

Alice Elaine Smith C.V.

CONTACT INFORMATION

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ACADEMIC POSITIONS

2023-present	JOE W. FOREHAND, JR. DISTINGUISHED PROFESSOR
2015-2023	JOE W. FOREHAND/ACCENTURE DISTINGUISHED PROFESSOR
2012–2015	W. ALLEN AND MARTHA REED PROFESSOR
2013-present	JOINT APPOINTMENT with Department of Computer Science and Software Engineering
1999-2011	PROFESSOR AND CHAIR
2001-2004	PHILPOTT—WESTPOINT STEVENS PROFESSOR Department of Industrial and Systems Engineering Auburn University Auburn University, Alabama
2017- present	VISITING PROFESSOR Department of Industrial Engineering Pontifical Catholic University of Valparaíso Valparaíso, Chile
March 2020	FULBRIGHT SPECIALIST AND VISITING PROFESSOR School of Engineering University of La Sabana Chia (Bogota), Colombia
March – June 2017	SENIOR FULBRIGHT FELLOW Department of Industrial Engineering Pontifical Catholic University of Valparaíso Valparaíso, Chile
March 2016	FULBRIGHT SPECIALIST AND VISITING PROFESSOR Department of Production Engineering Universidad EAFIT Medellin, Colombia
January – June 2013	SENIOR FULBRIGHT FELLOW AND VISITING PROFESSOR Department of Industrial Engineering Bilkent University Ankara, Turkey
1996-1999	ASSOCIATE PROFESSOR <i>Board of Visitors Faculty Fellow (1994 -1999)</i> Department of Industrial Engineering University of Pittsburgh Pittsburgh, Pennsylvania

1991 -1996 ASSISTANT PROFESSOR
 Department of Industrial Engineering
 University of Pittsburgh
 Pittsburgh, Pennsylvania

Synopsis of Administrative Achievements: During tenure as Chair, the Industrial and Systems Engineering Department at Auburn University witnessed unprecedented growth in student enrollments (+200%), research funding (+500%) and private donations (+400%). Over ten endowments were founded. Facilities expanded significantly and the department became a leader of three federally funded research centers funded by NSF, DoD, CDC/NIOSH and private industry. Interdisciplinary educational programs were developed including systems engineering, MBA / MISE dual program, automotive manufacturing systems, and occupational safety and ergonomics. Hiring all but one of the current faculty and staff, diversity of student body and faculty improved. New faculty and staff positions were defined, created and filled. International collaborations flourished and an industrial advisory board was established. Ranking (*U.S. News*) reached the top 25% of all IE departments nationally. The ISE department at Auburn University had approximately 250 undergraduate students, 140 graduate students, 12 tenure stream faculty positions, four staff positions, \$3M annual hard money budget, \$1.5M annual research expenditures, \$200K annual donations and \$4M in endowments when I concluded my leadership.

Research Focus: Modeling, analysis and optimization of complex systems using computational intelligence (artificial neural networks, meta-heuristics and fuzzy systems) combined with techniques from probability and statistics and from operations research. Primary application areas include manufacturing process control, advanced materials microstructure, design of reliable wired and wireless telecommunications networks, facilities design for healthcare, retail and manufacturing enterprises, and financial modeling.

INDUSTRIAL POSITIONS

Southwestern Bell Corporation, General Headquarters
 One Bell Center, St. Louis, Missouri

1988-1989 : AREA MANAGER - TRANSMISSION ENGINEERING

Direction and evaluation of research at Bell Communications Research Inc. (Bellcore) and representative to American National Standards Institute (ANSI) working groups concerning fiber optic systems, synchronous voice/data transport and digital video services.

1987-1988 : AREA MANAGER - CAPITAL DEPLOYMENT

Development of information systems for engineering design and facilities management. Supervision of one engineer, four programmers and multiple vendors with \$500,000 annual development budget.

1984-1986 : STAFF MANAGER - ENGINEERING DESIGN

Project planning, financial analysis and system design of computer systems.

1981-1983 : STAFF SPECIALIST - BUDGET MANAGEMENT METHODS

High level allocation and analysis of construction budgets totaling \$700 million annually.

1979-1981 : SUPERVISOR - ENGINEERING (HOUSTON, TEXAS)

Planning and design of telephone facilities with annual capital expenditures of \$500,000.

EDUCATION

B.A. SPANISH, 2022

Auburn University (Auburn, Alabama).
Global Seal of Biliteracy with Functional Proficiency Level in Spanish.

PH.D., ENGINEERING MANAGEMENT AND SYSTEMS ENGINEERING, 1991.

Missouri University of Science and Technology (Rolla, Missouri).
Chancellor's Fellowship.

M.B.A., 1988.

Saint Louis University (St. Louis, Missouri).

B.S., CIVIL ENGINEERING, 1979.

Rice University (Houston, Texas).
National Merit Scholar, George R. Brown Engineering Scholar, Tau Beta Pi Engineering Honor Society,
cum laude graduate.

HONORS AND AWARDS

One of the top 2% of World's Scientists 2023 by Stanford University / Elsevier.
<https://ecebm.com/2022/10/11/stanford-university-names-worlds-top-2-scientists-2022/> Listed in the
top 40% of these select scholars.

Named Joe W. Forehand, Jr .Distinguished Professor (endowed chaired position) (2023)

Auburn University Author Award 2023

Named IEEE Computational Intelligence Society Distinguished Lecturer, 2023-2025

Named Life Fellow of IEEE 2023

Global Seal of Biliteracy with Functional Proficiency Level in Spanish (awarded 2022)

Named Editor for Surveys of *Computers & Operations Research* (Elsevier) 2022

Named Fellow of INFORMS 2021

INFORMS Diversity, Equity, and Inclusion Ambassador 2021

2020 Yellowhammer Women of Impact Award (20 women are honored each year in the State of Alabama
<https://alabamawomen.org/#2020>)

Auburn University Author Award 2020

Fulbright Specialist (La Sabana University, Colombia) 2020

Best Paper Award at the Optima 2019 XIII Congreso Chileno de Investigación Operativa (Santa Cruz, Chile)

2019 International INFORMS Conference Keynote Speaker (Cancun)

Named *INFORMS Journal on Computing* Editor in Chief, 2019

2018 IEEE World Congress on Computational Intelligence Plenary Speaker (Rio)

Named IEEE Computational Intelligence Society Distinguished Lecturer, 2018-2021

100 Women Strong Leadership in Diversity Faculty Award (2017, Inaugural Awardee)

Named Fellow of the Institute of Electrical and Electronic Engineers (2017)

Systems Engineering Research Center UARC Best Student Paper 2016 Research Review, "Manufacturing cost prediction in the presence of categorical and numeric design attributes" by Eren Sakinc* and Alice E. Smith

Fulbright Senior Fellow (Pontifical Catholic University of Valparaíso, Valparaiso, Chile) 2017

Wellington Award (the highest honor given in the field of engineering economics) 2016

Fulbright Specialist (EAFIT, Medellin, Colombia) 2016

Named Joe W. Forehand / Accenture Distinguished Professor (\$1M chaired position) (2015)

Fulbright Senior Fellow (Bilkent University, Ankara, Turkey) 2013

Named Area Editor of *Computers & Operations Research* (Elsevier) 2013

Named Area Editor – Heuristic Search and Learning, *INFORMS Journal on Computing* (INFORMS) 2013

IIE Albert G. Holzman Distinguished Educator Award (2012)

Named W. Allen and Martha Reed Endowed Professor (2012)

Selected to be a member of the INFORMS Speakers Program (2011)

INFORMS WORMS Award for the Advancement of Women in OR/MS (2009)

E. L. Grant Award for the Best Paper published in *The Engineering Economist*, Volume 50 (2006)

ASEE Zone II Best Paper Award (2004)

Named Fellow of the Institute of Industrial and Systems Engineers (2003)

William A. J. Golomski Award for the Best Paper by an IIE member at the *2002 Reliability and Maintainability Symposium* (RAMS) (2003)

Named Philpott-WestPoint Stevens Distinguished Professor by Auburn University College of Engineering (partially endowed position) (2001-04)

Senior Faculty Research Award, College of Engineering, Auburn University (given annually as the highest honor in research) (2001)

IIE Gold Award, Quality Control and Reliability Engineering Division Director (2001)

ADVANCE Leadership Grant from the National Science Foundation (2001-2004)

E. L. Grant Award for the Best Paper published in *The Engineering Economist*, Volume 43 (1999)

Board of Visitors Faculty Award, School of Engineering, University of Pittsburgh (given annually for outstanding achievements in research and scholarly activity) (1996)

Faculty Early Career Development Grant (CAREER) from the National Science Foundation (1995-1999)

Named Board of Visitors Faculty Fellow by University of Pittsburgh School of Engineering (partially endowed position) (1994-99)

Missouri Society of Professional Engineers, St. Louis Young Engineer of the Year (1990)

Society of Women Engineers, St. Louis Distinguished New Engineer of the Year (1989)

Southwestern Bell Key Contributor Award (1989)

RESEARCH GRANTS

(PRINCIPAL INVESTIGATOR ON OVER \$12 MILLION IN RESEARCH CONTRACTS)

1. “Analytical and Simulation Modeling Framework to Support Wargaming and Strategic Planning (WASP) - SBIR Phase 3,” ALICE E. SMITH AND ALEXANDER VINEL, **AFMC through Frontier Technology, Inc.**, \$260,257 2023-24.

2. "Help from Above: Manufacturing Using Drones, Part II", JULIO JIMENEZ*, **Interdisciplinary Center of Advanced Manufacturing Systems (ICAMS) with funding from the Industrial Base Analysis & Sustainment Program of the Industrial Base Policy Office of the Office of the Secretary of Defense**, \$30,000, 2023-24.
3. "Next Generation Digital Ports," ROSA GONZALEZ WITH ALICE E. SMITH AND OTHERS, University of Los Andes, Santiago, Chile, **Agencia Nacional de Investigacion y Desarrollo, Ministerio de Ciencia, Tecnologia, Conocimiento e Innovacion, Federal Government of Chile**, grant # FOVI220133, \$30,000,000 Chilean pesos, 2022-2023. <https://www.agendamaritima.cl/puerto-inteligente-tecnologia-universidad/investigadores-desarrollaran-estudio-sobre-logistica-y-puertos-digitales/1473505>
4. "Analytical and Simulation Modeling Framework to Support Wargaming and Strategic Planning (WASP) - SBIR Phase 3," ALICE E. SMITH AND ALEXANDER VINEL, **AFMC through Frontier Technology, Inc**, \$225,582. 2022-23.
5. "Help from Above: Manufacturing Using Drones", JULIO JIMENEZ*, **Interdisciplinary Center of Advanced Manufacturing Systems (ICAMS) with funding from the Industrial Base Analysis & Sustainment Program of the Industrial Base Policy Office of the Office of the Secretary of Defense**, \$27,760, 2022-23.
6. "INFORMS Diversity, Equity, and Inclusion Ambassador," ALICE E. SMITH, **INFORMS**, \$2,500, 2021.
7. "SBIR Phase III – Analytical Framework and Modeling to Support Wargaming Logistics," ALICE E. SMITH, JEFFREY S. SMITH, ALEXANDER VINEL AND LEVENT YILMAZ, **AFMC through Frontier Technology, Inc**, \$678,000, 2020-22.
8. "RAPID: Collaborative Research: Quantifying Social Media Data for Improved Modeling of Mitigation Strategies for the COVID19 Pandemic," KONSTANTINOS MYKONIATIS AND ALICE E. SMITH, **National Science Foundation**, #CMMI 2029739. \$141,527. Collaborative Project with Columbus State University, ANASTASIA ANGELOPOULOU, \$25,812. 2020-22. <http://covidatanalyze.auburn.edu>.
9. "Sustainable logistics of the future (FutureLOG)," FABIO SGARBOSSA AND 18 INTERNATIONAL RESEARCHERS INCLUDING ALICE E. SMITH, **Research Council of Norway**, Project 309528, 5,910,000 Norwegian Kroner (about \$700,000) (Auburn share 500,000 Norwegian Kroner), 2020-24.
10. "Forward pick area: Design and Operation, A White Paper," ALICE E. SMITH, **Material Handling Institute**, \$5,000, 2020.
11. "REAL-time Rural Medicine Handling and Transport Using a Coordinated Fleet of Trucks and Drones," DANIEL SILVA AND ALICE E. SMITH, **Toyota Material Handling North America**, \$207,754, 2019-20. <http://drones.auburn.edu/>.
12. "Multi-Stage Stochastic Optimization Production Planning Models in Agriculture: Integrating Operational and Resource Flexibility," ALEJANDRO MAC CAWLEY WITH ALICE E. SMITH as international visiting professor, Pontificia Universidad Católica de Chile, Santiago, Chile, **Fondecyt Grant of CONICYT Chile**, grant # 11180502, \$2,000, 2019-21.
13. "Academy of Aerospace Quality – Phase XI," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$100,000, 2018-19.
14. "Planning Grant: Engineering Research Center for Resilient Rural Infrastructure (RRI)," ANDRZEJ S. NOWAK, MARK BARNETT, GERRY V. DOZIER, ROBERT A. NORTON, AND ALICE E. SMITH, **National Science Foundation**, \$97,750, 2018-22.
15. "SBIR Phase III – Analytical Framework and Modeling to Support Wargaming Logistics," JEFFREY S. SMITH, ALICE E. SMITH, ALEXANDER VINEL AND LEVENT YILMAZ, **AFMC through Frontier Technology, Inc**, \$796,464, 2018-20.
16. "Academy of Aerospace Quality – Phase X," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$120,000, 2017-18.
17. "Pricing And Bundles Composition Under Competition: The Effects Of Customers' Willingness to Pay Via Constrained Multinomial Logit and Dynamic Decision Making Processes," JUAN PEREZ WITH ALICE E. SMITH as international visiting professor, Universidad de Los Andes, Santiago, Chile, **Fondecyt Grant of CONICYT Chile**, \$2000, 2016-19.
18. "Academy of Aerospace Quality – Phase IX," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$120,000, 2016-17.
19. "Fulbright Senior Fellow - Chile," ALICE E. SMITH, **Fulbright Commission**, \$13,000, 2017.

20. "RT 159: Agile Systems Engineering Management," ALICE E. SMITH AND JEFF SMITH, **Office of the Secretary of Defense / National Security Agency** (subcontracted from the Systems Engineering Research Center / Stevens Institute of Technology, Richard Turner, Stevens PI), \$52,373, 2016-17.
21. "Academy of Aerospace Quality – Phase VIII," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$150,000, 2015-16.
22. "Fulbright Specialist - Colombia," ALICE E. SMITH, **Fulbright Commission**, \$5,000, 2016.
23. "A Model-Driven Generative Domain Architecture for Simulation Experiment Lifecycle Management and System Optimization," LEVENT YILMAZ AND ALICE E. SMITH, **Missile Defense Agency**, \$592,252, 2015-18.
24. "Integracion de tecnicas de simulacion y de diseno de instalaciones para manejo de contenedores," ALICE E. SMITH, ROSA GONZALEZ AND JIMENA PASCUAL (both, Pontificia Universidad Catolica de Valparaiso), **Comision Nacional de Investigacion Cientifica y Tecnologica- CONICYT - of Chile**, 8,300,000 Chilean pesos (about \$14,000), 2015-2016.
25. "RT 126: Agile Systems Engineering – Kanban Scheduling," ALICE E. SMITH, JEFF SMITH AND LEVENT YILMAZ, **Office of the Secretary of Defense / National Security Agency** (subcontracted from the Systems Engineering Research Center / Stevens Institute of Technology, Richard Turner, Stevens PI), \$172,874, 2014-15.
26. "Academy of Aerospace Quality – Phase VII," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$120,000, 2014-15.
27. "An Integrated Framework for Engineering Replicability into High Assurance Ballistic Missile Defense System Simulations - Supplement," LEVENT YILMAZ AND ALICE E. SMITH, **Missile Defense Agency**, \$57,172, 2014-15.
28. "Academy of Aerospace Quality – Phase VI," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$112,500, 2013-14.
29. "Facility Design for Grocery Stores," HALUK YAPICIOGLU, ALICE E. SMITH AND BAHAR YETIS KARA, **Coca Cola Turkey**, \$5,000, 2013.
30. "Facility Design and Redesign for Retail Enterprises," ALICE E. SMITH AND IHSAN SABUNCUOGLU, **The Scientific and Technological Research Council of Turkey (TUBITAK)**, Visiting Scientist Fellowship Program, with the participation of Migros Corporation, \$15,000, 2013.
31. "Fulbright Senior Fellow - Turkey," ALICE E. SMITH, **Fulbright Commission**, \$15,000, 2013.
32. "An Integrated Framework for Engineering Replicability into High Assurance Ballistic Missile Defense System Simulations," LEVENT YILMAZ AND ALICE E. SMITH, **Missile Defense Agency**, \$434,504, 2012-15.
33. "Pan American Advanced Studies Institute (PASI) on Modeling, Simulation and Optimization of Globalized Physical Distribution Systems," ALICE E. SMITH AND JORGE F. VALENZUELA, **National Science Foundation**, #OISE-1242239, \$100,000, 2012-14.
34. "Academy of Aerospace Quality – Phase V," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$100,000, 2012-13.
35. "Iraqi Scholar Rescue Project," ALICE E. SMITH, **Institute of International Education**, \$32,500, 2012-13.
36. "Collaborative Research: Non-Traditional Designs for Order Picking Warehouses," Kevin Gue and Alice E. Smith, **National Science Foundation**, #CMMI-12005677, \$255,000 with REU Supplements of \$12,000, 2012-16. Associated project at University of Arkansas (PI – Russ Meller and now Ashlea Bennett Milburn) for \$200,000.
37. "A Framework for Complexity Management in Virtual Forward Operating Base Camps - Phase II," STEVEN CORNS, MARIESA CROW, CIHAN DAGLI, CURT ELMORE, SCOTT GRASMAN, SUZANNA LONG (all Missouri University of Science and Technology) and ALICE E. SMITH, **Army Research ERDC, U.S. Department of Defense**, \$398,932 (Auburn portion = \$60,000), 2012-13.
38. "Academy of Aerospace Quality – Phase IV," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$100,000, 2011-12.
39. "Systems Engineering Using Secure Open Source Technology," DAVID UMPHRESS, DREW HAMILTON AND ALICE E. SMITH, **U.S. Department of Defense**, \$179,993, with subcontract to Tuskegee University, 2011-12.
40. "A Framework for Complexity Management in Virtual Forward Operating Base Camps," STEVEN CORNS, MARIESA CROW, CIHAN DAGLI, CURT ELMORE, SCOTT GRASMAN, SUZANNA LONG (all Missouri University of Science and Technology)

- and ALICE E. SMITH, **Army Research ERDC, U.S. Department of Defense**, \$398,932 (Auburn portion = \$60,000), 2011-12.
41. "Workshop: Empowering Women in Industrial Engineering Academia – International Collaborations for Research and Education," ALICE E. SMITH AND JANET M. TWOMEY (Wichita State University), **National Science Foundation**, #OISE-1042980, \$60,000, 2010-12.
 42. "Academy of Aerospace Quality – Phase III," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$180,000, 2010-11.
 43. "Systems Engineering in a Secure Computing Intensive Environment," DAVID UMPHRESS, DREW HAMILTON AND ALICE E. SMITH, **U.S. Department of Defense**, \$200,000, 2010-11.
 44. "Iraqi Scholar Rescue Project," ALICE E. SMITH, **Institute of International Education**, \$31,700, 2010-11.
 45. "Systems Engineering Research Center (SERC)," ALICE E. SMITH AND DREW HAMILTON, University Affiliated Research Center (UARC) consisting of 20 universities / research organizations, **U.S. Department of Defense**, 2009-onwards. <http://www.sercuarc.org/>
 46. "Development of a Hot Mix Plan Production Process Control System," MICHAEL HEITZMAN, JEFF SMITH AND ALICE E. SMITH, **Department of Transportation / Federal Highway Administration**, \$372,438, 2009-10.
 47. "US-Turkey Workshop: on Women in Industrial Engineering Academia - U.S. and Middle East," ALICE E. SMITH, **National Science Foundation**, #OISE-0728947, \$60,000, 2007-09.
 48. "ADVANCE Partnerships for Adaptation, Implementation and Dissemination: SEM Transformation through "Small Wins"", DONNA SOLLIE, MARIE WOOTEN, OVERTOUN JENDA, DANIEL SVYANTEK AND ALICE E. SMITH, **National Science Foundation**, #SBE-0620000, \$450,000, 2006-11.
 49. "Academy of Aerospace Quality – Phase II," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$280,890, 2006-10.
 50. "Planning Visit: Workshop on Industrial Engineering Women in Academia," ALICE E. SMITH, **National Science Foundation**, #OISE-0549304, \$14,705, 2006-07.
 51. "Next Generation of Manufacturing Engineers for the Automotive Sector," ALICE E. SMITH, JOHN EVANS AND PETER JONES, **National Science Foundation**, #DUE-0422361, \$400,000, 2004-08.
 52. "Enhancing the Fracture Strength of Advanced Ceramics by Process Control at the Microstructural Scale," IAN NETTLESHIP (University of Pittsburgh) and ALICE E. SMITH, **National Science Foundation**, #DMI-0301273, \$100,000 with RET Supplement \$6,000, 2003-05.
 53. "Academy of Aerospace Quality," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$405,000, 2003-06.
 54. "Industry / University Cooperative Research Center for Advanced Vehicle Electronics (CAVE), Research Experiences for Teachers," ALICE E. SMITH, **National Science Foundation**, Supplements to #EEC-9907749, \$175,400, 2003-10.
 55. "ADVANCE Leadership: Improving Success of Women Engineering Academics in Archival Publications," ALICE E. SMITH, **National Science Foundation**, #SBE-0123493, \$150,000 with REU Supplement \$15,000 and RET Supplement \$10,000, 2001-05. http://eng.auburn.edu/users/aesmith/backup/NSF_JournalPublication/
 56. "Relating Field Data to Accelerated Life Testing," ALICE E. SMITH AND S. WAYNE JOHNSON, **National Science Foundation**, #EEC-0002669, \$50,000 with REU Supplement of \$6,000, RET Supplements of \$46,225, with another \$70,000 from the member companies of the NSF Center for Advanced Vehicle Electronics, 2000-02. This was a joint project with the NSF Center for Quality and Reliability Engineering of Rutgers University. The PIs there, ELSAYED S. ELSAYED AND DAVID W. COIT (both, Rutgers University), also received a similar amount for the same project.
 57. "Comprehensive Redesign of Industrial Facilities," BRYAN A. NORMAN (University of Pittsburgh) and ALICE E. SMITH, **National Science Foundation**, #DMI-9908322, \$317,562 with REU Supplements \$22,000, 1999-2003.
 58. "GOALI: Improving Manufacturability of P/M Superalloys by Microstructural Control," ALICE E. SMITH AND IAN NETTLESHIP (University of Pittsburgh), **National Science Foundation** with the participation of **Crucible**

Compaction Metals, #DMI-9800430, \$311,526 with REU Supplements \$32,000 and International Supplement \$20,000, 1998-2001.

59. "Collaborative Research: Design of Communications Networks Using Computational Intelligence and Women in Engineering in the U.S. and Turkey," ALICE E. SMITH AND BERNA DENGIZ (Gazi University, Turkey), **National Science Foundation**, #INT-9731207, \$34,965, with additional support from **TUBITAK** (Turkish equivalent of NSF), 1998-2004.
60. "Joint Research on Intelligent Manufacturing Techniques," MITSUO GEN (Ashikaga Institute of Technology, Japan), ALICE E. SMITH, BRYAN A. NORMAN (University of Pittsburgh) and GURSEL A. SUER (University of Puerto Rico - Mayaguez), **Monbusho** (Japanese Ministry of Education, Science and Culture) International Scientific Research Program, 6,900,000 yen, with supplemental funds from the University Center for International Studies, University of Pittsburgh, \$760, and the Japanese Science & Technology Management Program, University of Pittsburgh, \$6500. 1998-2000.
61. "Process Improvement for Low Oxygen Metal Powders," ALICE E. SMITH AND IAN NETTLESHIP (University of Pittsburgh), **Ben Franklin Technology Center of Western Pennsylvania** with Crucible Compaction Metals Corporation, \$172,035, 1997-99.
62. "Motor Vehicle Abrasive Flow Machining," ALICE E. SMITH AND WILLIAM S. SLAUGHTER (University of Pittsburgh), **National Institute of Standards** with Extrude Hone Corporation, Ford Motor Company and others, \$125,000 (part of larger Advanced Technology Program), 1996-99.
63. "Predicting Failures of Mechanical/Electrical Systems," ALICE E. SMITH, **Adtranz** (now Bombardier Transportation), \$83,376, 1996-2000.
64. "Faculty Early Career Development (CAREER) : Resampling Approaches to Neural Model Validation," ALICE E. SMITH, **National Science Foundation**, #DMI-9502134, \$309,574 with REU Supplements \$40,000, 1995-2000.
65. "Predictive Quality Control for Ceramic Casting," ALICE E. SMITH, **Ben Franklin Technology Center of Western Pennsylvania** with Eljer Plumbingware Corporation, \$141,782, 1993-96.
66. "Intelligent Control for Wave Soldering," ALICE E. SMITH, AMRO EL-JAROUDI (University of Pittsburgh) and WILLIAM CLARK (University of Pittsburgh), **Lockheed Martin Corporation**, \$100,000, 1993-94.
67. "Process Planning Using an Integrated Neural Network and Expert System Approach," ALICE E. SMITH, **National Science Foundation**, #DDM-9209424, \$21,235, 1992-94.
68. "An Empirical and Theoretical Analysis of Backpropagation Error Surface Initiation and Descent," ALICE E. SMITH, Central Research Development Fund Award, **University of Pittsburgh**, \$12,996, 1992-94.

EQUIPMENT GRANTS

1. "In-Process, Non-Destructive Analytical Equipment for Electronics Manufacturing Research," WAYNE JOHNSON, JEFFREY SUHLING, ALICE E. SMITH, ROY KNIGHT, GEORGE FLOWERS, HAREESH TIPUR, MICHAEL BOZAK, BRYAN CHIN AND WILLIAM GALE, **Auburn University Internal Infrastructure Grant**, \$100,000, 2000-01.
2. "Software for Simulation Research," ALICE E. SMITH, Systems Modeling Corporation, \$1,550, 1996.
3. "Interdisciplinary Fuzzy Logic Infrastructure for Education and Research," ALICE E. SMITH, ROBERT BOSTON (University of Pittsburgh) and GEORGE KLINZING (University of Pittsburgh), Faculty/Departmental Computing Infrastructure Grant, **University of Pittsburgh**, \$4,000, 1994.
4. "Artificial Intelligence Hardware," ALICE E. SMITH, Individual Faculty Initiative, Computing Proficiency Enhancement Program, **University of Pittsburgh**, \$4,993, 1992.

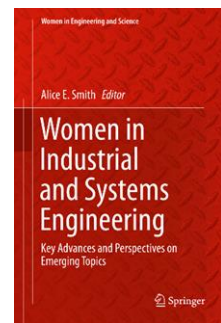
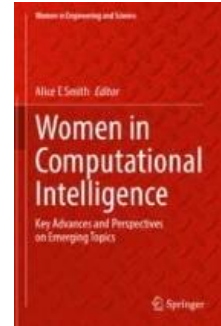
PATENT

"Light Rail Vehicle Having Predictive Diagnostic System for Motor Driven Automated Doors," CURTIS W. MCCULLERS, KENNETH A. KARG, DEAN J. CAMPBELL (all, Adtranz – now Bombardier Transportation), ANDREAS H. ETZEL (DaimlerChrysler

Research, Germany) and ALICE E. SMITH, U.S. Patent 6,636,814 B1, granted 10/21/2003, International Patent PCT/US00/30348. European Patent Application 00976897.9-2422-US0030348.

BOOKS

1. *IFORS 2023 Proceedings of the 23rd International Conference of the International Federation of Operational Research Societies*, (Alice E. Smith, Jorge R. Vera, and Bernard Fortz, Editors), 2023, Instituto Chileno de Investigación Operativa (ICHIO), Santiago, Chile, ISBN: 978-956-416-407-6, DOI: <https://doi.org/10.1287/ifors.2023>
2. *Women in Computational Intelligence: Key Advances and Perspectives on Emerging Topics* (ALICE E. SMITH, editor), Springer, E-book ISBN 978-3-030-79092-9 and hardbound ISBN 978-3-030-79091-2, 2022. <https://link.springer.com/book/10.1007/978-3-030-79092-9>
Part of the series *Women in Engineering and Science*. <https://www.springer.com/series/15424>
3. *Women in Industrial and Systems Engineering: Key Advances and Perspectives on Emerging Topics* (ALICE E. SMITH, editor), Springer, E-book ISBN 978-3-030-11866-2 and hardbound ISBN 978-3-030-11865-5, 2019. <https://www.springer.com/us/book/9783030118655#aboutBook>. Part of the series *Women in Engineering and Science*. <https://www.springer.com/series/15424>
4. *Proceedings of the 1999 Second Japan-USA Joint Workshop on Intelligent Manufacturing Systems* (M. GEN. T. YOKOTA, A. E. SMITH, G. A. SUER, R. W. WOLFF AND G. YAMAZAKI, editors), Kanazawa, Japan, October 1999.
5. *Proceedings of the 1998 First Japan-USA Joint Workshops on Intelligent Manufacturing Systems* (M. GEN, A. E. SMITH, G. A. SUER AND S. S. OREN, editors), Ashikaga, Japan, November 1998.
6. *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 7* (C. H. DAGLI, M. AKAY, O. ERSOY, B. R. FERNANDEZ AND A. E. SMITH, editors), ASME Press, New York, 1997.



REFEREED JOURNAL ARTICLES

ORCID ID: [HTTPS://ORCID.ORG/0000-0001-8808-0663](https://orcid.org/0000-0001-8808-0663)

(OVER 17,500 GOOGLE SCHOLAR CITATIONS AND H INDEX = 49 AND I10 INDEX OF 124)

* DENOTES STUDENT OR POST-GRADUATE SCHOLAR

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1. "Dynamic vehicle routing problem with drone resupply for same-day delivery," JUAN C. PINA-PARDO*, DANIEL F. SILVA, ALICE E. SMITH, AND RICARDO A. GATICA, accepted to *Transportation Research Part C* (accepted April 2024).
 2. "Fleet resupply by drones for last-mile delivery," JUAN C. PINA-PARDO*, DANIEL SILVA, ALICE E. SMITH, AND RICARDO A. GATICA, *European Journal of Operational Research*, vol. 316, no. 1, July 2024, 168-182. <https://doi.org/10.1016/j.ejor.2024.01.045>
 3. "A particle swarm matheuristic for locating drone stations for delivery in continuous space," LINGYUN ZHOU*, DANIEL F. SILVA, AND ALICE E. SMITH, accepted to *IEEE Transactions on Evolutionary Computation* (accepted December 2023).
 4. "Sustainable last mile parcel delivery and return service using drones," NAWIN YANPIRAT*, DANIEL SILVA, AND ALICE E. SMITH, *Engineering Applications of Artificial Intelligence*, special issue on Metaheuristics for Sustainable Supply Chain Management, vol. 124, June 2023, 106631. <https://doi.org/10.1016/j.engappai.2023.106631>.
 5. "Manufacturing cost estimation using piecewise function approaches," EREN SAKINC* AND ALICE E. SMITH, *Journal of Economic Analysis*, vol. 2, no. 3, 2023, 113-140. <https://doi.org/10.58567/jea02030007>
 6. "A sequential space-syntax approach for healthcare facility layout design," ALEJANDRO TERAN SOMOHANO* AND ALICE E. SMITH, accepted to *Computers & Industrial Engineering*, vol. 177, March 2023, 109038. <https://www.sciencedirect.com/science/article/abs/pii/S0360835223000621>

7. "Analysis of public sentiment on COVID-19 mitigation measures in social media in the United States using machine learning," ANASTASIA ANGELOPOULOU, KONSTANTINOS MYKONIATIS, AND ALICE E. SMITH, *IEEE Transactions on Computational Social Systems*, vol. 11, no. 1, 2024, 307-318. <https://ieeexplore.ieee.org/document/9933456>
8. "Design of empty container depot layouts using data and analytics," ERHAN KARAKAYA*, ALICE E. SMITH, ROSA G. GONZÁLEZ RAMÍREZ, AND JIMENA PASCUAL, accepted to *Flexible Services and Manufacturing Journal*, Special Issue on Data-Driven Optimization and Analytics for Maritime Logistics, vol. 35, 2023, 196-240. <https://link.springer.com/article/10.1007/s10696-022-09452-z>
7. "A tabu search algorithm for solving a green logistics bi-objective bi-level problem," JOSÉ-FERNANDO CAMACHO-VALLEJO, LILIAN LÓPEZ-VERA*, ALICE E. SMITH, AND JOSÉ-LUIS GONZÁLEZ-VELARDE, *Annals of Operations Research*, vol. 16, no. 2, 2022 <https://doi.org/10.1007/s10479-021-04195-w> .
8. "Acceptability of artificial intelligence in poultry processing and classification efficiencies of different classification models in the categorization of breast fillet myopathies," AFTAB SIDDIQUE*, SAMIRA SHIRZAEI*, ALICE E. SMITH, JAROSLAV VALENTA, LAURA J. GARNER, AND AMIT MOREY, *Frontiers in Physiology: Avian Physiology*, September 22, 2021. <https://doi.org/10.3389/fphys.2021.712649>
9. "Relocations in container depots for different handling equipment types: Markov models," ERHAN KARAKAYA*, ALEXANDER VINEL AND ALICE E. SMITH, *Computers & Industrial Engineering*, vol. 157, 2021. <https://www.sciencedirect.com/science/article/abs/pii/S0360835221002151?via%3DIhub>
10. "A computational software system to design order picking warehouses," SABAHATTIN GOKHAN OZDEN*, ALICE E. SMITH, AND KEVIN R. GUE, *Computers & Operations Research*, vol. 132, 2021. <https://doi.org/10.1016/j.cor.2021.105311>
11. "The traveling salesman problem with release dates and drone resupply," JUAN C. PINA-PARDO*, DANIEL F. SILVA AND ALICE E. SMITH, *Computers & Operations Research*, vol. 129, May 2021. <https://doi.org/10.1016/j.cor.2020.105170>
12. "A new approach for modeling order picking paths," SABAHATTIN GOKHAN OZDEN*, ALICE E. SMITH, AND KEVIN R. GUE, *Naval Research Logistics*, vol. 68, no. 4, June 2021, 471-484. <https://doi.org/10.1002/nav.21966>
13. "Minimizing late deliveries in a truck loading problem," MARIO VELEZ-GALLEGO*, ALEJANDRO TERAN-SOMOHANO* AND ALICE E. SMITH, *European Journal of Operational Research*, vol. 286, no. 3, November 2020, 919-928.
14. "Forward: COR special issue on computational operations research for drone systems," CHASE MURRAY AND ALICE E. SMITH, *Computers & Operations Research*, vol. 115, March 2020. <https://www.sciencedirect.com/journal/computers-and-operations-research/special-issue/1069MBSLT3T>
15. "An improved model for the parallel row ordering problem," XUHONG YANG*, WENMING CHENG, ALICE E. SMITH AND ANDRE R. S. AMARAL, *Journal of the Operational Research Society*, vol 71, no. 3, 2020, 475-490.
16. "A data-driven approach to grocery store block layout," ELIF OZGORMUS* AND ALICE E. SMITH, *Computers & Industrial Engineering*, Special Issue on Data-Driven Decision Making in Supply Chains, vol. 139, January 2020, 105562.
17. "Facility layout considering replicate machines and split product flows," MEHMET GULSEN*, CHASE MURRAY AND ALICE E. SMITH, *Computers and Operations Research.*, vol. 108, August 2019, 20-32.
18. "Locating multiple capacitated semi-obnoxious facilities using evolutionary strategies," ALEJANDRO TERAN-SOMOHANO* AND ALICE E. SMITH, *Computers and Industrial Engineering*, vol. 133, July 2019, 303-316.
19. "Optimal block layout for attraction-based enterprises," JINHUA LI* AND ALICE E. SMITH, *European Journal of Operational Research*, vol. 266, May 2018, 1100-1112.
20. "Evaluating reliability/survivability of capacitated wireless networks," OZGUR KABADURMUS* AND ALICE E. SMITH, *IEEE Transactions on Reliability*, Special Section on Reliability, Resilience, and Prognostics Modeling, vol. 67, no. 1, March 2018, 26-40.
21. "Solving large batches of traveling salesman problems with parallel and distributed computing," SABAHATTIN GOKHAN OZDEN*, ALICE E. SMITH AND KEVIN R. GUE, *Computers & Operations Research*, vol. 85, 2017, 85-96.
22. "An integer programming approach for fuzzy rule-based classification systems," SHAHAB DERHAMI* AND ALICE E. SMITH, *European Journal of Operational Research*, volume 256, 2017, 924-934.
23. "The double-bay layout problem," XING QUAN ZUO*, CHASE C. MURRAY AND ALICE E. SMITH, *IEEE Transactions on Semiconductor Manufacturing*, volume 29, number 4, November 2016, 446-454.
24. "Sharing clearances to improve machine layout," XING QUAN ZUO*, CHASE C. MURRAY AND ALICE E. SMITH, *International Journal of Production Research*, vol. 54, no. 14, 2016, 4272-4285.
25. "The vehicle loading problem with a heterogeneous fleet," JIANGSHENG LIU*, ALICE E. SMITH AND DAN QIAN, *Computers & Industrial Engineering*, volume 97, July 2016, 137-145.

26. "Multi-commodity k -splittable survivable network design problems with relays," OZGUR KABADURMUS* AND ALICE E. SMITH, *Telecommunication Systems*, volume 62, issue 1, May 2016, 123-133.
27. "A technical note on the paper 'hGA: Hybrid genetic algorithm in fuzzy rule-based classification systems for high-dimensional problems,'" SHAHAB DERHAMI* AND ALICE E. SMITH, *Applied Soft Computing*, volume 41, April 2016, 91-93.
28. "A clonal selection algorithm for urban bus vehicle scheduling," XINGUO SHUI, XINGQUAN ZUO*, CHENG CHEN AND ALICE E. SMITH, *Applied Soft Computing*, volume 36, 2015, 36-44.
29. "Solving an extended double row layout problem using multi-objective tabu search and linear programming," XINGQUAN ZUO*, CHASE C. MURRAY AND ALICE E. SMITH, *IEEE Transactions on Automation Science and Engineering*, special issue on Integrated Optimization of Industrial Automation, volume 11, number 4, October 2014, 1122-1132.
30. "Improving hot mix asphalt production using computer simulation and real time optimization," MIN ZHANG*, MICHAEL HEITZMAN AND ALICE E. SMITH, *ASCE Journal of Computing in Civil Engineering*, volume 28, number 3, May/June 2014, pp. 04014011-1 to 04014011-8.
31. "An efficient local search heuristic for the double row layout problem with asymmetric material flow," CHASE C. MURRAY, ALICE E. SMITH AND ZEQUIANG ZHANG*, *International Journal of Production Research*, vol. 51, no. 1, October 2013, 6129-6139.
32. "Retail spatial design considering revenue and adjacencies using a racetrack aisle network," HALUK YAPICIOGLU* AND ALICE E. SMITH, *IIE Transactions*, vol. 44, no. 6, June 2012, 446-458.
33. "Bi-objective model for the retail spatial design problem," HALUK YAPICIOGLU* AND ALICE E. SMITH, *Engineering Optimization*, special issue on Multiobjective Metaheuristics for Multidisciplinary Engineering Applications, vol. 44, no. 3, March 2012, 243-266.
34. "Connectivity management in mobile ad hoc networks using particle swarm optimization," ORHAN DENGIZ*, ABDULLAH KONAK* AND ALICE E. SMITH, *Ad Hoc Networks*, vol. 9, no. 7, September 2011, 1312-1326.
35. "Efficient optimization of reliable 2-node connected networks: A bi-objective approach," ABDULLAH KONAK* AND ALICE E. SMITH, *INFORMS Journal on Computing*, vol. 23, no. 3, Summer 2011, 430-445.
36. "Hybrid approach for pareto front expansion in heuristics," HALUK YAPICIOGLU*, HEPING LIU*, ALICE E. SMITH AND GERRY DOZIER, *Journal of the Operational Research Society*, special issue on Heuristic Optimization, vol. 62, no. 2, February 2011, 348-359.
37. "Prediction of wireless network connectivity using a Taylor Kriging approach," HEPING LIU*, SOROOR K. AL-KHAFI* AND ALICE E. SMITH, Special Issue on Soft Computing, Simulation, and Web-centric Computing : Selected Papers from NASTEC 2009, *International Journal of Advanced Intelligence Paradigms (IJAIIP)*, vol. 3, no. 2, 2011, 112-121.
38. "The human voice: Theatre as a means of celebrating diversity and creating community," DAYDRIE HAGUE, TONI ALEXANDER, DONNA SOLLIE, MARIE WOOTEN, DANIEL SVYANTEK, ALICE E. SMITH AND OVERTON JENDA, *The International Journal Of Diversity in Organisations, Communities and Nations*, vol. 10, no. 5, 2010, 37-50.
39. "Women in engineering in Turkey – A large scale quantitative and qualitative examination," ALICE E. SMITH AND BERNA DENGIZ*, *European Journal of Engineering Education*, vol. 35, no. 1, 2010, 45-57. Chosen to be archived at African Higher Education Research Online, AHERO, which is administered by the Centre for the Study of Higher Education at the University of the Western Cape, South Africa. The East Africa Institute for Higher Education Studies and Development at Makerere University (Kampala, Uganda) is a project partner.
40. "Guidelines and advice for successful publication provided by journal editors," LUKE T. MILLER*, ALICE E. SMITH AND ELAINE LABACH, *American Journal of Business Education*, vol. 3, no. 5, March 2010, 17-34.
41. "Bandwidth allocation with an analytical model for ethernet passive optical networks," UN GI JOO* AND ALICE E. SMITH, *Computer Communications*, vol. 33, 2010, 526-531.
42. "Neural network models to anticipate failures of airport ground transportation vehicles," ALICE E. SMITH, DAVID W. COIT* AND YUN-CHIA LIANG*, *IEEE Transactions on Automation Science and Engineering*, vol. 7, no. 1, January 2010, 183-188.
43. "A general neural network model for estimating telecommunications network reliability," FULYA ALTIPARMAK*, BERNA DENGIZ* AND ALICE E. SMITH, *IEEE Transactions on Reliability*, vol. 58, no. 1, March 2009, 2-9.
44. "Determining aisle structures for facility designs using a hierarchy of algorithms," OGUZHAN ALAGOZ*, BRYAN A. NORMAN AND ALICE E. SMITH, special issue on Facility Logistics of *IIE Transactions*, vol. 40, no. 11, November 2008, 1019-1031.

45. "Multi-objective facility expansion and relayout," SADAN KULTUREL-KONAK*, ALICE E. SMITH AND BRYAN A. NORMAN, *IIE Transactions*, vol. 39, no. 7, 2007, 747-761.
46. "Solving the semi-desirable facility location problem using bi-objective particle swarm," HALUK YAPICIOGLU*, ALICE E. SMITH AND GERRY DOZIER, *European Journal of Operational Research*, vol. 177, no. 2, March 2007, 733-749.
47. "The application of automated image analysis to dense heterogeneities in partially sintered alumina," ORHAN DENGIZ*, RICHARD MCAFEE*, IAN NETTLESHIP AND ALICE E. SMITH, *Journal of the European Ceramic Society*, vol. 27, no. 4, 2007, 1927-1933.
48. "A memetic algorithm for channel assignment in wireless FDMA systems," SUNG-SOO KIM*, ALICE E. SMITH AND JONG-HYUN LEE, *Computers and Operations Research*, vol. 34, 2007, 1842-1856.
49. "Practical guidelines for developing backpropagation neural network models of measurement uncertainty data," CHANG-XUE JACK FENG, ABHIRAMI C. GOWRISANKAR, ALICE E. SMITH AND ZHI-GUANG SAMUEL YU, *Journal of Manufacturing Systems*, vol. 25, no. 4, 2006, 239-250.
50. "An ant colony approach to the orienteering problem," YUN-CHIA LIANG* AND ALICE E. SMITH, *Journal of the Chinese Institute of Industrial Engineers*, vol. 23, no. 5, 2006, 403-414 (in English).
51. "Multi-objective genetic algorithms: A tutorial," ABDULLAH KONAK*, DAVID W. COIT* AND ALICE E. SMITH, *Reliability Engineering & System Safety*, vol. 91, 2006, 992-1007. **Most cited article of Reliability Engineering & System Safety (of over 7,000 papers).**
52. "The effect of powder forming method on the pull-out flaw populations observed on polished surfaces of alumina ceramics," ORHAN DENGIZ*, TIANDAN CHEN*, IAN NETTLESHIP AND ALICE E. SMITH, *Materials Science and Engineering A*, vol. A427, 2006, 160-166.
53. "A continuous approach to considering uncertainty in facility design," BRYAN A. NORMAN AND ALICE E. SMITH, *Computers and Operations Research*, vol. 33 no. 6, 2006, 1760-1775.
54. "Two stage data mining for flaw identification in ceramics manufacture," ORHAN DENGIZ*, ALICE E. SMITH AND IAN NETTLESHIP, *International Journal of Production Research*, special issue on Data Mining, vol. 44, no. 15, July 2006, 2839-2851.
55. "A new mixed integer programming formulation for facility layout design using flexible bays," ABDULLAH KONAK*, SADAN KULTUREL-KONAK*, BRYAN A. NORMAN AND ALICE E. SMITH, *Operations Research Letters*, vol. 34, no. 6, November 2006, 660-672.
56. "Multi-objective tabu search using a multinomial probability mass function," SADAN KULTUREL-KONAK*, ALICE E. SMITH AND BRYAN A. NORMAN, *European Journal of Operational Research*, vol. 169, 2006, 918-931.
57. "Grain boundary detection in microstructure images using computational intelligence," ORHAN DENGIZ*, ALICE E. SMITH AND IAN NETTLESHIP, *Computers in Industry*, special issue on Machine Vision, vol 56, no. 8-9, December 2005, 854-866.
58. "Dual kriging: An exploratory use in economic metamodeling," RAVIPIM CHAVEESUK* AND ALICE E. SMITH, *The Engineering Economist*, vol. 50, no.3. 2005, 247-271. **Awarded the 2006 E. L. Grant Award for the Best Paper published in The Engineering Economist, vol. 50.**
59. "Layout optimization considering production uncertainty and routing flexibility," SADAN KULTUREL-KONAK*, ALICE E. SMITH AND BRYAN A. NORMAN, *International Journal of Production Research*, vol. 42, no. 21, November 2004, 4475-4493.
60. "An ant-colony approach to redundancy allocation," YUN-CHIA LIANG* AND ALICE E. SMITH, *IEEE Transactions on Reliability*, vol. 53, no. 3, September 2004, 417-423. **26th most cited article of IEEE Transactions on Reliability (of over 5,600 papers).**
61. "Exploiting tabu search memory in constrained problems," SADAN KULTUREL*, BRYAN A. NORMAN, DAVID W. COIT* AND ALICE E. SMITH, *INFORMS Journal on Computing*, vol. 16, no. 3, Summer 2004, 241-254.
62. "Capacitated network design considering survivability: An evolutionary approach," ABDULLAH KONAK* AND ALICE E. SMITH, *Engineering Optimization*, vol. 36, no. 2, April 2004, 189-205.
63. "Optimal design of reliable computer networks: A comparison of metaheuristics," FULYA ALTIPARMAK*, BERNA DENGIZ* AND ALICE E. SMITH, *Journal of Heuristics*, vol. 9, no. 6, December 2003, 471-487.
64. "Prediction of the gas-liquid volumetric mass transfer coefficients in surface-aeration and gas-inducing reactors using neural networks," R. LEMOINE*, B. FILLION*, A. BEHKISH*, A. E. SMITH AND B. I. MORSI, *Chemical Engineering and Processing*, vol. 42, 2003, 621-643.
65. "Efficiently solving the redundancy allocation problem using tabu search," SADAN KULTUREL-KONAK*, ALICE E. SMITH AND DAVID W. COIT*, *IIE Transactions*, vol. 35, 2003, 515-526.

66. "Incorporating heterogeneous distance metrics within block layout design," GULTEKIN OZDEMIR*, ALICE E. SMITH AND BRYAN A. NORMAN, *International Journal of Production Research*, vol. 41, no. 5, 2003, 1045-1056.
67. "Economic valuation of capital projects using neural network metamodels," RAVIPIM CHAVEESUK* AND ALICE E. SMITH, *The Engineering Economist*, vol. 48, no. 1, 2003, 1-30.
68. "Estimation of shrinkage for near net-shape using a neural network approach," ABDULLAH KONAK*, SADAN KULTUREL KONAK*, ALICE E. SMITH AND IAN NETTLESHIP, *Journal of Intelligent Manufacturing*, Special Issue on Soft Computing in Manufacturing, vol. 14, no. 2, April 2003, 219-228.
69. "Estimation of all-terminal network reliability using an artificial neural network," CHAT SRIVAREE-RATANA*, ABDULLAH KONAK* AND ALICE E. SMITH, *Computers and Operations Research*, vol. 29, no. 7, June 2002, 849-868.
70. "Neural network open loop control system for wave soldering," DAVID W. COIT*, BONNIE TURNER JACKSON* AND ALICE E. SMITH, *Journal of Electronics Manufacturing*, vol. 11, no. 1, 2002, 95-105.
71. "A seeded memetic algorithm for large unit commitment problems," JORGE F. VALENZUELA* AND ALICE E. SMITH, *Journal of Heuristics*, vol. 8, no. 2, March 2002, 173-196.
72. "Genetic algorithm to maximize a lower-bound for system time-to-failure with uncertain component Weibull parameters," DAVID W. COIT* AND ALICE E. SMITH, *Computers and Industrial Engineering*, vol. 41, no. 4, February 2002, 423-440.
73. "Estimation of a mass transfer coefficient for nylon manufacture using multiple neural networks," SARAH LAM*, ALICE E. SMITH AND BADI MORSI, *Journal of Manufacturing Systems*, vol. 20, no. 5, 2001, 349-356.
74. "An evolutionary approach to incorporating intradepartmental flow into facilities design," BRYAN A. NORMAN, ALICE E. SMITH, ERKAN YILDIRIM* AND WIPAWEE THARMMAPHORNPHILAS*, *Advances in Engineering Software*, vol. 32, no. 6, 2001, 443-453.
75. "Locating input and output points in facilities design: A comparison of constructive, evolutionary and exact methods," RIFAT AYKUT ARAPOGLU*, BRYAN A. NORMAN AND ALICE E. SMITH, *IEEE Transactions on Evolutionary Computation*, vol. 5, no. 3, June 2001, 192-203.
76. "Integrated facilities layout using a perimeter distance measure," BRYAN A. NORMAN, ALICE E. SMITH AND RIFAT AYKUT ARAPOGLU*, *IIE Transactions*, vol. 33, no. 4, 2001, 337-344.
77. "An evolutionary approach for reliability optimization in fixed topology computer networks," FULYA ALTIPARMAK*, BERNA DENGIZ* AND ALICE E. SMITH, *Transactions on Operational Research*, Operational Research Society, Turkey (in English), vol. 12, no. 1,2, November 2000, 57-75.
78. "Prediction and optimization of a ceramic casting process using a hierarchical hybrid system of neural networks and fuzzy logic," SARAH LAM*, KIMBERLY PETRI* AND ALICE E. SMITH, *IIE Transactions*, vol. 32, no. 1, January 2000, 83-91.
79. "Neural networks as a metamodeling technique for discrete event stochastic simulation," ROBERT A. KILMER*, ALICE E. SMITH AND LARRY J. SHUMAN, *Computers and Industrial Engineering*, vol. 36, no. 2, 1999, 391-407.
80. "Alternative neural network approaches to corporate bond rating," RAVIPIM CHAVEESUK*, CHAT SRIVAREE-RATANA* AND ALICE E. SMITH, *Journal of Engineering Valuation and Cost Analysis*, vol. 2, no. 2, 1999, 117-131.
81. "Economic design of reliable networks," DARREN L. DEETER* AND ALICE E. SMITH, *IIE Transactions*, vol. 30, 1998, 1161-1174.
82. "Static neural network process models: Considerations and case studies," DAVID W. COIT*, BONNIE TURNER JACKSON* AND ALICE E. SMITH, *International Journal of Production Research*, vol. 36, no. 11, 1998, 2953-2967.
83. "Bias and variance of validation methods for function approximation neural networks under conditions of sparse data," JANET M. TWOMEY* AND ALICE E. SMITH, *IEEE Transactions on Systems, Man, and Cybernetics, Part C*, vol. 28, no. 3, August 1998, 417-430.
84. "Design optimization to maximize a lower percentile of the system-time-to-failure distribution," DAVID W. COIT* AND ALICE E. SMITH, *IEEE Transactions on Reliability*, vol. 47, no. 1, March 1998, 79-87.
85. "Statistical experimental design and analysis as a tool for capital budgeting decisions," DAVID E. SARTORI* AND ALICE E. SMITH, *PPG Technology Journal*, vol. 4, no. 1, February 1998, 95-103.
86. "A metamodel approach to sensitivity analysis of capital project valuation," DAVID E. SARTORI* AND ALICE E. SMITH, *The Engineering Economist*, vol. 43, no. 1, Fall 1997, 1-24. **Awarded the 1999 E. L. Grant Award for the Best Paper published in *The Engineering Economist*, vol. 43.**
87. "Local search genetic algorithm for optimal design of reliable networks," BERNA DENGIZ*, FULYA ALTIPARMAK* AND ALICE E. SMITH, *IEEE Transactions on Evolutionary Computation*, vol. 1, no. 3, September 1997, 179-188.

88. "Cost estimation predictive modeling: Regression versus neural network," ALICE E. SMITH AND ANTHONY K. MASON, *The Engineering Economist*, vol. 42, no. 2, Winter 1997, 137-161.
89. "Efficient optimization of all-terminal reliable networks using an evolutionary approach," BERNA DENGIZ*, FULYA ALTIPARMAK* AND ALICE E. SMITH, *IEEE Transactions on Reliability*, vol. 46, no. 1, March 1997, 18-26
90. "An emergency department simulation and a neural network metamodel," ROBERT A. KILMER*, ALICE E. SMITH AND LARRY J. SHUMAN, *Journal of the Society for Health Systems*, vol. 5, no. 3, 1997, 63-79.
91. "Penalty guided genetic search for reliability design optimization," DAVID W. COIT* AND ALICE E. SMITH, *Computers and Industrial Engineering*, vol. 30, no. 4, September 1996, 895-904.
92. "Solving the redundancy allocation problem using a combined neural network / genetic algorithm approach," DAVID W. COIT* AND ALICE E. SMITH, *Computers and Operations Research*, vol. 23, no. 6, June 1996, 515-526.
93. "Reliability optimization of series-parallel systems using a genetic algorithm," DAVID W. COIT* AND ALICE E. SMITH, *IEEE Transactions on Reliability*, vol. 45, no. 2, June 1996, 254-260. **4th most cited article of IEEE Transactions on Reliability (of over 7,000 papers).**
94. "Adaptive penalty methods for genetic optimization of constrained combinatorial problems," DAVID W. COIT*, ALICE E. SMITH AND DAVID M. TATE, *INFORMS Journal on Computing*, vol. 8, no. 2, Spring 1996, 173-182.
95. "Integrating an expert system and a neural network for process planning," MARK WILHELM*, ALICE E. SMITH AND BOPAYA BIDANDA, *Engineering Design and Automation*, vol. 1, no. 4, Winter 1995, 259-269.
96. "Unequal area facility layout using genetic search," DAVID M. TATE AND ALICE E. SMITH, *IIE Transactions*, vol. 27, 1995, 465-472.
97. "A predictive model for slip resistance using artificial neural networks," JANET M. TWOMEY*, ALICE E. SMITH AND MARK S. REDFERN, *IIE Transactions*, vol. 27, 1995, 374-381.
98. "A genetic algorithm approach to curve fitting," MEHMET GULSEN*, ALICE E. SMITH AND DAVID M. TATE, *International Journal of Production Research*, vol. 33, no. 7, 1995, 1911-1923.
99. "A genetic approach to the quadratic assignment problem," DAVID M. TATE AND ALICE E. SMITH, *Computers and Operations Research*, vol. 22, no. 1, 1995, 73-83.
100. "Performance measures, consistency and power for artificial neural network models," JANET M. TWOMEY* AND ALICE E. SMITH, *Journal of Mathematical and Computer Modelling*, vol. 21, no. 1/2, 1995, 243-258.
101. "Process control using backpropagation neural computing: A qualitative and quantitative analysis," ALICE E. SMITH AND CIHAN H. DAGLI, *International Journal of Computer and Engineering Management*, vol. 2, no. 2, 1994, 1-16.
102. "Reducing waste in casting with a predictive neural model," SERGIO MARTINEZ*, ALICE E. SMITH AND BOPAYA BIDANDA, *Journal of Intelligent Manufacturing*, vol. 5, 1994, 277-286.
103. "Genetically improved presequences for Euclidean traveling salesman problems," DAVID M. TATE, CENK TUNASAR* AND ALICE E. SMITH, *Journal of Mathematical and Computer Modelling*, vol. 20, no. 2, 1994, 135-143.
104. "X-bar and R control chart interpretation using neural computing," ALICE E. SMITH, *International Journal of Production Research*, vol. 32, no. 2, 1994, 309-320.
105. "Relating product specifications and performance data with a neural network model for design improvement," SAFOUEN BEN BRAHIM*, ALICE E. SMITH AND BOPAYA BIDANDA, *Journal of Intelligent Manufacturing*, vol. 4, 1993, 367-374.
106. "Predicting product quality with backpropagation: A thermoplastic injection moulding case study," ALICE E. SMITH, *International Journal of Advanced Manufacturing Technology*, vol. 8, no. 4, 1993, 252-257.
107. "An intelligent composite system for plastic extrusion process control," ALICE E. SMITH AND HULYA YAZICI, *Journal of Engineering Applications of Artificial Intelligence*, vol. 5, no. 6, 1992, 519-526.
108. "Sensitivity analysis of EAC's robustness," TED G. ESCHENBACH AND ALICE E. SMITH, *The Engineering Economist*, vol. 37, no. 3, 1992, 263-276.
109. "Improving production management with intelligent systems: Tutorial and overview of applications," CIHAN H. DAGLI AND ALICE E. SMITH, *Engineering Management Journal*, vol. 3, no. 1, 1991, 19-26.

REFEREED JOURNAL ARTICLES IN PROCESS

110. "R2 indicator and deep reinforcement learning enhanced adaptive multi-objective evolutionary algorithm," FARAJOLLAH TAHENEZHAD-JAVAZM*, DEBBIE RANKIN, NAOMI DU BOIS, ALICE E. SMITH, AND DAMIEN COYLE, submitted to *IEEE Transactions on Evolutionary Computation* (submitted March 2024).

111. "Drone-assisted material handling in smart manufacturing," JULIO JIMENEZ*, DANIEL SILVA, AND ALICE E. SMITH, submitted to a special issue on Sustainable and Responsive Transportation and Logistics of *ITORS* (submitted March 2024).
112. "Aisle designs for order picking warehouses - Is there any progress to be made?," SABAHATTIN GOKHAN OZDEN*, ALICE E. SMITH, AND KEVIN R. GUE, working paper.
113. "Comparison of the performance of machine learning algorithms on COVID-19 Twitter data labeled using a hashtag-based approach," KONSTANTINOS MYKONIATIS, ANASTASIA ANGELOPOULOU, ALICE E. SMITH, ATHANASIOS ARIS PANAGOPOULOS*, AND SAMIRA SHIRZAEI NICHOLS*, submitted to *IEEE Transactions on Computational Social Systems* (submitted September 2023).
114. "Drone-assisted pickup and delivery with time windows for last-mile healthcare logistics," NAWIN YANPIRAT*, DANIEL SILVA, AND ALICE E. SMITH, working paper.
115. "Sustainable last mile logistics considering drones and e-bikes," STEPHANIE SANTIAGO-MONTAÑO*, DANIEL F. SILVA, ALICE E. SMITH, revised for *Transportation Research Part C: Emerging Technologies*, Special Issue on Advanced Optimization, Learning and Control for Coordinated Multimodal Transportation towards a Flexible, Equitable and Sustainable Ecosystem (revision submitted February 2024).
116. "A hybrid simulation model of opinion change about mask mandates in social media during the COVID-19 pandemic," KONSTANTINOS MYKONIATIS, ANASTASIA ANGELOPOULOU, AND ALICE E. SMITH, revised for *European Journal of Operational Research* (revision submitted January 2024).
117. "The finished vehicle routing problem with a heterogeneous transport fleet," JIANGSHENG LIU*, BIN YUAN, YINGCONG HU, AND ALICE E. SMITH, working paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4239703

BOOK CHAPTERS

1. Data-driven analytical grocery store design," ELIF OZGORMUS* AND ALICE E. SMITH," *Retail Space Analytics*, (co-editors Ahmed Ghoniem and Babel Maddah). Springer, *International Series in Operations Research & Management Science*, <https://link.springer.com/book/10.1007/978-3-031-27058-1>, 2023, 75-101.
2. "Using simulation to improve container depot operations," JIMENA PASCUAL AND ALICE E. SMITH, *Women in Industrial and Systems Engineering: Key Advances and Perspectives on Emerging Topics* (Alice E. Smith, editor), Springer, E-book ISBN 978-3-030-11866-2 and hardbound ISBN 978-3-030-11865-5, 2019, Chapter 21, 487-513.
3. "An extended double row layout problem," ALICE E. SMITH, CHASE C. MURRAY AND XINGQUAN ZUO*, *12th International Material Handling Research Colloquium* (B. Montreuil, A. Carrano, K. Gue, R. de Koster, M. Ogle and J. Smith, editors), Material Handling Institute, 2014, ISBN: 978-1-882780-17-5, 554-569.
4. "Non-deterministic decoding with mapping rearrangement to enhance precision in binary encodings," ORHAN DENGIZ*, ALICE E. SMITH AND GERRY DOZIER, *Heuristics: Theory and Applications* (P. Siarry, editor), Nova Science Publishers, 2013, ISBN: 978-1-62417-637-1, Chapter 5, 69-82.
5. "Mentoring pathways: A small-wins approach to fostering faculty development," TONI ALEXANDER, DONNA L. SOLLIE, VICTORIA R. BROWN, DAYDRIE HAGUE, OVERTOUN JENDA, ALICE E. SMITH, DANIEL J. SVYANTEK AND MARIE W. WOOTEN, *Mentoring Strategies to Facilitate the Advancement of Women Faculty* (K. K. Karuksis, B. L. Gourley, M. Rossi and L. L. Wright, editors), American Chemical Society, Washington, D.C., 2010, 61-78.
6. "Improving network connectivity in ad hoc networks using particle swarm optimization and agents," ABDULLAH KONAK*, ORHAN DENGIZ* AND ALICE E. SMITH, *Wireless Network Design: Optimization Models and Solution Procedures* (J. Kennington, E. Olinick and D. Rajan, editors), Springer, 2011, Chapter 11, 247-270.
7. "Two-edge disjoint survivable network design problem with relays," ABDULLAH KONAK*, SADAN KULTUREL-KONAK* AND ALICE E. SMITH, *Operations Research and Cyber-Infrastructure* (J. W. Chinneck, B. Kristjansson and M. Saltzman, editors), *Operations Research/Computer Science Interfaces Series*, vol. 47, Springer Verlag, New York, 2009, 279-292.
8. "Optimizing a physical security configuration using a highly detailed simulation model," TOM MARECHAL*, ALICE E. SMITH, VOLKAN USTUN*, JEFFREY S. SMITH AND ERJEN LEFEBER, *Handbook of Military Industrial Engineering (IIE Book of the Year Awardee)*, CRC Press, Taylor & Francis, Boca Raton, FL, 2009, 2-1 – 2-17.

9. "Dynamic load balancing using an ant colony approach in micro-cellular systems," SUNG-SOO KIM*, ALICE E. SMITH AND SOON-JUNG HONG, *Advances in Metaheuristics for Hard Optimization* (P. Siarry and Z. Michalewicz, editors) Springer's Natural Computing Series, Springer Verlag, Germany, 2007, 137-152.
10. "Ant colony paradigm for reliable systems design," YUN CHIA LIANG* AND ALICE E. SMITH, *Computational Intelligence in Reliability Engineering* (G. Levitin, editor), Springer Verlag, Berlin, 2007, Chapter 1, 1-20.
11. "Network reliability optimization," ABDULLAH KONAK* AND ALICE E. SMITH, *Handbook of Optimization in Telecommunications* (M. G. C. Resende and P. Pardalos, editors), Springer Verlag, USA, 2006, Chapter 26, 735-760.
12. "Design of production facilities using evolutionary computing," ALICE E. SMITH AND BRYAN A. NORMAN, *Evolutionary Optimization* (R. Sarker, M. Mohammadian and X. Yao, editors), Kluwer Academic Publishers, USA, 2002, Chapter 12, 309-327.
13. "Neural network predictive process models: Three diverse manufacturing examples," SARAH S. Y. LAM* AND ALICE E. SMITH, *Handbook of Computational Intelligence in Design and Manufacturing* (A. Kusiak and J. Wang, editors), CRC Press LLC, 2001, Chapter 11, 11-1 – 11-12.
14. "Evolutionary methods for design of reliable networks," ALICE E. SMITH AND BERNA DENGIZ*, *Telecommunications Optimization: Heuristic and Adaptive Computation Techniques* (D. Corne, M. Oates and G. Smith, editors), Wiley, Chichester, U.K., 2000, Chapter 2, 17-34.
15. "A hierarchical genetic algorithm for system identification and curve fitting with a supercomputer implementation," MEHMET GULSEN* AND ALICE E. SMITH, IMA Volumes in Mathematics and its Applications Volume 111, *Evolutionary Algorithms* (Lawrence David Davis, Kenneth De Jong, Michael D. Vose and L. Darrell Whitley, editors), Springer-Verlag, New York, 1999, 111-138.
16. "Constraint-Handling Techniques - Penalty Functions," ALICE E. SMITH AND DAVID W. COIT*, in *Handbook of Evolutionary Computation*, Institute of Physics Publishing and Oxford University Press, Bristol, U.K., 1997, Chapter C5.2.
17. "Validation and Verification," JANET M. TWOMEY* AND ALICE E. SMITH, in *Artificial Neural Networks for Civil Engineers: Fundamentals and Applications* (N. Kartam, I. Flood and J. H. Garrett, editors), ASCE Press, New York, 1997, 44-64.
18. "Process Planning Using an Integrated Neural Network and Expert System Approach," MARK WILHELM*, ALICE E. SMITH AND BOPAYA BIDANDA, in *Hybrid Intelligent System Applications* (J. Liebowitz, editor), Cognizant Communications/ISIS, Elmsford, NY, 1996, 3-23.
19. "Impacts of Intelligent Process Control on Product Design," ALICE E. SMITH, in *Intelligent Systems in Design and Manufacturing* (C. H. Dagli and A. Kusiak, editors), ASME Press, New York, 1994, 383-394.
20. "Manufacturing Feature Identification for Intelligent Design," ALICE E. SMITH AND CIHAN H. DAGLI, in *Intelligent Systems in Design and Manufacturing* (C. H. Dagli and A. Kusiak, editors), ASME Press, New York, 1994, 213-230.
21. "An Expert System With External Optimization Module for Quality Control Decisions," ALICE E. SMITH AND CIHAN H. DAGLI, in *Handbook of Expert Systems Applications in Manufacturing: Structure and Rules* (A. Mital and S. Anand, editors), Chapman & Hall, London, UK, 1994, 370-381.
22. "Analysis of Worth: Justifying Funding for Development and Implementation of Expert Systems," ALICE E. SMITH AND CIHAN H. DAGLI, in *Managing Expert Systems* (E. Turban and J. Liebowitz, editors), Idea Group Publishing, Harrisburg, PA, 1992, 60-83.

REFEREED PROCEEDINGS

1. "Efficient risk estimation using extreme value theory and simulation metamodeling," Joseph J. Kennedy*, Armin Khayyer*, Alexander Vinel and Alice E. Smith, *Proceedings of the 2020 Winter Simulation Conference* (K.-H. Bae, B. Feng, S. Kim, S. Lazarova-Molnar, Z. Zheng, T. Roeder, and R. Thiesing, eds), December 2020.

2. "The selective traveling salesman problem with release dates and drone resupply," Juan C. Pina-Pardo*, Daniel F. Silva and Alice E. Smith, *Proceedings of the TSL Second Triennial Conference*, May 2020, TSL2020.024.
3. "Same day delivery vehicle routing problem with drone resupply," Juan Carlos Pina Pardo*, Daniel F. Silva Izquierdo, and Alice E. Smith, *Optima 2019 XIII Congreso Chileno de Investigación Operativa*, November 2019. **Best Paper of the Conference Award.**
4. "A space syntax analysis of the relationship between function and form in facility layout," Alejandro Teran-Somohano* and Alice E. Smith, *Progress in Material Handling Research, Proceedings of the 15th International Material Handling Research Conference*, July 2018, 3. https://digitalcommons.georgiasouthern.edu/pmhr_2018/3.
5. "Optimization of a fast-pick area in a cosmetics distribution center," Mario Velez-Gallego* and Alice E. Smith, *Progress in Material Handling Research, Proceedings of the 15th International Material Handling Research Conference*, July 2018, 28. https://digitalcommons.georgiasouthern.edu/pmhr_2018/28.
6. "Supporting simulation experiments with megamodeling," Sema Çam*, Orcun Dayıbaş*, Bilge Kaan Görür*, Halit Oğuztüzün, Levent Yılmaz, Sritika Chakladar*, Kyle Doud*, Alice E. Smith, and Alejandro Teran-Somohano*, *Proceedings of the 6th International Conference on Model-Driven Engineering and Software Development - Volume 1: MODELSWARD*, ISBN 978-989-758-283-7, DOI: 10.5220/0006586703720378. January 2018, 372-378.
7. "Model alignment using optimization and design of experiments," Alejandro Teran-Somohano*, Alice E. Smith and Levent Yılmaz, *Proceedings of the 2017 Winter Simulation Conference* (W. K. V. Chan, A. D'Ambrogio, G. Zacharewicz, N. Mustafee, G. Wainer, and E. Page, eds.), 978-1-5386-3428-8/17/\$31.00 ©2017 IEEE, December 2017, 1288-1299.
8. "Empty container stacking operations: case study of an empty container depot in Valparaiso Chile," Felipe Hidalgo*, Diego Aranda*, Jimena Pascual, Alice E. Smith, and Rosa G. González-Ramirez, *Proceedings of the 2017 Winter Simulation Conference* (W. K. V. Chan, A. D'Ambrogio, G. Zacharewicz, N. Mustafee, G. Wainer, and E. Page, eds.), 978-1-5386-3428-8/17/\$31.00 ©2017 IEEE, December 2017, 3114-3125.
9. "Models as self-aware cognitive agents and adaptive mediators for model-driven science," Levent Yılmaz, Sritika Chakladar*, Kyle Doud*, Alice E. Smith, Alejandro Teran-Somohano*, Halit Oguztuzun, Sema Cam*, Orcun Dayibas*, and Bilge Kaan Gorur*, *Proceedings of the 2017 Winter Simulation Conference* (W. K. V. Chan, A. D'Ambrogio, G. Zacharewicz, N. Mustafee, G. Wainer, and E. Page, eds.), 978-1-5386-3428-8/17/\$31.00 ©2017 IEEE, December 2017, 1300-1311.
10. "Empty container stacking operations: case study of an empty container depot in Valparaiso Chile," Jimena Pascual, Diego Aranda*, Felipe Hidalgo*, Alice E. Smith, Erhan Karakaya*, and Rosa G. Gonzalez-Ramirez, *Proceedings of the 2016 Winter Simulation Conference*, Washington DC, December 2016.
11. "Empty container stacking operations: case study of an empty container depot in Valparaiso Chile," Felipe Hidalgo*, Diego Aranda*, Jimena Pascual, Erhan Karakaya*, Alice E. Smith and Rosa G. Gonzalez-Ramirez, *Proceedings of the International Conference on Production Research*, Valparaíso, Chile, October 2016.
12. "DATASEM: A Simulation suite for SoSE management research," Richard Turner, Levent Yılmaz, Jeffrey Smith, Donghuang Li*, Saicharan Chada*, Alice E. Smith and Alexey Tregubov*, *Proceedings of the 2016 11th System of Systems Engineering Conference*, Kongsberg, Norway, June 2016.
13. "Environmental improvement of operating supply chains: An optimization approach for the cement industry," Mario C. Vélez-Gallego*, Alice E. Smith and Nora Cadavid, *Proceedings of the 2016 Industrial and Systems Engineering Research Conference*, Anaheim, California, May 2016.
14. "A model-driven engineering approach to simulation experiment design and execution," Alejandro Teran-Somohano*, Alice E. Smith, Joseph Ledet*, Levent Yılmaz, and Halit Oguztuzun, *Proceedings of the 2015 Winter Simulation Conference* (L. Yılmaz, W. K. V. Chan, I. Moon, T. M. K. Roeder, C. Macal, and M. D. Rossetti, editors), December 2015, 2632-2643.

15. "A hybrid transformation process for simulation modernization and reuse via model replicability and scenario reproducibility," Joseph Ledet*, Sema Cam*, B. Kaan Gorur*, Orçun Dayibas*, Halit Oguztuzun, Levent Yilmaz, and Alice E. Smith *Proceedings of the 2015 AlaSim International Conference*, Huntsville, Alabama, May 2015.
16. "Toward a model-driven engineering framework for reproducible simulation experiment lifecycle management," Alejandro Teran-Somohano*, Orçun Dayibaş*, Levent Yilmaz and Alice E. Smith, *Proceedings of the 2014 Winter Simulation Conference* (A. Tolk, S. Y. DIALLO, I. O. RYZHOV, L. YILMAZ, S. BUCKLEY, and J. A. MILLER, editors), December 2014, 2726-2737.
17. "Integer programming model for fuzzy rule-based classification systems," Shahab Derhami* and Alice E. Smith, *Proceedings of the 2014 IEEE World Congress on Computational Intelligence*, Beijing, China, July 2014.
18. "Toward model-driven engineering principles and practices for model replication," J. Ledet*, A. Teran-Somohano*, Z. Butcher*, L. Yilmaz, A. E. Smith, H. Oguztuzun, O. Dayibas*, and B. K. Gorur* in *Proceedings of the 2014 Summer Computer Simulation Conference*, pp. 34-41, Monterey, California, July 2014.
19. "Airfoil optimization by evolution strategies," Drew A. Curriston* and Alice E. Smith, *Proceedings of the 2013 IEEE Congress on Evolutionary Computation*, Cancun, Mexico, June 2013.
20. "A setup reduction methodology from lean manufacturing for development of meta-heuristic algorithms," Alejandro Teran-Somohano and Alice E. Smith, *Proceedings of the 2013 IEEE Congress on Evolutionary Computation*, Cancun, Mexico, June 2013.
21. "A complex adaptive model of information foraging and preferential attachment dynamics in global participatory science," OZGUR OZMEN*, JEFFREY S. SMITH, LEVENT YILMAZ, AND ALICE E. SMITH, *2012 IEEE Conference on Cognitive Methods in Situation Awareness and Decision Support* (CogSIMA 2012), New Orleans, LA, USA, March 2012.
22. "Disservice representation using the Gini coefficient in semi-desirable facility location problems," HALUK YAPICIOGLU* AND ALICE E. SMITH, *Proceedings of the 2011 IEEE Congress on Evolutionary Computation*, New Orleans, LA, June 2011.
23. "A simulation methodology for online process control of hot mix asphalt (HMA) production," OZGUR KABADURMUS*, ONKAR PATHAK*, JEFFREY S. SMITH, ALICE E. SMITH, AND HALUK YAPICIOGLU, *Proceedings of the 2010 Winter Simulation Conference*, Baltimore, MD, December 2010.
24. "Optimizing tactical military MANETs with a specialized PSO," YOUNGCHOL CHO*, JEFFREY .S. SMITH, AND ALICE E. SMITH, *Proceedings of the 2010 IEEE World Congress on Computational Intelligence*, Barcelona, Spain, July 2010.
25. "Application of Kriging to predict wireless network connectivity," Soroor Al Khafajj*, Heping Liu* and Alice E. Smith, *Proceedings of the 2nd International North-American Simulation Technology Conference on Soft Computing, Simulation and Software Engineering*, Atlanta, GA, August 26-28, 2009, 16-20.
26. "Application of Kriging to cost estimation," SOHIER BAIIOUMY*, HEPING LIU* AND ALICE E. SMITH, *Proceedings of the 9th Cairo University International Conference on Mechanical Design and Production (MDP-9)*, Cairo, Egypt, January 8-10, 2008, 1546-1556.
27. "A novel particle swarm optimizer with Kriging models," HEPING LIU* AND ALICE E. SMITH, *Intelligent Engineering Systems through Artificial Neural Networks: Smart Systems Engineering: Computational Intelligence in Architecting Complex Engineering Systems*, vol. 17, (Proceedings of the Artificial Neural Networks in Engineering Conference (ANNIE 2007) held November 11-14, 2007, in St. Louis, Missouri) edited by Cihan H. Dagli, Anna L. Buczak, David L. Enke, Mark J. Embrechts, and Okan Ersoy, ASME Press Series on Intelligent Engineering Systems Through Artificial Neural Networks, New York, 2007, 353-358.
28. "The application of microstructure mining to the relationships between surface damage and materials processing for polycrystalline ceramics," ORHAN DENGİZ*, TIANDAN CHEN*, IAN NETTLESHIP, AND ALICE E. SMITH, *Materials Science & Technology Conference* (MS&T2006), Cincinnati, OH, October 15-19, 2006.

29. "Maximizing connectivity and performance in mobile ad hoc networks using mobile agents," ORHAN DENGIZ*, ABDULLAH KONAK*, AND ALICE E. SMITH, *International Conference on Telecommunication Systems -Modeling and Analysis* (ICTSM2006), Penn State-Berks, Reading, PA, October 5-8, 2006.
30. "A populated variable neighborhood descend algorithm for the orienteering problem," M. FATIH TASGETIREN*, ALICE E. SMITH AND HATICE UYSAL*, *Proceedings of the 5th International Symposium on Intelligent Manufacturing Systems*, Sakarya, Turkey, May 2006.
31. "Designing resilient networks using a hybrid genetic algorithm approach," ABDULLAH KONAK* AND ALICE E. SMITH, *Proceedings of the Genetic and Evolutionary Computation Conference, GECCO-2005* (H.-G. Beyer, U.-M. O'Reilly, D.V. Arnold, W. Banzhaf, C. Blum, E.W. Bonabeau, E. Cantú Paz, D. Dasgupta, K. Deb, J.A. Foster, E.D. de Jong, H. Lipson, X. Llorca, S. Mancoridis, M. Pelikan, G.R. Raidl, T. Soule, A. Tyrrell, J.-P. Watson, and E. Zitzler, editors), ACM Press, New York, 2005, 1279-1286.
32. "Reaching 6th through 8th grade students through the National Science Foundation Research Experiences for Teachers Program," ALICE E. SMITH, CYNDA FICKERT AND MARK JONES, *Proceedings of the ASEE Annual Conference*, Portland, OR, 2005. **Awarded Best ASEE Zone II Paper (there are four ASEE zones in the U.S.)**
33. "A Pareto fed multi-objective genetic algorithm for the redundancy allocation problem," ORHAN DENGIZ*, ALICE E. SMITH, FULYA ALTIPARMAK* AND BERNA DENGIZ*, *Proceedings of the Industrial Engineering Research Conference*, Atlanta, GA, May 2005.
34. "The rack layout problem with stochastic demand and profit," BRYAN A. NORMAN, CHEN LI* AND ALICE E. SMITH, *Proceedings of the Industrial Engineering Research Conference*, Atlanta, GA, May 2005.
35. "New event-driven sampling techniques for network reliability estimation," ABDULLAH KONAK*, ALICE E. SMITH AND SADAN KULTUREL-KONAK*, *Proceedings of the 2004 Winter Simulation Conference*, Washington DC, 2004.
36. "Bi-criteria model for locating a semi-desirable facility on a plane using particle swarm optimization," HALUK YAPICIOGLU*, GERRY DOZIER AND ALICE E. SMITH, *Proceedings of the 2004 Congress on Evolutionary Computation (CEC2004)*, Portland, OR, June 2004, IEEE, 2328-2334.
37. "Non-deterministic decoding with memory to enhance precision in binary-coded genetic algorithms," ORHAN DENGIZ*, GERRY DOZIER AND ALICE E. SMITH, *Proceedings of the 2004 Congress on Evolutionary Computation (CEC2004)*, Portland, OR, June 2004, IEEE, 2166-2172.
38. "Reaching 6th through 8th grade students through the National Science Foundation Research Experiences for Teachers Program," ALICE E. SMITH, CYNDA FICKERT AND MARK JONES, *Proceedings of the ASEE Southeast Section Conference*, Auburn, AL, 2004. **Awarded Best ASEE Zone II Paper (there are four ASEE zones in the U.S.)**
39. "Engineering journal review process: A survey of engineering journal editors," LUKE T. MILLER* AND ALICE E. SMITH, *Proceedings of the ASEE Southeast Section Conference*, Auburn, AL, 2004.
40. "A reliability block diagramming tool to describe networks," MEHMET SAHINOGLU, C. V. RAMAMOORTHY, ALICE E. SMITH AND BERNA DENGIZ*, *Proceedings of the 2004 Reliability and Maintainability Symposium*, Los Angeles, 2004, 141-145.
41. "Improved network design when considering s-t reliability using an exact reliability block diagram," MEHMET SAHINOGLU, ALICE SMITH AND BERNA DENGIZ*, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 13* (C. H. Dagli, A. L. Buczak, J. Ghosh, M. J. Embrechts and O. Ersoy, editors), ASME Press, 2003, 849-855.
42. "Designing aisle networks to facilitate material flow," OGUZHAN ALAGOZ*, BRYAN A. NORMAN AND ALICE E. SMITH, *Progress in Material Handling Research 2002* (Russell Meller, Michael K. Ogle, Brett A. Peters, G. Don Taylor and John Usher, editors), The Material Handling Institute, Charlotte, NC, 2002, 11-25.
43. "Reliability estimation of computer communication networks: ANN models", FULYA ALTIPARMAK*, BERNA DENGIZ* AND ALICE E. SMITH, *Proceedings of the Eighth IEEE Symposium on Computers and Communications (ISCC)*, Kemer-Antalya, Turkey, 2003.

44. "Neural computing approach to shape change estimation in hot isostatic pressing," ORHAN DENGIZ*, ABDULLAH KONAK*, SADAN KULTUREL-KONAK*, ALICE E. SMITH AND IAN NETTLESHIP, *Adaptive Computing in Design and Manufacture V* (I. C. Parmee, editor), Springer-Verlag, London, 2002, 171-180.
45. "Reliability improvement of airport ground transportation vehicles using neural networks to anticipate system failure," ALICE E. SMITH, DAVID W. COIT* AND CURTIS MCCULLERS, *Proceedings of the 2002 Reliability and Maintainability Symposium (RAMS)*, January 2002, Seattle, WA, 74-79. **Awarded the William A. J. Golomski Award for Best Paper by an IIE member.**
46. "Predictive diagnostics for motor driven automated doors," CURTIS W. MCCULLERS AND ALICE E. SMITH, *Proceedings of the American Public Transportation Association Rail Transportation Conference*, June 2001, Boston, MA, CD ROM Format.
47. "Artificial neural networks in network reliability estimation using different experimental design methods," FULYA ALTIPARMAK*, BERNA DENGIZ* AND ALICE E. SMITH, *Proceedings of the 2001 IE Research Conference*, May 2001, Dallas, TX, CD ROM Format.
48. "Explicitly incorporating multiple material handling systems within block layout design," ALICE E. SMITH, GULTEKIN OZDEMIR* AND BRYAN A. NORMAN, *Progress in Material Handling Research 2000* (R. J. Graves, L. F. McGinnis, M. K. Ogle, B. A. Peters, R. E. Ward and M. R. Wilhelm, editors), The Material Handling Institute, Charlotte, NC, 2000, 330-339.
49. "Ant colony optimization for constrained combinatorial problems," YUN-CHIA LIANG* AND ALICE E. SMITH, *Proceedings of the 5th Annual International Conference on Industrial Engineering - Theory, Applications and Practice*, December 2000, Hsinchu, Taiwan, CD ROM Format, Paper ID#296. **Awarded Best Student Paper of the conference.**
50. "A genetic algorithm for the orienteering problem," M. FATIH TASGETIREN* AND ALICE E. SMITH, *Proceedings of the 2000 Congress on Evolutionary Computation*, La Jolla, CA, July 2000, IEEE, 910-915.
51. "Minimum cost 2-edge-connected Steiner graphs in rectilinear space: An evolutionary approach," SADAN KULTUREL KONAK*, ABDULLAH KONAK* AND ALICE E. SMITH, *Proceedings of the 2000 Congress on Evolutionary Computation*, La Jolla, CA, July 2000, IEEE, 97-103.
52. "Evolutionary design of facilities considering production uncertainty," ALICE E. SMITH AND BRYAN A. NORMAN, *Evolutionary Design and Manufacture: Selected Papers from ACDM 2000* (I. C. Parmee, editor), Springer-Verlag, London, 2000, 175-186.
53. "Incorporating heterogeneous distance metrics within block layout design," GULTEKIN OZDEMIR*, ALICE E. SMITH AND BRYAN A. NORMAN, *Proceedings of the Second Asia-Pacific Conference on Industrial Engineering and Management Systems*, Kanazawa, Japan, 1999, 213-216. Also published in *Proceedings of the 1999 Second Japan-USA Joint Workshop on Intelligent Manufacturing Systems* (M. Gen. T. Yokota, A. E. Smith, G. A. Suer, R. W. Wolff and G. Yamazaki, editors), Kanazawa, Japan, October 1999, 49-52.
54. "A neural network metamodel approach to capital investment decision analysis," RAVIPIM CHAVEESUK* AND ALICE E. SMITH, *Proceedings of the 1999 International Joint Conference on Neural Networks*, Washington, DC, July 1999, CD ROM format, paper number 306.
55. "Validation of neural networks using hybrid resampling methods," SARAH S. Y. LAM* AND ALICE E. SMITH, *Proceedings of the 1999 International Joint Conference on Neural Networks*, Washington, DC, July 1999, CD ROM format, paper number 307.
56. "A hybrid genetic algorithm approach for backbone design of communication networks," ABDULLAH KONAK* AND ALICE E. SMITH, *Proceedings of the 1999 Congress on Evolutionary Computation*, Washington D.C., IEEE, 1999, 1817-1823.
57. "Experiences with teaching adaptive optimization to engineering graduate students," ALICE E. SMITH, *Proceedings of the 1999 Congress on Evolutionary Computation*, Washington D.C., IEEE, 1999, 1696-1701.

58. "An ant system approach to redundancy allocation," YUN-CHIA LIANG* AND ALICE E. SMITH, *Proceedings of the 1999 Congress on Evolutionary Computation*, Washington D.C., IEEE, 1999, 1478-1484.
59. "Process control of abrasive flow machining using a static neural network model," SARAH S. Y. LAM* AND ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 8* (C.H. Dagli, M. Akay, A.L. Buczak, O. Ersoy and B.R. Fernandez, editors), ASME Press, New York, 1998, 797-802.
60. "Development of artificial neural network-based autoclaved cellular concrete models," W. HU*, ALICE E. SMITH, LUIS E. VALLEJO, RONALD NEUFELD AND D. M. GOLDEN, *Proceedings of the 13th International Symposium on Use and Management of Coal Combustion Products*, Orlando, FL., 1998, vol.1, pp. 31-1 to 31-21.
61. "Cascade-correlation neural network modeling of the abrasive flow machining process," SARAH S. Y. LAM* AND ALICE E. SMITH, *Advances in Industrial Engineering Theories, Applications and Practice III, Volume III* (M. M. Tseng, editor), *International Journal of Industrial Engineering*, 1998, 898-905.
62. "A genetic algorithm approach to input/output station location in facilities design," RIFAT AYKUT ARAPOGLU*, BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of the Second Japan-Australia Joint Workshop on Intelligent and Evolutionary Systems*, Kyoto, Japan, November 1998, 155-170.
63. "A neural network approach for condition monitoring of the people mover door systems," KEVIN CREEHAN*, RICHARD PERSIA* AND ALICE E. SMITH, *Proceedings of the Second Japan-Australia Joint Workshop on Intelligent and Evolutionary Systems*, Kyoto, Japan, November 1998, 70-74.
64. "A genetic algorithm approach to input/output station location in facilities design," RIFAT AYKUT ARAPOGLU*, BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of 1998 The First Japan-USA Joint Workshops on Intelligent Manufacturing Systems*, Ashikaga, Japan, November 1998, 15-20.
65. "A neural network approach for condition monitoring of the people mover door systems," KEVIN CREEHAN*, RICHARD PERSIA* AND ALICE E. SMITH, *Proceedings of 1998 The First Japan-USA Joint Workshops on Intelligent Manufacturing Systems*, Ashikaga, Japan, November 1998, 104-108.
66. "Research in intelligent manufacturing systems at the University of Pittsburgh," BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of 1998 The First Japan-USA Joint Workshops on Intelligent Manufacturing Systems*, Ashikaga, Japan, November 1998, addendum.
67. "Estimating all-terminal network reliability using a neural network," CHAT SRIVAREE-RATANA* AND ALICE E. SMITH, *Proceedings of the 1998 IEEE International Conference on Systems, Man, and Cybernetics*, San Diego, October 1998, 4734-4740.
68. "Integrated facility design using an evolutionary approach with a subordinate network algorithm," BRYAN A. NORMAN, ALICE E. SMITH AND RIFAT AYKUT ARAPOGLU*, *Parallel Problem Solving from Nature (PPSN V)* (A. E. Eiben, T. Baeck, M. Schoenauer and H.-P. Schwefel, editors), Lecture Notes in Computer Science 1498, Springer-Verlag, Berlin, Germany, 1998, 937-946.
69. "A general upper bound for all-terminal network reliability and its uses," ABDULLAH KONAK* AND ALICE E. SMITH, *Proceedings of the Industrial Engineering Research Conference*, Banff, Canada, May 1998.
70. "An efficient algorithm for using a perimeter distance metric in unequal area facility layout," BRYAN A. NORMAN, ALICE E. SMITH AND RIFAT AYKUT ARAPOGLU*, *Proceedings of the Industrial Engineering Research Conference*, Banff, Canada, May 1998.
71. "Developing and teaching graduate courses in computational intelligence," ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 7* (C. H. Dagli, M. Akay, O. Ersoy, B. R. Fernandez and A. E. Smith, editors), ASME Press, New York, 1997, 1043-1048.
72. "Neural network modeling of abrasive flow machining," ALICE E. SMITH AND WILLIAM S. SLAUGHTER, *Proceedings of the Advanced Technology Program Motor Vehicle Manufacturing Technology Public Workshop*, NIST Document NISTIR 6079, Ann Arbor, MI, October 1997, 151-158.

73. "Technology transfer of computational intelligence for manufacturing process control," ALICE E. SMITH, *Proceedings of the Fourth Africa-USA International Conference on Manufacturing Technology*, Pittsburgh, PA, August 1997, 90-97.
74. "Local search genetic algorithm for optimization of highly reliable communications networks," BERNA DENGIZ*, FULYA ALTIPARMAK* AND ALICE E. SMITH, *Proceedings of the Seventh International Conference on Genetic Algorithms (ICGA97)* (T. Bäck, editor), East Lansing, MI, July 1997, 650-657.
75. "Use of a hybrid genetic algorithm for a computer network design problem," BERNA DENGIZ*, FULYA ALTIPARMAK* AND ALICE E. SMITH, *Proceedings of the 11th European Simulation Conference*, Istanbul, Turkey, June 1997, 529-535.
76. "Considering uncertainty in unequal area block layout design," BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of the Sixth Industrial Engineering Research Conference*, Miami FL, May 1997, 826-831.
77. "Process monitoring of abrasive flow machining using a neural network predictive model," SARAH S. Y. LAM* AND ALICE E. SMITH, *Proceedings of the Sixth Industrial Engineering Research Conference*, Miami FL, May 1997, 477-482.
78. "Optimal design of networks considering all-terminal reliability," BERNA DENGIZ*, FULYA ALTIPARMAK* AND ALICE E. SMITH, *Proceedings of the Sixth Industrial Engineering Research Conference*, Miami FL, May 1997, 30-35.
79. "Random keys genetic algorithm with adaptive penalty function for optimization of constrained facility layout problems," BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of the IEEE Conference on Evolutionary Computing*, Indianapolis IN, April 1997, 407-411.
80. "Considering risk profiles in design optimization for series-parallel systems," DAVID W. COIT* AND ALICE E. SMITH, *Proceedings of the 1997 Annual Reliability and Maintainability Symposium*, Philadelphia PA, January 1997, 271-277.
81. "Heuristic optimization of network design considering all-terminal reliability," DARREN L. DEETER* AND ALICE E. SMITH, *Proceedings of the 1997 Annual Reliability and Maintainability Symposium*, Philadelphia PA, January 1997, 194-199.
82. "Iterative training to improve neural network metamodels of simulated systems," SANIYE BURCU OZSERIM*, ALICE E. SMITH AND ROBERT A. KILMER*, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 6* (C. H. Dagli, M. Akay, C. L. P. Chen, B. R. Fernandez and J. Ghosh, editors), ASME Press, 1996, 135-142.
83. "Artificial neural network approach to the control of a wave soldering process," JANET M. TWOMEY* AND ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 6* (C. H. Dagli, M. Akay, C. L. P. Chen, B. R. Fernandez and J. Ghosh, editors), ASME Press, 1996, 889-894.
84. "Optimal reliability allocation in series-parallel systems from components' discrete cost - reliability data sets: A nested simulated annealing approach," SUBBA RAO V. MAJETY*, SRIKANTH VENKATASUBRAMANIAN* AND ALICE E. SMITH, *Proceedings of the Fifth International Industrial Engineering Research Conference*, Minneapolis, MN, May 1996, 435-440.
85. "A hierarchical fuzzy model for predicting casting time in a slip-casting process," KIMBERLY L. PETRI* AND ALICE E. SMITH, *Proceedings of the Fifth International Industrial Engineering Research Conference*, Minneapolis, MN, May 1996, 217-222.
86. "Stochastic formulations of the redundancy allocation problem," DAVID W. COIT* AND ALICE E. SMITH, *Proceedings of the Fifth International Industrial Engineering Research Conference*, Minneapolis, MN, May 1996, 459-463.
87. "Committee networks by resampling," JANET M. TWOMEY* AND ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 5* (C. H. Dagli, M. Akay, C. L. P. Chen, B. R. Fernandez and J. Ghosh, editors), ASME Press, 1995, 153-158.

88. "Using a neural network as a function evaluator during GA search for reliability optimization," DAVID W. COIT* AND ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 5* (C. H. Dagli, M. Akay, C. L. P. Chen, B. R. Fernandez and J. Ghosh, editors), ASME Press, 1995, 369-374.
89. "A genetic algorithm approach to optimal topological design of all terminal networks," BERNA DENGIZ*, FULYA ALTIPARMAK* AND ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 5* (C. H. Dagli, M. Akay, C. L. P. Chen, B. R. Fernandez and J. Ghosh, editors), ASME Press, 1995, 405-410.
90. "Estimating cost functions: Neural nets and regression," ANTHONY K. MASON AND ALICE E. SMITH, *Proceedings of the 17th Annual Conference of the International Society of Parametric Analysts*, San Diego, CA, May 1995, meth 149-163.
91. "A neural network metamodel of an emergency department simulation," ROBERT A. KILMER*, ALICE E. SMITH, CENK TUNASAR* AND LARRY J. SHUMAN, *Proceedings of the Fourth Industrial Engineering Research Conference*, Nashville, TN, May 1995, 138-144.
92. "Optimization approaches to the redundancy allocation problem for series-parallel systems," DAVID W. COIT* AND ALICE E. SMITH, *Proceedings of the Fourth Industrial Engineering Research Conference*, Nashville, TN, May 1995, 342-349.
93. "Using designed experiments to produce robust neural network models of manufacturing processes," DAVID W. COIT* AND ALICE E. SMITH, *Proceedings of the Fourth Industrial Engineering Research Conference*, Nashville, TN, May 1995, 229-238.
94. "Neural networks as a metamodeling technique for discrete event stochastic simulation," ROBERT A. KILMER*, ALICE E. SMITH AND LARRY J. SHUMAN, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 4*, (C. H. Dagli, B. R. Fernandez, J. Ghosh and R. T. S. Kumara, editors), ASME Press, 1994, 1141-1146.
95. "Wave soldering process control modeling using a neural network approach," DAVID W. COIT*, JAY BILLA*, DARREN LEONARD*, ALICE E. SMITH, WILLIAM CLARK AND AMRO EL-JAROUDI, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 4* (C. H. Dagli, B. R. Fernandez, J. Ghosh and R. T. S. Kumara, editors), ASME Press, 1994, 999-1004.
96. "Artificial neural networks as an aid to medical decision making: Comparing a statistical resampling technique with the train-and-test technique for validation of sparse data sets," TERRY L. HUSTON, ALICE E. SMITH AND JANET M. TWOMEY*, *Artificial Intelligence in Medicine: Interpreting Clinical Data*, AAAI Press Technical Report SS-94-01, 1994, 70-73.
97. "Presquencing the Euclidean TSP with a combined genetic algorithm / space filling curve approach," DAVID M. TATE, CENK TUNASAR* AND ALICE E. SMITH, *Proceedings of the Third IIE Research Conference*, Atlanta, GA, May 1994, 267-272.
98. "Use of a genetic algorithm to optimize a combinatorial reliability design problem," DAVID W. COIT* AND ALICE E. SMITH, *Proceedings of the Third IIE Research Conference*, Atlanta, GA, May 1994, 467-472.
99. "Curve fitting using a genetic algorithm," MEHMET GULSEN*, ALICE E. SMITH AND DAVID M. TATE, *Proceedings of the Third IIE Research Conference*, Atlanta, GA, May 1994, 531-536.
100. "Nonparametric error estimation methods for validating artificial neural networks," JANET M. TWOMEY* AND ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 3*, (C. H. Dagli, L. I. Burke, B. R. Fernandez, J. Ghosh, editors), ASME Press, 1993, 233-238.
101. "Using artificial neural networks to approximate a discrete event stochastic simulation model," ROBERT A. KILMER* AND ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 3*, (C. H. Dagli, L. I. Burke, B. R. Fernandez, J. Ghosh, editors), ASME Press, 1993, 631-636.
102. "Neural network control charts for location and variance process shifts," HULYA YAZICI AND ALICE E. SMITH, *Proceedings of the World Congress on Neural Networks*, Portland, OR, July 1993, 1-265-268.

103. "Expected allele coverage and the role of mutation," DAVID M. TATE AND ALICE E. SMITH, *Proceedings of the Fifth International Conference on Genetic Algorithms*, Urbana, IL, July 1993, 31-37.
104. "Genetic optimization using a penalty function," ALICE E. SMITH AND DAVID M. TATE, *Proceedings of the Fifth International Conference on Genetic Algorithms*, Urbana, IL, July 1993, 499-505.
105. "Using artificial neural networks for estimation during cost analysis," ALICE E. SMITH, *Proceedings of the Second IIE Research Conference*, Los Angeles, CA, May 1993, 102-106.
106. "A neural predictive quality model for slip casting using categorical metrics," SERGIO MARTINEZ*, ALICE E. SMITH AND BOPAYA BIDANDA, *Proceedings of the Second IIE Research Conference*, Los Angeles, CA, May 1993, 265-269.
107. "A neural network model of the dynamic coefficient of friction," JANET M. TWOMEY*, ALICE E. SMITH AND MARK S. REDFERN, *Proceedings of the Second IIE Research Conference*, Los Angeles, CA, May 1993, 187-191.
108. "Genetic algorithm optimization applied to variations of the unequal area facilities layout problem," DAVID M. TATE AND ALICE E. SMITH, *Proceedings of the Second IIE Research Conference*, Los Angeles, CA, May 1993, 335-339.
109. "Power curves for pattern classification networks," JANET M. TWOMEY* AND ALICE E. SMITH, *Proceedings of the 1993 IEEE International Conference on Neural Networks*, San Francisco, CA, March 1993, 950-955.
110. "An examination of performance measures for pattern classification backpropagation neural networks," JANET M. TWOMEY* AND ALICE E. SMITH, in *Intelligent Engineering Systems Through Artificial Neural Networks, Volume 2* (C. H. Dagli, L. I. Burke and Y. C. Shin, editors), ASME Press, 1992, 343-348.
111. "Using genetic algorithms for equal area facilities layout design," ALICE E. SMITH AND DAVID M. TATE, *Robotics and Manufacturing: Recent Trends in Research, Education, and Applications, Volume 4* (M. Jamshidi, R. Lumia, J. Mullins and M. Shahinpoor, editors), ASME Press, 1992, 923-928.
112. "Estimating product performance and quality from design parameters via neural networks," SAFOUEN BEN BRAHIM*, ALICE E. SMITH AND BOPAYA BIDANDA, *Proceedings of the IIE Research Conference*, Chicago, IL, May 1992, 319-323.
113. "A composite system approach for intelligent quality control," HULYA YAZICI AND ALICE E. SMITH, *Proceedings of the IIE Research Conference*, Chicago, IL, May 1992, 325-328.
114. "Control chart representation and analysis via backpropagation neural networks," ALICE E. SMITH, *Proceedings of the 1992 International Fuzzy Systems and Intelligent Control Conference*, Louisville, KY, March 1992, 275-282.
115. "A prototype quality control expert system integrated with an optimization module," CIHAN H. DAGLI AND ALICE E. SMITH, *Proceedings of the World Congress on Expert Systems*, Orlando, FL, December 1991, 1959-1966.
116. "Controlling industrial processes through supervised, feedforward neural networks," ALICE E. SMITH AND CIHAN H. DAGLI, *Computers and Industrial Engineering*, vol. 21, no. 1-4, November 1991, 247-251.
117. "Quality control using backpropagation: An injection molding application," ALICE E. SMITH, *Intelligent Engineering Systems Through Artificial Neural Networks* (C. Dagli, S. Kumara and Y. Shin, editors), ASME Press, 1991, 729-734.
118. "An empirical analysis of backpropagation error surface initiation for injection molding process control," ALICE E. SMITH, CIHAN H. DAGLI AND ELAINE R. RATERMAN, *Proceedings of the 1991 IEEE International Conference on Systems, Man, and Cybernetics*, Charlottesville, VA, October 1991, 1529-1534.
119. "Relating binary and continuous problem entropy to backpropagation network architecture," ALICE E. SMITH AND CIHAN H. DAGLI, *Applications of Artificial Neural Networks II*, SPIE, 1991, 551-562.
120. "Women engineers as managers," ALICE E. SMITH, *Proceedings of the ASEM 11th Annual Conference*, St. Louis, MO, October 1990, 45-51.
121. "Cost justification of an expert system," ALICE E. SMITH AND CIHAN H. DAGLI, *Proceedings of IEEE Conference on Managing Expert Systems Programs and Projects*, Washington, D.C., September 1990, 114-121.

122. "Violating the equivalent repetition assumption of EAC," TED G. ESCHENBACH AND ALICE E. SMITH, *Proceedings of the International Industrial Engineering Conference*, San Francisco, CA, May 1990, 99-104.
123. "Packaging your technical project for executive approval," ALICE E. SMITH, *Proceedings of the Society of Women Engineers Convention*, San Juan, P.R., June 1988, 257-265.
124. "What's it worth? - Cost benefit analysis of an AM/FM system," ALICE E. SMITH, *Proceedings of the Automated Mapping/Facilities Management Regional Conference*, Orlando, FL, February 1987, 261-273 and *Proceedings of the Automated Mapping/Facilities Management Conference*, Snowmass, CO, August 1986, 531-542.

OTHER PUBLICATIONS

1. "IEEE Fellows – Class of 2023 [Society Briefs]," Alice E. Smith, *IEEE Computational Intelligence Magazine*, vol. 18, no.2, May 2023, 8-10, Print ISSN: 1556-603X, Online ISSN: 1556-6048, Digital Object Identifier: 10.1109/MCI.2023.3248879.
2. "Flying pharmacies," Daniel F. Silva and Alice E. Smith, *MHI Solutions Magazine*, vol. 8, no. 2, Spring 2020. http://www.mhisolutions-digital.com/mhiq/0220_volume_8_issue_2/MobilePagedArticle.action?articleId=1562106#articleId1562106
3. "Conference report: 2011 IEEE Congress on Evolutionary Computation," ALICE E. SMITH, *IEEE Computational Intelligence Magazine*, vol. 7, no. 1, February 2012, 12-13.
4. "Evolving an adaptive optimization course," ALICE E. SMITH, *IEEE Computational Intelligence Magazine*, vol. 4, no. 1, February 2009, 52-54.
5. "Learning continents: A spotlight on Turkey's women academics and industry partners," ALICE E. SMITH, *Industrial Engineer Magazine*, vol. 41, no. 1, January 2009, 32-33.
6. "Application of statistical estimators to expanding Pareto fronts," H. P. LIU*, A. E. SMITH, H. YAPICIOGLU* AND G. DOZIER, in *JSM Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association, 2008, on line format.
7. "The correlation of spatial heterogeneity in partially sintered ceramics with pull-out damage on ground and polished surfaces." ALICE E. SMITH AND IAN NETTLESHIP, *Proceedings of the 2004 NSF Design and Manufacturing Research Conference*, Dallas, TX, January 2004, CD Rom format.
8. "Comprehensive redesign of industrial facilities," BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of the 2003 NSF Design and Manufacturing Research Conference*, Birmingham, AL, January 2003, CD Rom format.
9. "Book review: *Multi-Objective Optimization using Evolutionary Algorithms*," ALICE E. SMITH, *IEEE Transactions on Evolutionary Computation*, vol. 6, no. 5, October 2002, 526.
10. "Comprehensive redesign of industrial facilities," BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of the 2002 NSF Design and Manufacturing Research Conference*, San Juan PR, January 2002, CD Rom format.
11. "Improving manufacturability of P/M superalloys by microstructural control," IAN NETTLESHIP AND ALICE E. SMITH, *Proceedings of the 2001 NSF Design and Manufacturing Research Conference*, San Juan PR, January 2002, CD Rom format.
12. "Book review: *Genetic Algorithms and Engineering Optimization*," ALICE E. SMITH, *IIE Transactions*, vol. 33, no. 6, June 2001, 531-532.
13. "Comprehensive redesign of industrial facilities," BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of the 2001 NSF Design and Manufacturing Research Conference*, Tampa, FL, January 2001, CD Rom format.
14. "Improving manufacturability of P/M superalloys by microstructural control," IAN NETTLESHIP AND ALICE E. SMITH, *Proceedings of the 2001 NSF Design and Manufacturing Research Conference*, Tampa, FL, January 2001, CD Rom format.
15. "Update, Research 2000," ALICE E. SMITH, *IIE Facilities, Planning & Design Division Newsletter*, Fall 2000, 6.

16. "Book review: *Swarm Intelligence*," ALICE E. SMITH, *IEEE Transactions on Evolutionary Computation*, vol. 4, no. 2, 2000, 192-193.
17. "Improving manufacturability of P/M superalloys by microstructural control," IAN NETTLESHIP AND ALICE E. SMITH, *Proceedings of the 2000 NSF Design and Manufacturing Research Conference*, Vancouver, BC, January 2000, CD Rom format.
18. "Neural network models of industrial processes: Condition-based maintenance application," ALICE E. SMITH, *Proceedings of the 1999 NSF Design and Manufacturing Research Conference*, Vancouver, BC, January 2000, CD Rom format.
19. "Comprehensive redesign of industrial facilities," BRYAN A. NORMAN AND ALICE E. SMITH, *Proceedings of the 2000 NSF Design and Manufacturing Research Conference*, Vancouver, BC, January 2000, CD Rom format.
20. "Improving manufacturability of P/M superalloys by microstructural control," IAN NETTLESHIP AND ALICE E. SMITH, *Proceedings of the 1999 NSF Design and Manufacturing Grantees Conference*, Long Beach, CA, January 1999, CD Rom format.
21. "Neural network models for industrial applications where data sets are small," ALICE E. SMITH, *Proceedings of the 1999 NSF Design and Manufacturing Grantees Conference*, Long Beach, CA, January 1999, CD Rom format.
22. "Book review: *Adaptive Computing in Design and Manufacture*," ALICE E. SMITH, *IEEE Transactions on Evolutionary Computation*, vol. 3, no. 2, 1999, 159.
23. "New ways to consider production uncertainty and detailed design in facilities layout," ALICE E. SMITH AND BRYAN A. NORMAN, *IIE FAPAD Newsletter*, Spring 1998, 3-4.
24. "Book Review: *Achieving Stretch Goals*," ALICE E. SMITH, *IIE Transactions*, vol. 30, no. 4, 1998, 411.
25. "Neural network models of manufacturing processes: Technology transfer issues in development, validation and implementation," ALICE E. SMITH, *Proceedings of the 1998 NSF Design and Manufacturing Grantees Conference*, Monterrey, Mexico, January 1998, 311-312.
26. "Resampling validation of neural network industrial models under conditions of sparse data," ALICE E. SMITH, *Proceedings of the 1997 NSF Design and Manufacturing Grantees Conference*, Seattle WA, January 1997, 417-418.
27. "Process planning using an integrated neural network and expert system approach," MARK WILHELM*, ALICE E. SMITH AND BOPAYA BIDANDA, *Proceedings of the 1994 NSF Design and Manufacturing Grantees Conference*, Cambridge, MA, January 1994, 391-392.
28. "Southwestern Bell: Change molds an organization," ALICE E. SMITH, a case in *Modern Management: Quality, Ethics, and the Global Environment, Fifth Edition* by S. C. Certo, Allyn and Bacon, Boston, 1992, pp. 378-379.
29. "Graduate options for management education," ALICE E. SMITH, *U. S. Woman Engineer*, vol. 36, no. 3, May/June 1990, 19-20.

MEDIA COVERAGE

Material Handling Institute Member Spotlight <http://s354933259.onlinehome.us/mhi-blog/cicmhe-member-spotlight-interview-with-professor-and-author-dr-alice-smith/>

"What's your story?," Alice E. Smith, *IIE Magazine*, vol. 52, no. 6, June 2020, pp. 64-65. Covered my career and the book I recently edited.

http://ocm.auburn.edu/newsroom/news_articles/2020/05/121356-public-health-order-compliance.php

"Series Highlights Women's Accomplishments," Jill S. Tietjen, *SWE Magazine*, vol. 65, no. 5, p. 64. Covered book edited by Alice E. Smith.

"Chilean Container Depot Project," Faculty Highlights, *Auburn Engineering Magazine*, 2017, <http://ecm.eng.auburn.edu/wp/emag/?p=4044>.

“Conference Report for the 2014 IEEE Symposium Series on Computational Intelligence,” *IEEE Computational Intelligence Magazine*, vol. 10, no. 2, May 2015, pp. 10-12. Covered plenary talk of Alice E. Smith.

“Looking East for Diversity,” *Industrial Engineer*, vol. 44, no. 12, December 2012, pp. 40-41. Covered 2012 NSF sponsored Women in Industrial Engineering Academia Workshop, Alice E. Smith, P.I.

“INFORMS News – People,” *OR/MS Today*, vol. 39, no. 5, October 2012, p. 60. Discusses 2012 NSF sponsored Women in Industrial Engineering Academia Workshop, Alice E. Smith, P.I.

“Eastern Mediterranean Collaboration,” *Industrial Engineer*, vol. 43, no. 11, November 2011, p. 15. Discusses 2012 NSF sponsored Women in Industrial Engineering Academia Workshop, Alice E. Smith, P.I.

“CIEADH Production Wins an Emmy,” *Industrial Engineer*, vol. 43, no. 5, May 2011, p. 64. The CIEADH IE recruiting video that won an Emmy is discussed.

“Engineering Defense,” *Industrial Engineer*, vol. 41, no. 8, August 2009, p. 15. Book of the month which highlights Chapter 2, authored by Tom Marechal, Alice E. Smith, Volkan, Ustun, Jeffrey S. Smith and Erjen Lefeber.

“Publish and Flourish,” by Adedeji Badiru, *OR/MS Today*, vol. 35, no. 1, February 2008, 18-19. Article describing ADVANCE Leadership CD ROM project.

“On the Job,” Alabama Public TV 30 minute program on the automotive manufacturing minor established by the Auburn University industrial and systems engineering department. The video was aired across Alabama in 2009 and can be found at <http://www.eng.auburn.edu/videos/automotive-minor.html>.

“Women make ADVANCES in Academia,” *SWE Magazine*, vol. 51, no. 4, Fall 2006, p. 46. Article highlighting ADVANCE Leadership CD ROM project.

“Sabah” May 3, 2005 and “Hurriyet” October 23, 2004. These are newspapers in Turkey and they ran articles on the work on women in engineering in Turkey sponsored by NSF and TUBITAK.

“Are you experienced?,” *Industrial Engineer*, vol. 35, no. 9, September 2003, 36-39. Article on the RET (Research Experiences for Teachers) project.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Registered Professional Engineer (Alabama and Pennsylvania, Industrial Engineering)

Institute for Operations Research and Management Science (INFORMS) - **Fellow**

INFORMS Journal on Computing Editor in Chief (2019-present)

Co-Chair INFORMS Diversity, Equity and Inclusion Best Paper Award (2023)

INFORMS Volunteer Service Award Committee member (2022-24)

INFORMS Diversity Ambassador (2021)

INFORMS Junior Faculty Interest Group Paper Competition Co-Chair (2021)

INFORMS Morse Lectureship Committee (2021-23)

INFORMS Computing Society Harvey J. Greenberg Research Prize Committee (2021)

INFORMS Task Force for educating reviewers (2019)

INFORMS Journal on Computing Area Editor (2012-2018)

INFORMS Speakers Program speaker (2011-present)

WORMS Award Chair (2011)

INFORMS WORMS Award for the Advancement of Women in OR/MS (2009)

ACORD (Association of Chairs of Operations Research Departments) President (2002-03)

ACORD (Association of Chairs of Operations Research Departments) Vice President and Secretary (2001-02)

INFORMS Journal on Computing Associate Editor (1995-2012)

Institute of Electrical and Electronics Engineers (IEEE) – **Life Fellow**

Named IEEE Computational Intelligence Society Distinguished Lecturer (2023-24)

Chair, Subcommittee for Senior Members, IEEE CIS Member Activity Committee (2023-24)

IEEE Computational Intelligence Society Administrative Committee (elected position) (2023-25)

IEEE Task Force on Computational Intelligence for Diversity, Equity and Inclusivity (DEITY) Member (2022 – present)

IEEE CIS Fellows Committee Chair (2022)

IEEE CIS Awards Committee Chair (2021)

IEEE CIS Fellows Committee (2021)

IEEE CIS Ad Hoc Committee on *Computational Intelligence Magazine* Design (2021)

IEEC CIS WCI Webinar Panelist, August 2020

IEEE CIS Outstanding Early Career Award Subcommittee Chair (2020)

IEEE Computational Intelligence Society Administrative Committee (elected position) (2020-22)

IEEE CIS Liaison to IEEE Press (2020-2021)

IEEE CIS Membership Committee Strategic Planning Subcommittee Vice Chair (2019)

IEEE Evolutionary Computation Technical Committee Vice Chair for Communication and Education (2019)

Named IEEE Computational Intelligence Society Distinguished Lecturer (2018-22)

IEEE Evolutionary Computation Technical Committee Vice Chair (2018)

IEEE CIS Fellows Committee (2018)

IEEE CIS Outstanding Early Career Award Subcommittee (2018, 2019)

IEEE CIS Strategic Planning Committee (2017-18)

IEEE CIS Strategic Planning Sub-Committee for Technical Activities (2017)

IEEE CIS Membership Committee Strategic Planning Subcommittee Chair (2017-18)

IEEE Computational Intelligence Society Administrative Committee (elected position) (2016-18)

IEEE Computational Intelligence Society Nominations Committee (2016-17)

IEEE Computational Intelligence Society Task Force on Formations of New Technical Committees (2016)

IEEE Computational Intelligence Society CIM Best Paper Award Committee Co-Chair (2016)

IEEE Evolutionary Computation Technical Committee Chair (2016-17)

IEEE Women in Computational Intelligence Committee (2016-present)

Computational Intelligence Society representative to the IEEE Society on Social Implications of Technology (SSIT) Board of Governors (2015-16)

IEEE Transactions on Automation Science and Engineering Associate Editor (2015-18)

IEEE CIS Summer School Subcommittee (2014)

IEEE Computational Intelligence Society Liaison to the IEEE-USA's Committee on Transportation and Aerospace Policy (2014-16)

IEEE Computational Intelligence Society Distinguished Lecturers Program Committee Member (2014-16)

IEEE Computational Intelligence Society Education Committee Member (2014-present)

IEEE Transactions on Evolutionary Computation Ad Hoc Committee on Scope and Purpose Chair (2013)

IEEE Computational Intelligence Society Administrative Committee (elected position) (2013-15)

IEEE Evolutionary Computation Technical Committee Vice Chair (2012-2015)

IEEE Evolutionary Computation Technical Committee Task Force on Education Vice Chair (2012-14)

IEEE Women in Computational Intelligence Committee (2011)

IEEE Congress on Evolutionary Computation 2011 General Co-chair

IEEE Evolutionary Computation Technical Committee Member (1999-2000, 2007-2015)

IEEE Transactions on Evolutionary Computation Editorial Board (1998-2018)

Institute of Industrial and Systems Engineers (IISE) – **Fellow**

Wellington Award Selection Committee (2020-22)

Fellows Selection Committee (2018-21)

Senior Vice President – Publications and Board of Trustees Member (2014-17)

CIEADH Oversight Committee of the Industrial and Systems Engineering Research Conference Incoming Chair (2012-13)

CIEADH (Council of IE Academic Department Heads) Past Chair (2011-12)

CIEADH (Council of IE Academic Department Heads) Chair (2010-11)

CIEADH (Council of IE Academic Department Heads) Secretary (2009-10)

Fellow Selection Committee (2009-11)

Educational Foundation Member (2002-05)

Senior Vice President – Academics and Board of Trustees Member (2002-04)
 Judge, Golomski RAMS/IIE Best Paper Award Committee (2003)
 Chair, *IIE Transactions* Design & Manufacturing Best Paper Award (2003)
 Member, PE Exam Committee (2001-06)
 Director, Division of Quality Control and Reliability Engineering (2000-02)
 Member, IIE Outstanding Publication Award Committee (2000-01)
 Director-Elect, Division of Quality Control and Reliability Engineering (1999-2000)
 Newsletter Editor, Division of Quality Control and Reliability Engineering (1997-98)
IIE Transactions Editorial Board (1996-2008)

Society of Women Engineers (SWE) - **Senior Member**

National Women in Academia Committee (2012–present)
 National Upward Mobility Award Judge (1999-2005, 2007-09, 2012)
 National Career Guidance Committee Regional Representative (1995-96)
 National Chair of Women in Academia (1991-93), National Chair of Awards Committee (1986-87)
 University of Pittsburgh Student Section Faculty Advisor (1991-99)
 Pittsburgh Section Student Coordinator and Executive Council Member (1992-99)
 Pittsburgh Section Speaker's Bureau Chair (1991-1992)
 St. Louis Section President (1987-89), Section Representative (1985-87), Treasurer (1984-85), Secretary (1983-84)

College Industry Council on Material Handling Education (CIC-MHE) of the Material Handling Institute of America
 2022 and 2011 Teacher's Institute Organizer
 Member (1999-2003) and (2018-2022)

Editor in Chief, *INFORMS Journal on Computing* (INFORMS), 2020 – present

Editor of Surveys, *Computers & Operations Research* (Elsevier), 2022 – present

Computers & Operation Research, Special Issue on Computational Operations Research for Drone Systems, co-guest editor with Chase Murray (2019) <https://www.sciencedirect.com/journal/computers-and-operations-research/special-issue/1069MBSLT3T>

Associate Editor, *IEEE Transactions on Automation Science and Engineering*, 2015 - 2018

Area Editor, *Computers & Operations Research* (Elsevier), 2013 – 2019

Area Editor, Heuristic Search and Learning, *INFORMS Journal on Computing* (INFORMS), 2012 - 2018

Associate Editor, *IEEE Transactions on Evolutionary Computation* (IEEE), 1998 - 2018

Editorial Board, *Suleyman Demirel University Journal of Engineering Sciences and Design*, Isparta, Turkiye 2016 – present

Editorial Board, *Computers & Operations Research* (Elsevier), 2005 – 2012

Associate Editor, *INFORMS Journal on Computing* (INFORMS), 1995 - 2012

Editorial Board, *International Journal of General Systems* (Taylor & Francis), 2004 – 2012

Design and Manufacturing Editorial Board, *IIE Transactions* (IIE), 1996 - 2008

Advisory Committee, *International Journal of Smart Engineering System Design* (Taylor & Francis), 2002 - 04

Editor, Eastern United States, *International Journal of Smart Engineering System Design* (Gordon & Breach), 1997 - 2001

Associate Editor, *Engineering Design and Automation Journal* (John Wiley & Sons), 1995 – 98

Newsletter Editor, IIE Division of Quality Control and Reliability Engineering, 1997 – 98

Co-Guest Editor, *Journal of Engineering Valuation and Cost Analysis*, Special Issue on Engineering Valuation and Computational Intelligence, vol. 2, no. 2, 1999

Co-Guest Editor, *Engineering Design and Automation Journal*, Special Issue on Intelligent Engineering Design, vol. 3, no. 2, Summer 1997

Co-Guest Editor, *Computers & Industrial Engineering*, Special Issue on Genetic Algorithms and Industrial Engineering, vol. 30, no. 4, September 1996

Dean's Advisory Council, University of Buffalo, Member (2020-present)

External Graduate Program Reviewer, Virginia Tech Industrial Engineering Department (2012)

External Department Program Reviewer, University of Central Florida Industrial Engineering Department (2012)

Member, University of Arkansas Industrial Engineering Department Liaison Committee (2010-2012)

External Ph.D. Examiner: University of Pretoria (South Africa); Dalhousie University (Canada); The National University of Singapore (Singapore); University of New South Wales / Australian Defence Force Academy (Australia)

Significant Seminars and Keynote Addresses: (Plenaries and Keynotes Bolded)

1. University of Michigan Medical School, April 2024.
2. AI@AU Seminar, March 2024. <https://www.youtube.com/watch?v=1H29bLzH8PM>
3. **ICORES Keynote Address**, Rome, Italy, February 2024. <https://vimeo.com/927198373?title=0&portrait=0>
4. **IEEE Symposium Series on Computational Intelligence Plenary Speaker**, Mexico City, December 2023
5. Norwegian University of Science and Technology, Trondheim, June 2023
6. University of Alabama (Tuscaloosa), April 2023.
7. George Mason University, April 2023.
8. Northeastern University, April 2023.
9. University of Southern California, February 2023.
10. Rutgers University, Business School, November 2022
11. **Keynote Speaker, International Symposium for Production Research 2022** (ISPR 2022), Antalya, Turkey, October 2022 (virtual).
12. **Keynote Speaker, International Engineering Symposium 2022** (IES 2022), Izmir, Turkey, October 2022 (virtual).
13. **Keynote Speaker, 5th International Conference on Intelligent Autonomous Systems (IEEE)**, Dalian China, September 2022 (virtual)
14. **IEEE WCCI 2022 Women in Computational Intelligence Plenary**, July 2022 (Padua, Italy)
15. **Plenary Speaker, 7th IEEE Symposium on Analytics and Risk**, China, July 2022 (virtual)
16. Alliance of International Science Organizations (ANSO) Training on Sustainable Development and Leadership Enhancement, June 2022 (virtual)
17. Pontificia Universidad de Chile (Santiago, Chile), June 2022
18. INFORMS Webinar https://www.youtube.com/watch?v=91bMRbWv_AU
19. EAFIT (Medellin, Colombia), March 2022
20. Texas Tech University, February 2022
21. University of Minnesota, February 2022
22. Clemson University, January 2022
23. International Conference on Cognitive & Intelligent Computing, ICCIC 2021 (<https://sites.google.com/view/icciconference/about>) in Hyderabad, India, December 2021 (virtual)
24. Future LOG Sustainable Logistics of the Future, Norwegian University of Science and Technology, November 2021 (virtual)
25. **Escuela de Verano en Inteligencia Computacional (EVIC) 2021, Keynote Address, IEEE**, November 2021 (virtual)
26. **Latin American Congress on Computational Intelligence (LA-CCI) 2021, Keynote Address, IEEE**, November 2021 (virtual)

27. XV Brazilian Congress on Computational Intelligence October 2021 <https://www.cbic21.org/> (virtual)
28. **International Symposium for Production Research, Keynote Address**, October 2021 (virtual)
29. University of Hong Kong System Analytics Global Leaders Seminar, August 2021 (virtual) https://www.youtube.com/watch?v=Rvc_3DJMxes
30. **6th IEEE Symposium on Analytics and Risk Keynote**, Beijing, July 2021 (virtual)
31. IEEE CIS Distinguished Lecture, IEEE Hyderabad Section, India R10, May 2021 (virtual)
32. **Keynote Speaker, Troy University, College of Education, Annual Research and Scholarship Conference**, April 2021 (virtual)
33. IEEE CIS Distinguished Lecture, IEEE Computational Intelligence Society, Kolkata Chapter, Visvabharati University, Santiniketan - West Bengal, January 2021 (virtual)
34. **Escuela de Verano en Inteligencia Computacional (EVIC) 2020, Keynote Address, IEEE**, December 2020 (virtual)
35. Pontificia Universidad Católica de Chile, Santiago Chile, November 2020 (virtual)
36. New Faculty Colloquium, INFORMS, November 2020 (virtual)
37. **2020 Australasian Conference on Artificial Intelligence Plenary Address**, Canberra, November 2020 (virtual)
38. INFORMS/WORMS Webinar September 2020 <https://connect.informs.org/worms/events/past-webinars>
39. **International Symposium for Production Research, Keynote Address**, September 2020 (virtual)
40. **2020 IEEE Midwest Industry Conference, Keynote Address**, August 2020 (virtual)
41. IIEC CIS WCI Webinar Panelist, August 2020
42. IISE Quality Control and Reliability Engineering & Manufacturing and Design Divisions Webinar, April 2020
43. University of La Sabana, Colombia, March 2020
44. University of Binghamton, February 2020
45. University of Connecticut, February 2020
46. University of Florida, January 2020
47. University of Buffalo (INFORMS Speaker), November 2019
48. **INFORMS-ALIO International Meeting Keynote Address**, Cancun, June 2019
49. University of South Florida, April 2019
50. Stevens Institute of Technology, April 2019
51. IEEE Computational Intelligence Webinar, April 2019
52. **IEEE World Congress on Computational Intelligence Plenary Address**, Rio, July 2018
53. The Wellington Lecture, Institute of Industrial and Systems Engineering, Orlando, May 2018
54. University of Los Andes (Bogota, Colombia), May 2018
55. **IEEE COLCACI Conference Keynote**, Medellin, Colombia, May 2018
56. Texas State University, March 2018
57. George Mason University, February 2018
58. Arizona State University, January 2018
59. Iowa State University, November 2017
60. University of Tennessee – Knoxville, September 2017
61. Adolfo Ibanez University (Vina del Mar and Santiago, Chile), June 2017
62. Catholic University (PUC), Santiago, Chile, June 2017
63. University of Engineering and Technology (UTEC) (Lima, Peru), June 2017
64. National University of Cuyo (Mendoza, Argentina), May 2017
65. University of Los Andes, Santiago, Chile, May 2017
66. U.S. Embassy Santiago, Chile, April 2017
67. Fulbright Chile Webinar, March 2017
68. Monterrey Tech University (Mexico), March 2017
69. Universidad Autónoma de Nuevo León (Monterrey, Mexico), March 2017
70. IISE National Webinar on Cost Estimation, February 2017
71. Universidad de los Andes (Bogota, Colombia), January 2017
72. NASA Office of Mission Assurance Webinar, October 2016
73. University of Louisville, September 2016
74. Cal Poly San Luis Obispo, April 2016

75. University of Arizona, January 2016
76. South Dakota School of Mines and Technology (Rapid City, South Dakota), June 2015
77. **2014 IEEE Symposium Series on Computational Intelligence Evolutionary Computation Plenary Speaker** (Orlando, Florida), December 2014.
78. **2014 Current Challenges in Computing "CCubed" Conference Plenary Speaker** (Napa, California), December 2014.
79. **5th International Conference on Computational Logistics (ICCL'14) Keynote Address** (Valparaiso, Chile), September 2014
80. University of Oklahoma (sponsored by the INFORMS Speakers Program), September 2014
81. **2014 International Conference on Quality, Reliability, Risk, Maintenance, and Safety Engineering Keynote Address** (Dalian, China), July 2014
82. Northeastern University (Shenyang, China), July 2014
83. Hong Kong University of Science and Technology (Hong Kong), July 2014
84. City University of Hong Kong (Hong Kong), July 2014
85. Southwest Jiaotong University (Chengdu, China), July 2014
86. Bejaia University (Bejaia, Algeria), April 2014
87. Ecole Nationale Supérieure des Mines de Saint-Etienne (Gardanne, France), April 2014
88. Swiss Federal Institute of Technology (ETH) (Zurich, Switzerland), April 2014
89. L'Aquila University (L'Aquila, Italy), April 2014
90. Wayne State University, March 2014
91. Universidad de los Andes (Bogota, Colombia), February 2014
92. Universidad EAFIT (Medellin, Colombia), February 2014
93. Pontificia Universidad Católica de Valparaíso (Chile), January 2014
94. Missouri University of Science and Technology, November 2013
95. University of Chile (Santiago, Chile), August 2013
96. **USMOS Conference Plenary**, Middle East Technical University (Turkey), June 2013
97. Kuwait University, April 2013
98. Uludag University (Turkey), April 2013 (sponsored by the U.S. Embassy in Turkey)
99. Baskent University (Turkey), March 2013
100. Suleyman Demirel University (Turkey), March 2013
101. Middle East Technical University (Turkey), March 2013
102. Anadolu University (Turkey), February 2013
103. Bilkent University (Turkey), February 2013
104. Penn State University, November 2012
105. University of Pittsburgh, September 2012
106. University of Miami, March 2012
107. University of Washington, March 2011
108. WORMS Keynote Session (INFORMS), November 2010
109. Rutgers University, October 2010
110. Lehigh University, September 2010
111. Northwestern University, May 2010
112. University of Tennessee, April 2010
113. IIE Doctoral Colloquium Speaker, May 2009
114. Iowa State University, April 2009
115. Clemson University, February 2008
116. NSF ADVANCE Conference, Arlington VA, June 2007
117. Mississippi State University, March 2007
118. Penn State – Berks, October 2006
119. University of Buffalo, September 2006
120. 2006 Material Handling Institute of America Spring Meeting, Charlotte, NC, April 2006
121. North Carolina State University, March 2006
122. IIE New Faculty Colloquium Speaker, Atlanta, May 2005
123. Keynote Speaker, Society of Women Engineers Girls' Night Out, Auburn, April 2004

124. INFORMS Doctoral Colloquium Speaker, Atlanta, October 2003
125. American Statistical Society, Alabama Chapter, Troy State University, Montgomery, January 2003
126. NSF 2003 Design, Service and Manufacturing Grantees Conference
127. Research Experiences for Teachers, ASEE, Portland, January 2003
128. **Adaptive Computing in Design and Manufacture (ACDM) Keynote Speech**, Plymouth, England, April 2000
129. Saint Louis University School of Business, November 1998
130. Daimler-Benz Research Institute (Frankfurt, Germany), September 1998
131. Gazi University (Ankara, Turkey), September 1998
132. Discover Ceramics '97, September 1997
133. Lenox Research Center, New Jersey, August 1997
134. Pennsylvania State University Industrial Engineering Department, April 1997
135. PPG Fiber Glass Research Center, Pittsburgh, December 1996
136. 51st Annual Ceramics Forum of the Pennsylvania Ceramics Association, State College, PA, October 1996
137. Institute for Mathematics and Its Applications Workshop on Evolutionary Algorithms, Minneapolis, October 1996
138. University of Buffalo Industrial Engineering Department, October 1995
139. Wichita State University Industrial Engineering Department, November 1995, November 1994

Conference Leadership:

- International Advisory Board Honorary Member ISCFI 2024, Melbourne, Australia <http://www.iscfi.us/>
- International Engineering Symposium - IES'23, Izmir Democracy University, Scientific Committee
- IFORS 2023 Conference Program Chair (Santiago, Chile 2023)
- IEEE Global Reliability & Prognostics and Health Management Conference 2022, International Advisory Committee.
- International Startup Summit (Istanbul 2022), International Scientific Committee.
- International Conference on Industry 4.0 and Smart Systems, ICI4.OSS-2022, International Program Committee
- 2022 9th Intl. Conference on Soft Computing & Machine Intelligence (ISCFI 2022) Honorary Member of International Advisory Board
- 2022 IEEE World Congress on Computational Intelligence (WCCI 2022) Congress on Evolutionary Computation Technical Co-Chair
- 2022 6th International Conference on Intelligent Systems, Metaheuristics & Swarm Intelligence (ISMSI 2022) Honorary Co-Chair
- IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2021) Program Co-Chair
- IEEE CEC 2021 Technical Co-Chair
- IEEE World Congress on Computational Intelligence 2020 Publications Chair – Glasgow, Scotland
- 8th Joint International Conferences on Swarm, Evolutionary and Memetic Computing Conference (SEMCCO 2020) & Fuzzy And Neural Computing Conference (FANCCO 2020) – Wuhan China (International Advisory Committee)
- 9th Asia-Pacific International Symposium on Advanced Reliability and Maintenance Modeling 2020 Vancouver (International Advisory Committee)
- International Program Committee, International Conference on Industry 4.0 and Smart Systems, Canakkale Turkey, June 2020
- 10th IEEE Prognostics and System Health Management Conference 2019 – Qingdao China (International Advisory Committee)
- International Conference on Production Research 2019 – Chicago (Organizing Committee)
- 2017 Winter Simulation Conference – Las Vegas (Co-Registration Chair)
- International Conference of Production Research Americas 2018, Scientific Committee – Bogota, Colombia
- IEEE Congress on Evolutionary Computation (IEEE CEC2017) 2017 (Program Committee) – Bilbao, Spain
- 2016 Winter Simulation Conference – Arlington, VA (Registration Chair)
- IEEE World Congress on Computational Intelligence (WCCI) 2016 Technical Program Committee - Vancouver
- 2015 IEEE Symposium Series on Computational Intelligence: IEEE Symposium on Computational Intelligence in Production and Logistics Systems Technical Program Committee – Capetown, South Africa

- 2015 Genetic and Evolutionary Computation Conference Integrative Genetic and Evolutionary Computation Track Program Committee - Madrid
- 2015 Winter Simulation Conference – Huntington Beach, CA (Registration Chair)
- International Advisory Committee Member of QR2MSE 2015 – Beijing
- IEEE Symposium Series on Computational Intelligence 2014 Technical Program Committee – Orlando, Florida
- International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS) 2014 Technical Program Committee – Bejaia, Algeria
- IEEE World Congress on Computational Intelligence (WCCI) 2014 Technical Program Committee - Beijing
- The Genetic and Evolutionary Computation Conference (GECCO) 2014 Integrative Genetic and Evolutionary Computation Program Committee - Vancouver
- IEEE Congress on Evolutionary Computation (IEEE CEC2013) 2013 (Program Committee) – Cancun, Mexico
- The Genetic and Evolutionary Computation Conference (GECCO) 2013 Integrative Genetic and Evolutionary Computation Program Committee - Amsterdam
- International IIE Conference 2013 Program Committee - Istanbul
- International Conference on Evolutionary Computation Theory and Applications 2012 International Program Committee - Barcelona
- The Genetic and Evolutionary Computation Conference (GECCO) 2012 Integrative Genetic and Evolutionary Computation Program Committee - Philadelphia
- Conference on Systems Engineering Research 2012 (Technical Program Committee) – Saint Louis
- IEEE Congress on Evolutionary Computation (IEEE CEC2012) 2012 (Program Committee) – Brisbane, Australia
- International Conference on Evolutionary Computation Theory and Applications 2011 (Program Committee) – Paris, France
- IEEE Congress on Evolutionary Computation (IEEE CEC2011) 2011 General Co Chair – New Orleans
- International Conference on Evolutionary Computation 2010 (Program Committee) – Valencia, Spain
- IEEE Congress on Evolutionary Computation (IEEE CEC2009) 2009 (Program Committee) – Trondheim, Norway
- IEEE Congress on Evolutionary Computation (IEEE CEC2008) 2008 (Program Committee) – Hong Kong
- The Seventh Metaheuristics International Conference (MIC 2007) (International Program Committee). Montreal
- Ninth International Conference on Parallel Problem Solving from Nature (PPSN VIII) 2006 (Program Committee). Reykjavik Iceland
- IEEE Congress on Evolutionary Computation (IEEE CEC2006) 2006 (Program Committee). Vancouver
- IEEE Congress on Evolutionary Computation (IEEE CEC2005) 2005 (Program Committee). Edinburgh, Scotland
- Eighth International Conference on Parallel Problem Solving from Nature (PPSN VIII) 2004 (Program Committee). Birmingham, U.K.
- IEEE Congress on Evolutionary Computation (IEEE CEC2004) 2004 (Program Chair). Portland, OR
- Seventh International Conference on Parallel Problem Solving from Nature (PPSN VII) 2002 (Program Committee). Grenada, Spain
- IEEE Congress on Evolutionary Computation (IEEE CEC2002) 2002 (Program Committee). Hawaii
- Optimization in Industry III Conference 2001 (Organizing Committee). Tuscany, Italy
- International Symposium on Adaptive Systems: Evolutionary Computation and Probabilistic Graphical Models (ISAS 2001) (International Scientific Committee). Havana, Cuba
- IEEE Congress on Evolutionary Computation (IEEE CEC2001) 2001 (Technical Committee). Korea
- Sixth International Conference on Parallel Problem Solving from Nature (PPSN VI) 2000 (Program Committee). Paris, France
- IEEE Congress on Evolutionary Computation (IEEE CEC2000) 2000 (Technical Chair, The Americas). San Diego, CA
- Second Asia-Pacific Conference on Genetic Algorithms and Applications 2000 (Conference Committee). Kanazawa, Japan
- World Symposium on Group Technology and Cellular Manufacturing 2000 (Technical Committee). San Juan, Puerto Rico
- Genetic and Evolutionary Computation Conference (GECCO) 1999 (Program Committee). Orlando, FL
- IEEE Congress on Evolutionary Computation (IEEE CEC99) 1999 (Special Sessions Chair). Washington, D.C

- First European Workshop on Evolutionary Computation in Telecommunications 1999 (Program Committee). Goteborg, Sweden
- IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC) 1998 (Organizing Committee). San Diego, CA
- Fifth International Conference on Parallel Problem Solving from Nature (PPSN V) 1998 (Program Committee). Amsterdam, Netherlands
- Industrial Engineering Research Conference (IERC) 1998, 1999 (Program Committee). Various U.S. locations
- Adaptive Computing in Design and Manufacturing (ACDM '98, '02, '06) 1998, 2002. Plymouth, Exeter, Bristol, England
- Frontiers in Education Conference (FIE) 1997 (Finance Chair). Pittsburgh, PA
- International Conference on Engineering Design and Automation (EDA) 1997, 1998, 1999 (International Advisory Board). Various international locations
- Sian Ka'an International Conference - The First Joint Mexico - U.S. International Workshop on Neural Networks and Neurocontrol 1995. Cancun, Mexico
- International Conference on Genetic Algorithms (ICGA) 1995 (Local Arrangements Chair), 1997 (Program Committee). Pittsburgh, PA
- Artificial Neural Networks in Engineering (ANNIE) 1994, 1995, 1996 (Applications Papers Award Chair), 1997 (Conference Co-Chair and Applications Papers Award Chair). St Louis, MO

National Science Foundation Panels and Site Visits:

- Mid-Career (2021)
- ADVANCE Site Visit (2006)
- ERC Preproposals (2002)
- Production Systems (2002)
- IGERT Preproposals (2000)
- CAREER (1999)
- Model Institutions for Excellence (MIE) Site Visit (1999)
- Optimized Portable Application Libraries, Division of Mathematical Sciences, Panel and Site Visit (1998)
- Combined Research – Curriculum Development Program, Division of Engineering Education and Centers (1998)
- Production Systems (1994, 1995)
- OR/PS Research Deployment (1993)
- OR/PS Small Business Innovation Research (1993)
- Operations Research (1992)

European Science Foundation College of Expert Reviewers member (2021 – present),

Reviewer for other governmental agencies including U.S. National Security Agency, Agència de Gestió d'Ajuts Universitaris i de Recerca Catalunya (Spain), Research Foundation Flanders, Research Grant Council of Hong Kong, Engineering and Physical Sciences Research Council of Great Britain, Natural Sciences and Engineering Research Council of Canada, Australia Research Council, CONICYT – Chile, Arab Science and Technology Foundation, Qatar National Research Fund, Romanian Agency for Higher Education, Research, Development and Innovation Funding, State of New Jersey Commission on Science and Technology, Ben Franklin Technology Center of Western Pennsylvania, Florida Board of Education, Binghamton University (S.U.N.Y. New York), State of Louisiana

Many roles of service internally to Auburn University and University of Pittsburgh. These include university wide (e.g., budget advisory, promotion and tenure policies) and college wide committees (e.g., promotion and tenure, curriculum) and activism in Auburn's Women in Science and Engineering Institute (WISE). Led and participated in multiple searches for faculty, staff and administrators.

COURSES INSTRUCTED

Graduate Courses:

- Data Mining for Operations (developed) (Auburn University)
- Scholarly Reading, Writing, and Presentation (developed) (Pontifical Catholic University of Valparaíso)
- Metaheuristics (developed) (Pontifical Catholic University of Valparaíso)
- Fuzzy Logic and Fuzzy Systems (developed) (Pontifical Catholic University of Valparaíso)
- Fuzzy Logic and Fuzzy Systems (developed) (Auburn University)
- Two course sequence on Systems Engineering for Secure Computing-Intensive Environments (co-developed and co-taught with Computer Science and Software Engineering) (Auburn University)
- Adaptive Optimization (developed) (Auburn University and University of Pittsburgh)
- Neural Networks and Fuzzy Systems (developed) (Auburn University)
- Decision Models (developed) (Auburn University and University of Pittsburgh)
- Advanced Engineering Economy (developed) (Auburn University and University of Pittsburgh)
- Operation Systems Design and Management (Auburn University, Techno-MBA Executive course, co-developed and co-taught with Jeff Smith)
- Graduate Seminar (Auburn University)
- Engineering Applications of Fuzzy Logic (co-developed and co-taught with Electrical Engineering) (University of Pittsburgh)
- Neural Networks and Industrial Applications (developed) (University of Pittsburgh)
- Graduate Journal Seminar (University of Pittsburgh)

Undergraduate Courses:

- Fuzzy Logic and Fuzzy Systems (developed) (Auburn University)
- Statistical Quality Control (Auburn University, Bilkent University)
- Introduction to Industrial Engineering (Auburn University)
- Engineering Economy (Auburn University and University of Pittsburgh)
- Senior IE Projects (Auburn University and University of Pittsburgh)
- Introduction to Probability and Statistics (Engineering Service Course) (University of Pittsburgh)
- Advanced Probability and Statistics (University of Pittsburgh)

GRADUATE STUDENTS AND VISITING SCHOLARS

PH.D.

1. "Two-dimensional Truck Loading With Off Loading Considerations," JUAN PABLO MORANDE CASTELBLANCO, Ph.D. Dissertation, co-advised with Daniel Silva, 2025. (Auburn University)
2. "Drone Logistical Operations for Moveable Factories," DANIELA GRANADOS RIVERA, Ph.D. Dissertation, co-advised with Daniel Silva, 2025. (Auburn University)
3. "Drone Logistical Operations for Production Environments," JULIO JIMENEZ SARDA, Ph.D. Dissertation, co-advised with Daniel Silva, 2025. (Auburn University)
4. "Sustainable Delivery with Drone-Assisted Tandem Systems," STEPHANIE SANTIAGO-MONTANO, Ph.D. Dissertation, co-advised with Daniel Silva, 2025. (Auburn University)
5. "Recourse for Vehicle Routing Problems with Drone Resupply," MEHMET KURT, Ph.D. Dissertation, co-advised with Daniel Silva, 2025. (Auburn University)
6. "Forward Pick Warehousing Design," ELIANA PENA TIBADUIZA, Ph.D. Dissertation, co-advised with Mario Velez Gallego, 2024. (Auburn University)
7. "Layout of Grocery Store Promotions," ILKNUR TURKMEN, Ph.D. Dissertation, 2024. (Auburn University)

8. "Flying Drone Sidekick Travelling Salesman Problem with Integrating Pickup and Delivery," NAWIN YANPIRAT, Ph.D. Dissertation, co-advised with Daniel Silva, 2023, currently assistant professor at Kasetsart University, Bangkok, Thailand. (Auburn University)
9. "Vehicle Routing Problems with Drone Resupply," JUAN CARLOS PIÑA PARDO, Ph.D. Dissertation, co-advised with Daniel Silva and Ricardo Gatica, 2022, currently post-doctoral associate at Massachusetts Institute of Technology (MIT) Center for Transportation and Logistics. (Pontifical Catholic University of Valparaíso)
10. "Improving Empty Container Port Operations," ERHAN KARAKAYA, Ph.D. Dissertation, 2020, currently Assistant Professor – Computer Engineering, Yozgat University, Turkey. (Auburn University)
11. "Using Symbolic Data Analysis to Detect Fraud, Waste and Abuse in Healthcare Claims Data," RICK REYNOLDS, Ph.D. Dissertation, 2020, currently Director of Advanced Analytics, Health Plan Product, Service and Administration Applied Intelligence Solutions, Kaiser Permanente – National Claims Administration. (Auburn University)
12. "Patient-Centric Facility Design for Rehabilitation Hospitals," ALEJANDRO TERAN-SOMOHANO, Ph.D. Dissertation, 2019, currently Operations Research Analyst at UPS Supply Chain Solutions, Alpharetta, Georgia. (Auburn University)
13. "Using Pre-Deployment Planning for Maintaining Network Connectivity in MANET Models," JARRETT CHAPMAN, Ph.D. Dissertation, co-advised with Dr. Jeffrey S. Smith, 2019, currently Owner and Founder, Yud Hey Systems Modeling and Analytics LLC. NSF Bridge to the Doctorate Fellowship Awardee. (Auburn University)
14. "A Computational System to Solve the Warehouse Aisle Design Problem," SABAHATTIN GOKHAN OZDEN, Ph.D. Dissertation, co-advised with Dr. Kevin Gue (University of Louisville), 2017, currently Associate Professor – Information Sciences and Technology, Penn State – Abington. (Auburn University)
15. "Manufacturing Cost Prediction in the Presence of Categorical and Numeric Design Attributes," EREN SAKINC, Ph.D. Dissertation, 2016, currently Senior Director, Head of Field Force Deployment Strategy and Chief of Staff, Commerical Operations, Bayer Pharmaceuticals.
16. "Optimization of Block Layout for Grocery Stores," ELIF OZGORMUS, Ph.D. Dissertation, 2015, results of dissertation granted Turkish patent joint with Migros Inc., currently Senior Teaching Fellow – Supply Chain Engineering – Coventry University, U.K. (Auburn University)
17. "Design of Resilient Heterogeneous Wireless Networks," OZGUR KABADURMUS, 2013, currently Lecturer – Department of Industrial Engineering, Clemson University. (Auburn University)
18. "Optimization of Military MANET," YOUNCHOL ERIC CHO, Ph.D. Dissertation, co-advised with Dr. Jeffrey S. Smith, 2009, currently Captain -Naval Headquarters System Analysis Dvision, Republic of Korea. (Auburn University)
19. "Facility Design for Retail Enterprises," HALUK YAPIOCOGLU, Ph.D. Dissertation, 2008, currently Associate Professor, Eskisehir Technical University, Eskisehir, Turkey. (Auburn University)
20. "Optimal Deployment Strategy of Mobile Agents to Maintain Connectivity and Performance in Mobile Ad Hoc Networks," ORHAN DENGIZ, Ph.D. Dissertation, 2007, currently Founder and President, DVM Technologies, Ankara, Turkey. (Auburn University)
21. "Facility Layout and Relayout Under Uncertainty," SADAN KULTUREL, Ph.D. Dissertation, 2002, currently Professor of Management Information Systems, Penn State – Berks. (Auburn University)
22. "Ant Colony Methods for Combinatorial Optimization," YUN-CHIA LIANG, Ph.D. Dissertation, 2001, currently Professor – Department of Industrial Engineering and Management, Yuan Ze University, Taoyuan, Taiwan. (Auburn University)
23. "A Multiobjective Genetic Algorithm Approach to Telecommunication Network Design Problems Considering Reliability and Performance," ABDULLAH KONAK, Ph.D. Dissertation, 2000, currently Professor of Information Sciences and Technology, Penn State – Berks. (University of Pittsburgh)

24. "Metamodeling for Sensitivity Analysis of Capital Projects," RAVIPIM CHAVEESUK, Ph.D. Dissertation, 2000, currently Associate Dean for Planning and Head – Agri-Food Supply Chain Management Research Unit, Kasetsart University, Bangkok, Thailand. Royal Thai Scholar. (University of Pittsburgh)
25. "Improved Prediction and Validation Using Resampled Neural Networks: Committee Networks and Hybrid Validation," SARAH S.Y. LAM, Ph.D. Dissertation, 1999, currently Professor - Department of Systems Science and Industrial Engineering, Binghamton University (S.U.N.Y.). (University of Pittsburgh)
26. "Stochastic Simulation Optimization Using Genetic Algorithms," CHEN-YU FEI, Ph.D. Dissertation, 1997, career officer - Taiwanese Army. (University of Pittsburgh)
27. "Curve Fitting and Function Selection with a Hierarchical Genetic Algorithm," MEHMET GULSEN, Ph.D. Dissertation, 1997, currently Assistant Professor – Department of Industrial Engineering, Baskent University, Ankara, Turkey. Previously with United Airlines and Disney Corporation. (University of Pittsburgh)
28. "Optimization of Reliability Design Problems Considering the Uncertainty in Component Reliability and Time-to-Failure," DAVID W. COIT, Ph.D. Dissertation, 1996, currently Professor - Department of Industrial Engineering, Rutgers University. **NSF CAREER awardee**. (University of Pittsburgh)
29. "Nonparametric Error Evaluation Methods for Evaluating and Validating Artificial Neural Networks," JANET M. TWOMEY, Ph.D. Dissertation, 1995, currently Associate Dean of Research and Professor - Department of Industrial and Manufacturing Engineering, Wichita State University. **NSF CAREER awardee and former NSF Program Director**. (University of Pittsburgh)

M.S.

1. "Comparing the Influence of Probability Density Functions on the Estimation of Product Cost by Using Monte Carlo Simulation," EREN SAKINC, M.I.S.E. Project, May 2010. (Auburn University)
2. "Artificial Intelligence Applications to Grain Boundary Detection in Fuzzy Images," ORHAN DENGIZ, M.I.S.E. Project, December 2002. (Auburn University)
3. "Predictive Modeling for Time Estimation in the Custom Garment Industry," ARTHUR GRIFFIN, M.I.S.E. Project with Russell Corporation, May 2001. GEM Scholar. (Auburn University)
4. "Neural Network Approach to All-Terminal Network Reliability Estimation," CHAT SRIVAREE-RATANA, M.S.I.E. Thesis, August 1998. (University of Pittsburgh) (*deceased*)
5. "A Genetic Algorithm for Solving a Generalized Network Design Problem," DARREN L. DEETER, M.S.I.E. Thesis, August 1996. (University of Pittsburgh)
6. "A Hierarchical Neural Network Approach to Modeling the Wave Solder Process," BONNIE TURNER JACKSON, M.S.I.E. Thesis, December 1995. National Science Foundation Minority Fellowship. (University of Pittsburgh)
7. "Improving Neural Network Simulation Metamodels Using Iterative Training," SANIYE B. OZSERIM, M.S.I.E. Thesis, September 1995. (University of Pittsburgh)
8. "Reduction in Cycle Time for Acceptance Testing of Shipboard Propulsion Plant Valves," LEE A. GREGORY, M.S. Manufacturing Systems Engineering Thesis, April 1995. (University of Pittsburgh)
9. "Process Planning and Process Standard Time Prediction Using an Integrated Expert System and Neural Networks Approach," MARK WILHELM, M.S.I.E. Thesis, April 1994. (University of Pittsburgh)

VISITING SCHOLARS

1. HYUN JIN HAN, Colonel, Republic of Korea Army. January 2024 – January 2025. Studied military targeting optimization and military simulation.
2. MEHMET FATIH TASGETIREN, Professor of Industrial Engineering, Yasar University, Izmir Turkey. December 2021 – December 2022. Studied evolutionary optimization. *Deceased*.

3. JUAN CARLOS PINA PARDO, Ph.D. student, Pontifical Catholic University of Valparaíso, Valparaiso, Chile. October 2021 – February 2022. Studied optimization of drone/truck delivery.
4. LINGYUN ZHOU, Lecturer, College of Computer Science, South-Central University for Nationalities, Wuhan, China. November 2019 – November 2020. Studied optimization of drone transshipment stations using particle swarm.
5. JULIO JIMENEZ, student, Pontifical Catholic University of Valparaíso, Valparaiso, Chile. January – February 2019. Studied discrete-event simulation of empty container depots.
6. JUAN CARLOS PINA PARDO, Ph.D. student, Pontifical Catholic University of Valparaíso, Valparaiso, Chile. January – March 2019. Studied cone programming and optimization of drone/truck delivery.
7. DARIO CANUT DE BON, Ph.D. student, Pontifical Catholic University of Valparaíso, Valparaiso, Chile. August – December 2018. Studied routing and scheduling of navy resources to patrol fishing activity off the coast of Chile.
8. MARIO VELEZ-GALLEGO, Professor of Production Engineering, Universidad EAFIT, Medellin, Colombia. January - December 2018. Studied environmentally benign supply chain practices.
9. KEVIN STRUWE, M.Sc. student, Rostock University, Rostock Germany. July 2016 (funded by the German government). Studied modeling of sounds for enhance cochlear implants.
10. NATHAN CAUM E SILVA, PAULO FELLIPE CRUZ, HENRIQUE DONAH CERRI and JOÃO CARLOS SARAN. May – July 2016 (funded by the Brazilian government). Studied quality assurance for aerospace applications. All Brazilian undergraduate students studying for one year in the U.S.
11. CARMEN SAYURI MALDONADO PINTO, M.Sc. student, Universidad Autónoma de Nuevo León, Monterrey, Mexico. April – June 2016 (funded by CONICYT of Mexico). Studied bi-level optimization for green logistics.
12. MEHMET FATIH TASGETIREN, Professor of Industrial Engineering, Yasar University, Izmir Turkey. February – July 2016 (funded by Yasar University). Studied evolutionary optimization.
13. BABEK ERDEBILLI, Assistant Professor of Industrial Engineering, Atilim University, Ankara Turkey. December 2015 – August 2016 (funded by the TUBITAK, Scientific and Technical Research Council of Turkey). Studied decision making in retail environments.
14. JINHUA LI, Associate Professor of Economics and Management, South China Normal University, Guangzhou, China. October 2015 – September 2016 (funded by the Chinese Scholarship Council). Studied optimal layout for attraction based entities.
15. THOMAS HARDTKE, undergraduate student, Rostock University, Rostock Germany. September – November 2015 (funded by the German government). Studied simulation modeling for scheduling of large scale IT projects.
16. MARIO VELEZ-GALLEGO, Professor of Production Engineering, Universidad EAFIT, Medellin, Colombia. August - December 2015 (funded by the **Fulbright Commission**). Studied environmentally benign supply chain practices.
17. WILSON BRETAS BORGES, MIGUEL PINTO FILHO, BRUNA BRUM GARCIA, BRUNO GORDO SOARES and NINA BERNARDES TROLLY. May – July 2015 (funded by the Brazilian government). Studied quality assurance for aerospace applications. All Brazilian undergraduate students studying for one year in the U.S.
18. FATMA PAKDIL, Professor of Industrial Engineering, Baskent University, Ankara, Turkey. August 2014-August 2015. Studied quality assurance for aerospace applications.
19. JIANGSHENG “VICTOR” LIU, Associate Professor of Mechanical and Electrical Engineering, Nanchang University, Nanchang, China. November 2013 – March 2016 (funded by the Chinese Scholarship Council). Studied optimal loading for vehicle transport.
20. XUHONG “RICHARD” YANG, Doctoral Student, School of Mechanical Engineering, Southwest Jiaotong University, Chengdu, China. September 2013 – August 2015 (funded by the Chinese Scholarship Council). Studied meta-heuristics.
21. RAFIK MEDJOUJ, Doctoral Student, Department of Electrical Engineering, Bejaia University, Bejaia, Algeria. October – December 2012 (funded by Bejaia University). Studied meta-heuristics for reliable design of gas and petroleum pipelines.
22. SOROOR HUSSAIN AL-KHAFAJI, Assistant Professor of Industrial Engineering, Department of Mechanical Engineering, University of Bagdad, Bagdad, Iraq. September 2012 – August 2013 (funded by Iraqi Scholar Rescue Program). Studied design of retail facilities.

23. XINGQUAN ZUO, Associate Professor of Computer School, Beijing University of Posts and Telecommunications, Beijing, China. January 2012 – January 2013 (funded by the Chinese Scholarship Council). Studied optimal plant layout for semi-conductor facilities.
24. JAE-HWAN KIM, Professor and Chair of Department of Data Information, Korea Maritime University, Busan, Korea. July 2011 – August 2012 (funded by Korea Maritime University). Studied design of reliable systems.
25. MITHAT ZEYDAN, Associate Professor and Chair of Industrial Engineering, Erciyes University, Kayseri, Turkey. June 2011 – August 2011 (funded by Erciyes University). Studied multi-variate process optimization for textile dyeing.
26. NEVRA AKBILIK, Assistant Professor of Industrial Engineering, Sakarya University, Sakarya, Turkey. March 2011 – August 2012 (funded by Sakarya University) . Studied facility layout with AGV material handling systems.
27. HAIYAN WANG, , Doctoral Student and Assistant Professor of School of Management, Fuzhou University, Fuzhou, China. September 2010 – September 2011 (funded by the Chinese Scholarship Council). Studied facility location for recycling centers.
28. MOHAIR ISSA AHMED AL-DAOUD, (*deceased*). Professor and Head of Industrial Engineering Section, College of Engineering, University of Bagdad, Bagdad, Iraq. August 2010 – August 2011 (funded by the Iraqi Scholar Rescue Project of the Institute of International Education). Studied facility location for health clinics in Bagdad. **Scholar Rescue Program Scholar.**
29. ZEIQIANG ZHANG, Associate Professor of Mechanical Engineering, Southwest Jiaotong University, Chengdu, China. August 2010 – August 2011 (funded by the Chinese Scholarship Council). Studied facility design for double row lines.
30. MIN ZHANG, Doctoral Student, School of Mechanical Engineering, Southwest Jiaotong University, Chengdu, China. August 2010 – August 2011 (funded by the Chinese Scholarship Council). Studied process optimization for hot mix asphalt.
31. CUIHUA ZHANG, Associate Professor of Business Administration, Northeastern University, Shenyang, China. August 2010 – November 2010 (funded by the Chinese Scholarship Council). Studied facility location for recycling centers.
32. YASIN ORTAKCI, Lecturer of Computer Engineering, Karabuk University, Karabuk, Turkey. March 2010 – June 2010 (funded by Karabuk University). Studied particle swarm optimization for ad hoc mobile networks.
33. NUMAN CELEBI, Associate Professor of Industrial Engineering, Istanbul University, Istanbul, Turkey. August 2009 – January 2011 (funded by TUBITAK, Scientific and Technical Research Council of Turkey, and Istanbul University). Studied facility location for earthquake disaster relief.
34. SOROOR HUSSAIN AL-KHAFIJI, Assistant Professor of Industrial Engineering, Department of Mechanical Engineering, University of Bagdad, Bagdad, Iraq. August 2008 – September 2009 (funded by University of Technology, Bagdad). Studied process control and reliable systems using Kriging. **Scholar Rescue Program Scholar.**
35. SOHIER MOHAMED HUSSIEN BAILOUMY, Assistant Professor of Mechanical Engineering Technology, Department of Mechanical Engineering, Benha University High Institute of Technology, Benha, Egypt. January – September 2007 (funded by the Egyptian Ministry of High Education). Studied modeling of cost estimation data.
36. EDGARDO ESCALANTE, Professor of Industrial Engineering, Monterrey Tech University, Monterrey, Mexico. August 2006 – May 2008 (funded by NASA and Auburn University). Quality control research and teaching.
37. THOMAS M. A. MARECHAL, Department of Mechanical Engineering, Technological University of Eindhoven, The Netherlands. August – December 2006 (funded by Technological University of Eindhoven). Studied optimization of discrete event simulation for his Masters of Systems Engineering internship.
38. UN GI JOO, Associate Professor of Knowledge and Industrial Engineering, Sun Moon University, Asan City, Chungnam Province, South Korea. July 2006 – June 2007 (funded by Sun Moon University). Studied advanced meta-heuristics applied to problems in designing telecommunications systems.
39. SUNG-SOO KIM, Assistant Professor of Industrial Engineering, Kangwon National University, Chunchon, South Korea. January 2004 – February 2005 (funded by Kangwon National University). Studied tabu search, ant colonies and genetic algorithms applied to problems in designing wireless communications networks with attention to routing and channel assignment.
40. CHANG SUN YUM, Assistant Professor of Business Administration, Pukyong National University, Busan, South Korea. Academic year of 2002 – 03 (funded by Pukyong National University). Studied neural networks and

genetic algorithms applied to problems in designing reliable communications networks and estimating network reliability and performability.

41. MEHMET FATIH TASGETIREN, Associate Professor of Industrial Engineering, Yasar University, Izmir, Turkey. March 1999 – August 2000 (funded by Sakarya University, Turkey). Studied computational intelligence approaches to scheduling and routing.
42. BERNA DENGIZ, Dean of Engineering, Baskent University, Ankara, Turkey. Summers of 1994 (funded by Gazi University), 1996 (funded by the TUBITAK, Scientific and Technical Research Council of Turkey), 1999 (funded by NSF) and 2001 (funded by NSF). Academic year of 2002 – 03 (funded by NSF). Studied genetic algorithms and neural networks applied to problems in designing reliable communications networks.