

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

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

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 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 \$7.5 MILLION IN RESEARCH CONTRACTS)

1. "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**, 2016-19.
2. "Academy of Aerospace Quality – Phase IX," ALICE E. SMITH AND JEFF SMITH, **NASA**, \$100,000, 2016-17.