the Twentieth Midwest Symposium on Circuits and Systems, Lubbock, Texas.

Burns, J. (1977). *Models for Problem-Driven Technology Assessments: Applications to Human Rehabilitation*. Proceedings of the 1977 International Conference on Cybernetics and Society, Washington, D.C..

Burns, J. (1977). *Social Modeling Methodology and Kile's RWIII*. Proceedings of the Society for General Systems Research, Denver, Colorado.

Burns, J., White, L. (1976). *A Methodology for Automated Curriculum Design*. Proceedings of the Seventh Annual Pittsburgh Conference on Modeling and Simulation, Pittsburgh.

Burns, J. (1976). *A Preliminary Approach to Automating the Process of Simulation Model Synthesis*. Proceedings of the Seventh Annual Conference on Modeling and Simulation, Pittsburgh.

Burns, J. (1976). *System-Theoretic Methods for Machine-Translation of Causal or Cross-Impact Models into Simulation Models*. Proceedings of the First International Conference on Information Sciences and Systems.

Burns, J. (1975). *Towards a Mathematically Rigorous Methodology for Simulation of Social Processes*. Proceedings of the 1975 Summer Computer Simulation Conference, San Francisco.

Burns, J. (1974). *A Disaggregated, Hierarchical World Model*. Proceedings of the Fifth Annual Pittsburgh Conference on Modeling and Simulation, Pittsburgh, Pennsylvania.

Burns, J. (1973). *Optimization Techniques Applied to the Forrester Model of the World*. Proceedings of the Fourth Annual Pittsburgh Conference on Modeling and Simulation, Pittsburgh.

Burns, J., Malone, D. (1973). *Sensitivity Analysis and Forrester's Model of the World*. Seventh Annual Southeastern Conference on System Theory Proceedings, Raleigh-Durham.

Instructor's Manual

Burns, J., Eubanks, D. (1988). *Instructor's Manual and Test Bank to Accompany "Microcomputers: Business and Personal Applications*.

Burns, J., Austin, L. (1985). *Instructor's Manual -- Management Science: An Aid for Managerial Decision Making*.

Journal Article, Academic Journal

Burns, J., Sirisomboonsuk, P., Cao, Q., Gu, V. (2018). Relationship between Project Governance and Information Technology Governance and its Impact on Project Performance. *International Journal of Project Management*.

Gu, V., Burns, J. (2016). The Launch Strategy Choices in China's Pharmaceutical Market. *International Journal of Pharmaceutical and Healthcare Marketing, 10*(3), 339 - 356.

Burns, J., Gu, V. (2016). The Launch Strategy Choices in China's Pharmaceutical Market. *International Journal of Pharmaceutical and Healthcare Marketing, 10*(3), 339-356.

Burns, J., Janamanchi, B. (2016). Performance Metric Optimization Advocates CPFR in Supply Chains: A System Dynamics Model Based Study. *Cogent Business and Management, 3*(1), 20.

Burns, J., Sirisomboonsuk, P., Janamanchi, B. (2015). Decision Support for the Entire Project Lifecycle. *American Journal of Information Technology*.

Janamanchi, B., Burns, J. (2015). Performance Metric Optimization Advocates CPFR in Supply Chains: A System Dynamics Model Based Study. *Cogent Business & Management, 3*(1139440).

Burns, J., Janamanchi, B. Decision Support for the Entire Projet Lifecycle. *American Journal of Information Technology, 5*(1&2), 22.

Calvo-Amodio, J., Patterson, P., Smith, M., Burns, J. (2015). Application of Transition-Phase Management Model for an Electronic Health Record System Implementation: A Case Study. *Engineeing Management Journal, 27*(3), 131-140.

Sirisomboonsuk, P., Burns, J. (2014). How Decisions Determine the Value of Additional Relevant Information. *Decision Line, 3-Feb*(March/May), 12 - 17.

Calvo-Amodio, J., Patterson, P., Smith, M., Burns, J. (2014). A System Dynamics Model for Managing Transition-Phases in Healthcare Environments. *Journal of Industrial Engineering and Management Innovation*.

Burns, J., Janamanchi, B. (2013). Control Theory Concepts Applied to Retail Supply Chain: A System Dynamics Modeling Environment Study. *Modeling and Simulation in Engineering, 2013*.

Burns, J., Janamanchi (2013). Control theory concepts applied to retail supply chain: A system dynamics modeling environment study. *Modeling and Simulation in Engineering, 2013*(2013).

Burns, J., Bellah, C. (2013). Offshore information systems development process in India: How practitioners respond to challenges in the process. *Journal of Information Technology Case and Analysis Research, 15*(2), 30 - 53.

Burns, J., Janamanchi (2012). The Case for Comprehensive Models and Methodologies for Project Planning, Tracking and Managing. *Global Perspective on Engineering Management, 1*(3), 74 - 82.

Burns, J., Janamanchi, B. (2012). The Case for Comprehensive Models and Methodologies for Project Planning, Tracking and Managing. *Global Perspectives on Engineering Management, 1*(3), 9.

Burns, J., Liu, C. (2012). Analysis of U.S. Electricity Generation Using Tools of System Dynamics. *International Journal of Business and Economics Perspectives, 6*(1), 17-30.

Burns, J., Cao (2011). Deterministic, path sensitive heuristics for project earned value management. *International Jouirnal of Project Organization and Management, 3*(1).

Burns, J., Cao, Q. (2011). Deterministic, Path-Sensitive Heuristics for Project Earned Value Management. *International Journal of Project Organization and Management, 3*(1), 1-21.

Burns, J., Cao, C., Gu, V. (2009). Applications of Real Option Analysis to Vendor Selection Process in IT outsourcing. *Information Systems and Change Management, 4*(2), 143 - 155.

Burns, J., Coa, Q., Gu, V. (2009). Applications of Real Option Analysis to Vendor Selection Process in IT Outsourcing. *International Journal of Information Systems and Change Management, 4*(2), 143-155.

Cao, Q., Gu, V., Burns, J. (2009). Applications of Real Option Analysis to Vendor Selection Process in IT Outsourcing,. *International Journal of Information Systems and Change Management, 4*(2), 143 - 155.

Burns, J., Jung, D. G., Hoffman, J. (2009). Capturing and Comprehending the Behavioral/Dynamical Interactions within an ERP Implementation. *Journal of End User Computing, 21*(2), 67-90.

Hoffman, J. J., Burns, J., Jung, D. (2009). Capturing and Comprehending the Behavioral/Dynamical Interactions within an ERP Implementation,. *Journal of End User Computing, 21*(2), 67 - 90.

Cao, Q., Burns, J. (2009). Deterministic, Path-Sensitive Heuristics for Project Earned Value Management. *International Journal of Project Organization and Management, 3*(1), 1 - 21.

Burns, J., Jung, Hoffman, J. (2008). Capturing and Comprehending the Behavioral/Dynamical Interactions within and ERP Implementation. *Journal of Organizational and end User Computing, 21*(2).

Janamanchi, B., Burns, J. (2008). Reducing Bullwhip Oscillation in a Supply Chain: A System Dynamics Model-Based Study. *Information Systems and Change Management, 3*(2), 208 -.

Burns, J., Janamanchi, B. (2008). Simulation Studies of the Effects of Safety Stock and related Policies upon Bullwhip. *International Journal of Information Systems and Change Management, Vol. 3, No. 2*, 171-187.

Janamanchi, B., Burns, J. (2008). Simulation Studies of the Effects of Safety Stock and Related Policies Upon Bullwhip Oscillation in Supply Chains. *Information Systems and Change Management, 4*.

Burns, J., Janamanchi, B. (2008). Simulation Studies of the Effects of Safety Stock and related Policies upon Bullwhip Oscillation in Supply Chains,. *International Journal of Information Systems and Change Management, 3*(2), 171 - 187.

Burns, J., Janamanchi, B. (2007). "Reducing Bullwhip Oscillation in a Supply Chain: A System Dynamics Model Based. *International Journal of Information Systems and Change Management, Vol. 2, No. 4*, pp. 350-371.

Burns, J., Janamanchi, B. (2007). Improved Task Estimation and Project Tracking. *Information Systems and Change Management, 2*(2), 167 - 190.

Burns, J., Janamanchi, B. (2007). Improved Task Estimation and Project Tracking. *International Journal of Information Systems and Change Management, 2*(2), 167-190.

Burns, J., Janamanchi, B. (2007). Off shoring Knowledge-worker Jobs: Boom or Burst for the US Economy?. *The Icfai Journal of Knowledge Management, 5*(2), 20 - 39.

Burns, J., Janamanchi, B. (2007). Reducing Bullwhip Oscillation in a Supply Chain: A System Dynamics Model Based Study,. *International Journal of Information Systems and Change Management, 2*(4), 350 - 371.

Burns, J., Janamanchi, B. (2007). Offshoring Knowledge Worker Jobs: Boom or Burst for the U.S. Economy?. *The Icafi Journal of Knowledge Management, V*(2), 20-39.

Burns, J., Janamanchi, B. (2006). Dynamics of Change Management in a Technology Project Context. *Information Systems and Change Management, 1*(1), 115 - 137.

Burns, J., Janamanchi, B. (2006). Dynamics of Change Management in a Technology Project Context. *International Journal of Information Systems and Change Management, 1*(2), 115-137.

Burns, J., Musa, P. (2006). System Dynamics and Theory of Constraints Compared in various Problem Contexts. *IEEE Transactions on Engineering Education*.

Janamanchi, B., Burns, J. (2005). Off-shoring Knowledge Worker Jobs: Boom or Burst for the US Economy?. *Knowledge Management*.

Burns, J., Gibson, C., Lin, Y. (2003). E-Business Experiences of Practitioners and Consultants. *Information Systems Management, 20*(3), 8-18.

Burns, J., Ottaway, T. (2000). An Adaptive Production Control System Using Agent Technology. *International Journal of Production Research, 38*(4).

Burns, J., Kim (2000). Decision Process Cycle Time Reduction Through Coordination of Modeling Activities. *Cycle Time Research, 6*(1), 47-54.

Burns, J., Kim, J. (2000). An Architecture for Organizational Decision Support Systems. *Journal of Organizational and End-User Computing, 12*(3), 23-33.

Burns, J., Kim, J. (1998). Ertror Reduction iin Distributed DSS Through Coordination of Modeling Activities: Simulation Study. *Journal of Organizational Computiing, 8*(3), 217-245.

Burns, J., Ottaway, T. (1997). Adaptive Agile Approaches to Organizational Architecture Utilizing Agent Technology. *Decision Sciences, 28*(1), 483-511.

Burns, J., Jung, J.-d. (1993). Connectionist Approaches to Inexact Reasoning and Learning Systems for Executive and Decision Support: Conceptual Design. *Decision Support Systems, 10*, 37-66.

Burns, J., Lin, Y., Austin, L. (1992). An Intelligent Algorithm for Mixed-Integer Programming Models. *Computers and Operations Research, 19*(6), 461-468.

Burns, J., Wright, H., Chang, H. (1992). An Expert System for Prescribed Burning of Rangelands. *Rangelands, 14*(5), 286-292.

Burns, J. (1990). A Specification Language for Generating Intelligent Discrete Next-Event Simulations. *Information and Decision Technologies, 16*(1), 3-13.

Burns, J., Lin, Y., Austin, L. (1990). An Implicit Branch-and-Bound Algorithm for Mixed-Integer Linear Programming. *Computers and Operations Research, 17*(5), 457-465.

Burns, J., Hayworth, D., Winstead, W. (1989). Semantic Nets as Paradigms for Both Causal and Judgmental Knowledge Representation. *IEEE Transactions on Systems, Man and Cybernetics, SMC-19*(1), 58-68.

Burns, J., Morgeson, D. (1988). An Object-Oriented World View for Intelligent, Discrete, Next-Event Simulation. *Management Science, 34*(12), 1245-1440.

Burns, J., Cokolez, C. (1988). Distribution Systems—Warehouse Location and Capacity. *Omega, 17*(1), 45-51.

Burns, J., Morgeson, D. (1988). Methodology for Knowledge-based Simulation. *Information and Decision Technologies, 14*, 15-30.

Burns, J., Mahmood, M. (1985). Design and Development of a Decision Support System for Curriculum Design. *Policy and Infdormation, 9*(2), 77-94.

Burns, J., Winstead, W. (1985). M-labeled Digraphs: An Aid to the Analysis of Structural and Simulation Models. *Management Science, 31*(3), 343-357.

Burns, J., Davison, Winstead, W. (1983). Author's Reply. *IEEE Transactions on Systems, Man and Cybernetics, SMC-13*(3), 432-434.

Burns, J., Minch, R. (1983). Conceptual Design of Decision Support Systems Utilizing Management Science Models. *IEEE Transactions on Systems, Man and Cybernetics, SMC-13*(4), 548-557.

Burns, J., Mahmood, M., Courtney, J. (1983). On Environmental Factors Affecting Decision Support System Design. *Database*, 23-28.

Burns, J. (1982). Solar Energy and the National Energy Dilemma: A Model for Policy Evaluation. *Technological Forecasting and Social Change, 21*, 213-228.

Burns, J., Winstead, W. (1982). Input and Output Redundancy. *IEEE Transactions on Systems, Man and Cybernetics, SMC-12*(6), 785-794.

Burns, J., Winstead, W. (1982). An Input/Output Approach to the Structural Analysis of Digraphs. *IEEE Transactions on Systems, Man and Cybernetics, SMC-12*(1), 15-23.

Burns, J., Marcy, W. (1979). Causality: Its Characterization by Methodologies for Modeling Socio-Economic Systems. *Technological Forecasting and Social Change, 14*, 387-398.

Burns, J., Beights, W., Ulgen, O. (1979). An Algorithm for Converting Signed Digraphs to Forrester Schematics. *IEEE Transactions on Systems, Man and Cybernetics, SMC-9*(3), 115-125.

Burns, J., Ulgen, O. (1978). A Sector Approach to the Formulation of System Dynamics Models. *International Journal of Systems Science, 9*(6), 649-680.

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Magazine/Trade Publication

Burns, J., Sirisomboonsuk, P. (2014). *How Decisions Determine the Value of Additional Relevant Information* (2nd ed., pp. 12-17). Decision Line/Decision Sciences Institute.

Presented Paper

Burns, J. (2007). *Airline Business Cycles: What causes them and what can be done to counteract them*. Presented to Southwest Airlines as part of a CELDi meeting held on site.

Research Report

Burns, J., Janamanchi, B. (2006). *National Energy Modeling/Policy with Implications for Commercial Airlines*. Presented at Southwest Airlines, Dallas.

Burns, J., Wright, H. (1991). *Burning Expert System User Manual, Technical Report: Texas Tech University, Departments of Range and Wildlife and Information Systems and Quantitative Sciences*.

Burns, J. (1985). *Knowledge Bases and Simulation*. ORSA/TIMS.

Burns, J. (1984). *Management Science Models and the Microcomputer*. ORSA/TIMS.

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Burns, J., Edenburn, D. (1980). *A Cell String Model with Mirror Gap Shading for a Parabolic Trough Photovoltaic Collector*. SAND81-0069, Sandia Laboratories, Albuquerque.

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Burns, J. (1978). *AIR CARGO: An Integrated Systems View*. CR-145384, NASA, Langley Research Center, Hampton, Virginia.

Presentations Given

Burns, J., ORSA/TIMS, "Partitioned Adjacency Matrix Representations of Parse Trees and Neural Nets," New York. (October 1990).

Burns, J., Morgeson, D. (Other), ORSA/TIMS, "A Specification Language for Generating Intelligent, Discrete, Next-Event Simulatioins," Operations Research Society of America, St. Louis. (October 1987).

Burns, J., Morgeson, D. (Other), ORSA/TIMS, "Incorporating AI Concepts into Intelligent, Discrete, Next-Event Simulation," Operations Research Society of America, Miami, FL. (October 1986).

Burns, J., Winstead, W. (Other), TIMS/ORSA, "M-Labeled Digraphs as Paradigms for Both Casual and Judgmental Knowledge Representation," The Institute of Management Science, Los Angles, CA. (October 1985).

Contracts, Grants and Sponsored Research

Grant

Burns, J. R. (Co-Principal), Hennessey, K. (Co-Principal), "Automated Visual Inspection: Defect Characterization and Production Testing," Sponsored by Texas Higher Education Coordinating Board ATP, State, $394,000.00. (September 1, 1989 - August 31, 1993).

Burns, J., Hennessey, K., "Automated Visual Inspection: Defect Characterization and Production Testing--Supplement to Support Minorities," Sponsored by Texas Higher Education Coordinating Board ATP, State, $24,000.00. (September 1, 1990 - August 31, 1992).

Burns, J. (Co-Principal), Wright, H. (Co-Principal), "Real time Analysis to Optimize the Burning of Blacklines in Grass-shrub fuels with a Helitorch," Sponsored by Texas Higher Education Coordinating Board ATP, State, $165,000.00. (September 1, 1989 - May 31, 1992).

Burns, J., "Computer-aided Formulation of Simulation Models," Sponsored by Texas Tech College of Business Administration Research Award, $5,000.00. (September 1, 1983 - May 31, 1984).

Burns, J., "Exploratory Computer Studies in Technology Assessment: Human Rehabilitation Techniques," Sponsored by National Science Foundation, Federal, $9,000.00. (September 1, 1976 - May 31, 1977).

GENERAL

Licensures and Certifications

Project Management Professional, Project Management Institute. (January 5, 2015 - Present).

Certified in Integrated Resources Management, American Production and Inventory Control Society. (March 10, 1996 - Present).

Professional Memberships

Project Management Institute. (February 15, 2012 - Present).

Served as sessions chair many times. Ran the Doctoral Student Consortium in 2008, Decision Sciences Institute. (January 2000 - Present).

System Dynamics Society. (January 15, 1987 - Present).

Registered Professional Engineer in the State of Texas. (January 15, 1975 - December 31, 1977).