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Education

D.Sc., School of Engineering and Applied Science, George Washington University, 1982.
Major: Operations Research

M.S., School of Industrial and Manufacturing Sciences, Cranfield University, 1978.
Major: Management Science

B.S., Arya-Mehr University of Technology, 1971.
Major: Physics

Professional Positions

Academic - Faculty

Professor Emeritus, Merrick School of Business, University of Baltimore. (2013 - Present).

Professor, Merrick School of Business, University of Baltimore. (1998 - 2013).

Associate Professor, Merrick School of Business, University of Baltimore. (1990 - 1998).

Assistant Professor, Merrick School of Business, University of Baltimore. (1983 - 1990).

Academic - Administrative/Other

Post Doctoral Fellow Researcher, The International Water Resources Institute (IWRI), George Washington University. (1982 - 1983).

Licenses and Certifications

Advanced Certification in Information Systems, MIS Institute of the AACSB. (1991).

Professional Memberships

Society for College and University Planning (2002).

Environmental SIG (2001).

Performance Measurement Association (2001).

System Dynamics Society (2001).

Awards and Honors

The CSX Leadership Award in Business. (2011).

Named One of the Top Five Professors by Graduate Students. (2005).

Recognition of My Contribution to the Merrick School of Business. University Annual Convocation. (2005).

Regents' Faculty Award for Excellence in Research. University System of Maryland (USM). (2001).

The Wright Distinguished Endowed Chair: Endowed Chair Professor of Decision Science, Simulation, and Statistics. Merrick School of Business, University of Baltimore. (1983).

RESEARCH

Intellectual Contributions

Books

Arsham, H. (2009). Business Statistics Review. *Pearson Publisher.*

Book Chapters

Arsham, H., & Adlakha, V. G. (2014). DECISIONS FOR THE PERFORMANCE-DESIGN PROCESS: A SINGLE-RUN DISCRETE-EVENTS SIMULATION APPROACH. *Cambridge Scholars Publishing.*

Arsham, H., Bardossy, G., & Sharma, D. K. (2014). Essentials of Linear Programming for Managers: From System of Inequalities to Software Implementation. *IGI Global publisher. Chapter 7*(First Edition), 96-127.

Arsham, H., & Adlakha, V. G. (2014). Critical Path Stability Region: A Single-Time Estimate. *IGI Global publisher.* 35-60.

Arsham, H. (2011). Bartlett's Test. *Springer. Part II.* 87-88.

Arsham, H. (2010). Gradient-based optimization techniques for discrete event systems simulation. *John Wiley & Sons. 3.* 1429-1446.

Arsham, H., & Stemberger, M. (2005). Selected Decision Support Models for Production and Public Policy. *Slovene Association of Operational Research.* (3), 81-102.

Arsham, H. (2002). A New Introduction to Global Optimization over Polyhedrons. *WSEAS Press.*

Refereed Journal Articles

Arsham, H. (2013). An Interior Boundary Pivotal Solution Algorithm for Linear Programs with the Optimal Solution-based Sensitivity Region. *International Journal of Mathematics in Operational Research. 5*(6), 663–692.

Arsham, H. (2013). Modeling Tariff to Analyze Protectionism. *International Journal of Pure and Applied Mathematics. 84*(4), 389-396.

Arsham, H. (2013). Monte Carlo Solution to Find Input Parameters in Systems Design Problems. *International Journal for Computational Methods in Engineering Science and Mechanics. 14*(4), 343-353.

Arsham, H. (2013). Adaptive K-S Tests For White Noise in the Frequency Domain. *International Journal of Pure and Applied Mathematics. 82*(2), 521-529.

Arsham, H. (2013). Modeling and Simulation for Product Design Process. *Simulation: Transactions of the Society for Modeling and Simulation International. 89*(2), 178-191.

Arsham, H. (2012). Data Perturbation Analysis for IS Project Management Based on a Single Time Estimate. *Internati International Journal of Enterprise Information Systems. 8*(4), 77-98.

Arsham, H. (2012). Injectivity and Surjectivity Equivalency of Linear Mapping: A Reversal of the Traditional Approach. *International Journal of Pure and Applied Mathematics. 79*(4), 595-603.

Arsham, H. (2012). Foundation of Linear Programming: A Managerial Perspective From Solving System of Inequalities to Software Implementation. *International Journal of Strategic Decision Sciences. 3*(3), 40-60.

Arsham, H., Adlakha, V. G., & Lev, B. (2009). A Simplified Algebraic Method for System of Linear Inequalities with LP Applications. *OMEGA. 37*(4), 876-882.

Arsham, H., Ford, D. A., & Morse, J. N. (2008). The Efficient Market Hypothesis in Personal Finance: Choosing an Mortgage. *The Journal of Global Business Issues. 2*(2), 191-200.

Arsham, H. (2008). A Validation and Verification Tool for Optimization Solvers. *Journal of Information & Optimization Sciences. 29*(1), 57-80.

Arsham, H., Ford, D. A., Pitta, D. A., & Morse, J. N. (2007). The Rate Decision: Adjustable vs Fixed Rate Mortgages. *Journal of Business & Economics Research. 11*(5), 31-42.

Arsham, H. (2007). A Computationally Stable Solution Algorithm for Large-Scale Linear Programs. *Applied Mathematics and Computation. 188*(2), 1549-1561.

Arsham, H. (2007). A Hybrid Gradient and Feasible Direction Pivotal Solution Algorithm for General Linear Programs. *Applied Mathematics and Computation. 195*(3), 982-995.

Arsham, H. (2007). Construction of the Largest Sensitivity Region for General Linear Programs. *Applied Mathematics and Computation. 198*(3), 1123-1150.

Arsham, H. (2007). Monte Carlo Techniques for Parametric Finite Mulitdimensional Integral Equations. *Monte Carlo Methods and Applications. 13*(3), 173-195.

Arsham, H. (2007). Perturbed Matrix Inversion with Application to LP Simplex Method. *Applied Mathematics and Computation. 197*(1), 1003-1016.

Arsham, H. (2006). A Big-M Free Solution Algorithm for General Linear Programs. *International Journal of Pure and Applied Mathematics. 32*(4), 549-564.

Arsham, H. (2006). Simulation Based Decision Support for Systems Design and Control. *Organization (Organizacija): Journal of Management, Information Systems and Human Resource. 39*(10), 626-634.

Arsham, H. (2005). A Computer Implementation of the Push-and-Pull Algorithm and Its Computational Comparison with LP Simplex Method. *Applied Mathematics and Computation. 170*(1), 36-63.

Arsham, H. (2005). Tight Bounding of Continous Functions over Polyhedrons: A New Introduction to Exact Global Optimization. *International Journal of Pure and Applied Mathematics. 19*(3), 393-413.

Arsham, H. (2004). Decision Analysis: Making Justifiable, Defensible Decisions. *e-Quality. 12*(3), 1-2.

Arsham, H. (2004). Global Optima for Linearly Constrained Business Decision Models. *Scientific Journal of Administrative Development. 2*(1), 2-53.

Arsham, H. (2003). An Algorithm for Simplex Tableau Reduction with Numerical Comparions. *International Journal of Pure and Applied Mathematics. 4*(1), 57-85.

Arsham, H., Damij, T., & Grad, J. (2003). An Algorithm for Simplex Tableau Reduction: The Push-to-Pull Solution Strategy. *Applied Mathematics and Computation. 137*(2-3), 525-547.

Arsham, H., & Stemberger, M. (2003). From Linear to Nonlinear Optimization:The Missing Chapter. *International Journal of Mathematical Education in Science & Technology. 34*(3), 417-430.

Arsham, H. (2003). Globally Tight Bounds for Almost Differentiable Functions over Polytopes with Application to Tolerance Analysis. *OPSEARCH: Journal of the Operationsal Research Society of India. 40*(4), 305-319.

Arsham, H. (2003). Linearly Contstrained Global Optimization: A General Solution Algorithm with Applications. *Applied Mathematics and Computation. 134*(2-3), 345-361.

Arsham, H. (2002). Continuous Global Optimization Over Polyhedrons: A New Introduction to Optimization. *International Mathematical Journal. 1*(1), 37-52.

Arsham, H. (2002). Impact of the Internet on Learning and Teaching. *The United States Distance Learning Association Journal. 16*(3), 6-21.

Arsham, H. (2000). The Use of Simulation in Discrete Event Dynamic Systems Design. *Journal of Systems Science. 31*(5), 563-573.

Conference Proceedings

Arsham, H. (2007). An Algorithm for Perturbed Matrix Inversion Problem. *The 9th International Symposium on Operations Research.*

Arsham, H., & Adlakha, V. G. (2007). Solving Linear System of Inequalities with Applications to Linear Programs. *Proc Proceedings, The Annual Conference of the Northeast Decision Sciences Institue.*

Arsham, H., & Ford, D. A. (2007). The Rate Decision: Adjustable versus Fixed Rate Mortgages. *Proceedings, The Annual Conference of the Northeast Decision Sciences Institute.*

Arsham, H. (2002). A New Introduction to Global Optimization over Polyhedrons. *The International WSEAS Conferences.* 1291-1296.

Arsham, H. (2002). Students' Dropout: Cause and Prevention,. *The Open and Distance Learning, UK Open University.*

Arsham, H. (2001). A New Introduction to the Linearly Constrained Global Optimization. *The 6th International Symposium on Operational Research.* 133-138.

Newsletters

Arsham, H. (2002). Zero in Four Dimensions: Historical, Psychological, Cultural, and Logical Perspectives. *The Pantaneto Forum. 2*(5), 19 pages.

Arsham, H. (2001). Teaching an Online Course: The Debriefing Dr. Arsham. *The E-Learning Post.*

Broadcast Media

Arsham, H. (2012). BBC Interview: Even Numbers and Zero. *BBC Current Affairs on World Service and Radio 4.*

Magazine/Trade Publication

Arsham, H. (2003). Tapping Into E-Learning: An Interview. *The Military Officer Magazine. 1*(1), 36-40.

Other

Arsham, H. (2002). Questionnaire Design and Surveys Sampling. *SySurvey: The Online Survey Tool.*

Magazine/Trade Publication

Arsham, H. (2001). Thinking of Zero. *Science News. 25*(159).

Media Contributions

Questionnaire Design and Surveys Management with Applications to Sample Size in Surveys Sampling, key Survey: (2004).

What are Models in Decision Making Process, News Age: Borno, Nigeria. (2003).

Questionnaire Design and Surveys Sampling, SySurvey: The Online Survey Tool: (2002).

Relationships among Statistical Tables and Their Applications, The SpineLine Magazine, The North American Spine Society: A graphic presentation that appeared on the cover of the SpineLine Magazine, Vol. III, No.3, 2002. (2002).

Education in Marketplace, The Washington Post: An interview. (2000).

Contracts, Grants and Sponsored Research

Grants

Arsham, Hossein , "The Human and Social Dynamics, Grant Proposal Consulting HSD/ERCD-604-011" Sponsored by National Science Foundation, (2005).

Arsham, Hossein , "Decision Theory with Applications to Engineering Design, Grant Proposal Consulting ENG/DMII-443-537" Sponsored by National Science Foundation, (2002).

SERVICE

Department Service

Committee Member, Department Chair Search.

Committee Member, Student Merit Awards.

The author, and the Examiner, OPRE504 Waiver's Test. (January 1998 - December 2008).

College Service

Committee Member, Accreditation (AACSB) Task Force.

Committee Member, Business Advisory Council.

Committee Member, Business Library.

Committee Member, Endowed Chairs Advisory Committee.

Committee Member, Graduate Curriculum Review.

Committee Member, Interinstitutional Library Automation for the University System of Maryland.

Chairman, Management Science Group.

The Permanent Waiver Examiner, MBA Business Statistic Course.

Committee Member, New Building Planning.

Committee Chair, Research Award.

Committee Member, Sabbatical Committee.

Committee Chair, Scholarship Continuous Improvement Committee.

Committee Member, Strategic Planning Committee.

Committee Chair, Teaching Award.

Committee Member, Tenure and Promotion.

Committee Member, Undergraduate Curriculum Review.

University Service

Committee Member, Library Committee.

Professional Service

Editorial Review Board Member, Journal of Advances in Applied & Computational Mathematics. (January 2013 - Present).

Editorial Review Board Member, Journal of Operational Research and Decision Science Studies. (January 2013 - Present).

Editor, Associate Editor, Scientific Journal of Mechanical and Industrial Engineering. (January 2013 - Present).

Editor, Associate Editor, The Journal of Global Good Governance, Ethics and Leaderships. (January 2013 - Present).

Editor, Associate Editor, The Journal of Information & Optimization Sciences. (January 2013 - Present).

Editor, Associate Editor, Organization: The Journal of Management, Information Systems and Human Resources. (January 2012 - Present).

Editor, Associate Editor, International Journal of Mathematics in Operational Research,. (January 2008 - Present).

Editor, Senior Editor, International Journal of Strategic Decision Sciences. (January 2008 - Present).

Editor, Associate Editor, International Journal of Ecological Economics & Statistics. (January 2006 - Present).

Editor, Associate Editor, International Journal of Statistics and Systems. (January 2006 - Present).

Committee Member, International Scientific Committee, IASTED International Conferences. (January 2002 - Present).

Committee Member, International Scientific Committee, International Symposium on Adaptive Systems. (January 2001 - Present).

Editor, Senior Editor, Journal of Interdisciplinary Mathematics. (January 1997 - January 2013).

Editor, Associate Editor, Computational Statistics & Data Analysis. (January 1989 - January 2005).

Reviewer, Journal Article, Educational Technology & Society Journal. (January 1997 - January 2005).

Editor, Associate Editor, Journal of Applied Statistical Reasoning. (January 1997 - January 2002).

Public Service

Member, Advisory Board, IUI.

Faculty Member, Association for Information Systems.

Faculty Member, Beta Gamma Sigma, The Honor Society for AACSB Accredited Business Programs.

Member, Durand Academy & Community Services, The Durand Foundation.

Member, Faculty Advisory Board, California National University.

Faculty Member, International Engineering Consortium.

Faculty Member, Omega Rho, The International Honorary Society for OR.

Fellow, SIFE: Sam M. Walton.

Guest Speaker, The 6th Meeting of The Federation of European Simulation Societies.

Member, The Beacon Project.

Liason, The Institute for Operation Research and Management Science (INFORMS).

Fellow, The World Innovation Foundation: Scientific Discovery.

Faculty Advisory Board Member, Western Governors University.

Consulting

Government, National Science Foundation, (2005).

Government, National Science Foundation, (2002).