

PAKIZE SIMIN PULAT**OFFICE**

School of Industrial Engineering
 202 West Boyd, Room 124
 Norman, Oklahoma 73019
 Telephone: (405) 325-3725

EDUCATION

PhD	1984	Operations Research, North Carolina State University, Raleigh, NC.
MS	1977	Operations Research, North Carolina State University, Raleigh, NC.
BS	1975	Industrial Engineering, Middle East Technical University, Ankara, Turkey.

EDUCATIONAL POSITIONS:

1996 - present	Professor , University of Oklahoma, School of Industrial Engineering
1991 - 1996	Associate Professor , University of Oklahoma, School Of Industrial Engineering.
1985 - 1991	Assistant Professor , University Of Oklahoma, School Of Industrial Eng.
1980 - 1985	Assistant Professor , North Carolina A&T State Univ., School of Industrial Eng.
1979	Part-time instructor , Bennett College, Mathematics Department.
1974 - 1975	Teaching assistant , Middle East Technical University.

MANAGERIAL EXPERIENCE:

May 2004	Chair , Council of Industrial Engineering Department Heads- CIEADH
2002- present	Vice-president and Chief Operating Officer , Creative Insights, Norman, OK.
2001- present	Director and Professor , School of Industrial Eng., University of Oklahoma
1997 - 1998	Interim Director , School of Industrial Engineering, University of Oklahoma

INSTRUCTIONAL EXPERIENCE*THE UNIVERSITY OF OKLAHOMA*

Gateway to College, Freshman Orientation Course.

Introduction to Engineering, E 1112: Engineering profession, manipulating data, applied engineering, concepts, engineering design.

Enterprise Engineering, IE 2823: Introduction to the industrial engineering role as enterprise system integrator. Systems concepts, modeling and analysis; integrated product/service and operational process design; productivity and quality improvement; computer technology insertion; project, operations, and global supply chain management.

Engineering Statistics, E 3293: Introduction to Probability and Statistics.

Engineering Economy, E 4223: Cash flow analysis, investment decisions, replacement analysis, depreciation, taxation, and risk analysis.

Deterministic Models of Operations Research, IE 4623: Linear programming, integer programming, network flows, scheduling, and dynamic programming.

Probabilistic Models in Operations Research, IE 4633: Probabilistic models in operations research, inventory systems, decision analysis.

Senior Design Capstone Course, IE 4393. Faculty Supervisor of one or two teams per year as they solve real life problems for 18 years.

Applied Probability Models in IE, IE 5523: Review of distributions, conditional expectation, Poisson process, Markov chains, Markov processes, and renewal theory.

Engineering Decision Analysis, IE 5513: Decision trees, normal form of analysis, utility functions, risk sharing, probability assessments, multiattribute decision making, analytical hierarchy process.

Linear Programming, IE 5623: Review of linear algebra, variants of simplex method, primal dual analysis, sensitivity analysis, decomposition method, ellipsoid algorithm, Karmarkar's projective algorithm, complexity issues.

Engineering Optimization, IE 5643: Necessary and sufficient conditions for optimality, unconstrained optimization methods, constrained optimization methods, geometric programming, quadratic programming.

Analysis of Network Models, IE 5653: Network optimization, modeling, maximum flow, shortest path, minimum cost flow, computational complexity, degeneracy, traveling salesman problem, heuristics.

Stochastic Models in Industrial Engineering, IE 5663. Markov Chains and Markov Processes, Renewal and regenerative processes. Applications to industrial engineering.

Network Models and Integer Programming, IE 6643: Network flow models, maximum flow, shortest path, minimum cost flow, generalized networks, traveling salesman, integer programming models, cutting plane methods, branch and bound method, mixed integer programming.

Applied Operations Research. Case studies covering variety of OR applications, teamwork, presentations.

NORTH CAROLINA A&T STATE UNIVERSITY:

Interface to Industrial Engineering Lab., IE 102: Use of computational aids, FORTRAN, Plant visits.

Engineering Statistics, IE 320: Counting problems, probability distributions, statistical analysis, and test of hypothesis.

Operations Research I, IE 480: Modeling, simplex method, queuing theory, dynamic programming.

Quality Control, IE 510: Statistical analysis of quality, acceptance sampling, and control charts.

Production Control, IE 530: Organization and function of production control, forecasting techniques, materials requirements planning, project planning techniques.

Operations Research, IE 650: Management decision-making, review of probability, queuing theory, and mathematical model formulations.

Project Management and Scheduling, IE 658: CPM, PERT, scheduling with resource constraints, assembly line balancing, and sequencing and scheduling methods.

Operations Research II, IE 733: Optimality conditions, unconstrained nonlinear optimization, constrained problems.

Inventory Systems Analysis, IE 749: Lot-size systems, order-level systems, systems with nonconstant demand, scheduling with/without lead times.

BENNETT COLLEGE

Pre-calculus: Algebra and trigonometry.

SCHOLARSHIPS & AWARDS

IIE Fellow, Institute of Industrial Engineers, May 2004.

Outstanding Professor in Industrial Engineering, University of Oklahoma, 2001.

Engineering Excellence Award, College of Engineering, Univ. of Oklahoma, 1996.

Nominated by the School of Industrial Engineering for **Amoco Teaching Award**, 1994.

Distinguished Lecturer Award, College of Engineering, University of Oklahoma, 1993-1994.

Certificate of Appreciation, NASA for Research on Tolerancing, 1992.

Faculty Development Award, University of Oklahoma, Spring 1988.

Associates Distinguished Lecturer Award, University of Oklahoma, 1988-1989.

Ralph Teetor Educator Award, Society of Automotive Engineers, 1987.

IIE Greensboro Senior Chapter 163 Service Award, 1985.

Alpha Pi Mu, Industrial Engineering Honor Society, 1981.

Sigma Xi, The Scientific Research Honor Society, 1981.

Tau Beta Phi, Engineering Honor Society, 1978.

Omega Rho, Operations Research Honor Society, 1978.

Turkish Ministry of Education Scholarship, 1976-1980.

CENTO Scholarship, 1974-1975.

SPONSORED RESEARCH

- Principal Investigator, October 2003- September 2004, University of Oklahoma. Freight Movement Model Development for Oklahoma- Phase III, Sponsor: Oklahoma Transportation Center, Level of Funding: \$94,934.
- Co-Principal Investigator, February 2003 – August 2003, University of Oklahoma. Quantifying the Value of Transportation Velocity and Consistency, Sponsor: Burlington Northern Santa Fe Railroad, Level of Funding: \$49,500.
- Principal Investigator, January 2003- September 2003, University of Oklahoma. Freight Movement Model Development for Oklahoma- Phase II, Sponsor: Oklahoma Transportation Center, Level of Funding: \$50,000.
- Co-Principal Investigator, May 1, 2002-September 30, 2002, University of Oklahoma. Freight Movement Model Development for Oklahoma- Phase I, Sponsor: Oklahoma Department of Transportation, Level of Funding: \$42,000 (includes Oklahoma State University's budget).
- Co-Principal Investigator, December 2001-July 2002, University of Oklahoma. Distribution Security Requirements, Sponsor: U.S Department of Transportation, Federal Aviation Administration. Level of Funding: \$70,000. Supplemental Funding: \$24,919.
- Co-Principal Investigator, August 2001- August 2004, University of Oklahoma. Real-time Promising for Authority Domains Operating in a Build-to-Order Mode, Sponsor: National Science Foundation. Level of Funding: \$499,784.
- Principal Investigator, November 2000- November 2003, University of Oklahoma. Real-Time Decision Support for the Transport Industry, University of Oklahoma Foundation, Level of funding: \$179,000.
- Principal Investigator/Project Director, October 15, 2000-October 14, 2001, University of Oklahoma. Design and Evaluation of a Hierarchical Network Structure and a Decision Support System with Surveillance Information to Enhance Business Partnerships in the E-Marketplace, Sponsor: National Science Foundation, Level of Funding: \$100,000.
- Co-Principal Investigator, October 1, 2000 - September 30, 2001, University of Oklahoma. Real-Time Promising for Authority Domains Operating in a Build-to-Order Mode, Sponsor: National Science Foundation, Level of Funding: \$129,641.
- Principal Investigator, January 15, 2000 - August 15, 2000., University of Oklahoma. Strategic Demand Chain Design for Service Parts, Sponsor: Global Concepts Inc., Level of Funding: \$45,501.
- Principal Investigator, July 1, 1999 - December 31, 1999. University of Oklahoma, Strategic Network Model for Supply Chain Management, Sponsor: Global Concepts Inc., Level of Funding: \$32,523.
- Principal Investigator, October 15, 1998 – February 14, 1999., University of Oklahoma. Assembly Line Demand Flow Implementation. Sponsor: Unitary Products Group, York International. Level of Funding: \$11,988.
- Co-Principal Investigator, November 1, 1998 - August 31, 1999, University of Oklahoma. Development of a Performance Evaluation and Improvement System for the Oklahoma Health Care Authority. Sponsor: Oklahoma Health Care Authority. Level of Funding: \$82,635.
- Principal Investigator, January 15, 1998 - July 15, 1998, University of Oklahoma. Need Analysis for Hospital Beds in the State of Oklahoma. Sponsor: Oklahoma Health Care Authority. Level of Funding: \$18,976.
- Co-Principal Investigator, October 1, 1995 - September 30, 1998, University of Oklahoma. Curriculum for Integrating Manufacturing Enterprise Decisions (CIMED). Sponsor: National Science Foundation. Level of Funding: \$200,000.
- Co-Principal Investigator, September 15, 1993 - September 14, 1996, University of Oklahoma. A Framework for Integrated Production Planning and Scheduling in a Hybrid Assembly Job Shop Environment Under Uncertainty. Sponsor: National Science Foundation. Level of Funding: \$140,000.

- Co-Principal Investigator, September 1993 - August 1994, University of Oklahoma. Computer Integrated Manufacturing - Integration Engineering. Sponsor: Oklahoma Center for the Advancement of Science and Technology. Level of Funding: \$79,895.
- Co-Principal Investigator, June, 1991 - December, 1993, University of Oklahoma. Automatic Plant Layout Design with Unequal Department Size, Fixed Shape, and Location Dependent Construction Cost. Sponsor: National Science Foundation. Level of Funding: \$180,000.
- Project Director/Principal Investigator, 1993, University of Oklahoma. Process Selection Methodology for Minimum Cost Tolerancing. Sponsor: NASA, Marshall Space Flight Center. Level of Funding: \$13,787.
- Co-Principal Investigator, June 1, 1990 - May 31, 1991, University of Oklahoma. A Dynamic Decision Making for Energy Management. Sponsor: Energy Research Center. Level of Funding: \$17,606.
- Project Director/Principal Investigator, August 21, 1989 - September 4, 1993, University of Oklahoma. A Decision Support System for Tolerance Allocation. Sponsor: NASA, Marshall Space Flight Center. Level of Funding: \$158,533.
- Co-Principal Investigator, January 1, 1990 - June 31, 1995. University of Oklahoma. CIM Project on Production Management. Sponsor: Oklahoma Center for the Advancement of Science and Technology. Level of Funding: \$232,763.
- Principal Investigator, August 15, 1988 - June 30, 1989. University of Oklahoma. Interface of Decision-Making with Energy Forecasting Models. Sponsor: Energy Research Center. Level of Funding: \$22,249.
- Junior Faculty Summer Research Fellowship, Summer 1988. University of Oklahoma. Multicriteria Network Flow Problem Sponsor: University Research Council. Level of Funding: \$3,500.
- Research Assistant Support, May 15-August 15, 1988. University of Oklahoma. Bicriteria Network Flow Problems. Sponsor: University Research Council. Level of Funding: \$1,800
- Junior Faculty Summer Research Fellowship, Summer 1986. University of Oklahoma. Network Reliability with Arc Failures and Repairs. Sponsor: University Research Council. Level of Funding: \$3,500.
- Co-Principal Investigator, April 1985 - June 1985. North Carolina A & T State University. Discrete Generalized Networks: Application to Integer Constrained Flow Problems. Sponsor: Office of Army Research. Level of Funding: \$90,000.
- Principal Investigator, September 1985 (awarded, not started). North Carolina A & T State University. Application of Multi-Criteria Decision-Making to Evaluation of Pilot Performance at Varying Levels of Efficiency. Sponsor: NASA/AMES Research Center. Level of Funding: \$30,803.
- Co-Principal Investigator, August 1981 - 1983. North Carolina A & T State University. Distribution of Functionality and Levels of Functionality as a Solution to the CONOPS Problem. Sponsor: Office of Army Research. Level of Funding: \$107,000.
- Co-Investigator, May - August 1981. North Carolina A & T State University. A Computer Aided Multi-Man-Machine Work Area Design and Evaluation System-MAWADES. Sponsor: Office of Naval Research. Level of Funding: \$170,000 for 3 years.

GRADUATE STUDENT RESEARCH SUPERVISION:

UNIVERSITY OF OKLAHOMA:

Student's Name	Degree	Date	Thesis/Dissertation Title
Haijune Lee	Ph.D.	1989	Generating all Efficient Solutions for Bicriteria Network Flow Problems.
Jaihyun Kim	M.S.	1989	On the Solution of Linear Bilevel Programming Problem.
Fenghueih Huarng	Ph.D.	1991	Multicriteria Network Flow Problem An interactive Approach
Myunkoo Kang	Ph.D.	1992	Decomposition Method for Multiattribute Decision-Making Problems.

Bryan Norman	M.S.	1991	Traveling Salesman Problem.
Aminur Rahman	Ph.D.	1992	Multiple Objective Project Scheduling Problem.
Tech-Eng Soh	M.S.	1994	Large Scale Tour Selection"
Raman Batra	M.S.	1994	Plant Layout Problem.
Steven Horn	M.S.	1995	Multiple Objective Project Scheduling Problem.
Jaideep Mani	M.S.	1996	Process and Machine Selection Algorithm for Manufacturing.
Luke Sastradjojo	M.S.	1998	Graph Partitioning Problems using Tabu Search
Ramesh Premkumar	M.S.	1998	Facility Layout Optimization using Tabu Search
Rajiv Bhuta	M.S.	1998	Integrated Curriculum in Manufacturing Enterprise Décisions
Andrini Prabandari	M.S.	1998	Tabu Search Application to Unconstrained
Kayode Badiru	M.S.	1999	Heuristics for Surface Roughness Optimization
Jae-Jin Seok	M.S.	2000	Methodologies for Simulation Optimization Measurements
Marvin Lee	M.S.	2000	Flow Shop Scheduling with Parallel Mach.
Shein Loong Yap	M.S.	2000	Strategic Planning Tool for Logistics Network Designs
Melisa Crews-Moore	M.S.	2000	Performance Evaluation and Improvement System for Non-Profit Organizations
Tarab Ali	M.S.	2001	Design of Intelligent Relay Networks for Ground Freight Transportation
Mihir Korke	M.S.	2002	Intercity Freight Scheduling Using Relay Networks
Affan Badar	Ph.D.	2002	(co-advisor) An Intelligent Search-Based Methodology for Selection of Sample Data Pints for Form Error Estimation
Misty McDowell	M.S.	2003	A Workload Analysis and Resource Allocation Study of Faculty at a Medium-Sized University
Murat Kocak	M.S.	2004	Generating LTL Freight Schedules
Santosh Parameswaran	M.S.	2004	Three-level Multiple Product Inventory Simulation System

Current Ph.D Students: Jae-Jin Seok, Kayode Badiru, Kai-Pei Cheng

Current M.S Students: Natraj Kumar, Buck Held

Served as committee member for several students from industrial, electrical engineering, computer science, and chemical engineering. Supervised three M.S. students at North Carolina A&T State University.

PUBLICATIONS:

BOOKS:

Comprehensive Project Management: Optimization Models, Management Practices, and Computers, A. Badiru, P.S. Pulat, Prentice-Hall, Englewood Cliffs, NJ, 1995.

JOURNAL ARTICLES:

- Badar, M., Raman, S., and Pulat, P., "Intelligent Search-Based Selection of Sample Points for Straightness and Flatness Estimation", *Journal of Manufacturing Science and Engineering*, **125**(2): 263-271, 2003.
- Ali, T., Radhakrishnan, S., Pulat, P. S., and Gaddipati, N., "On Algorithms for Relay Network Design in Freight Transportation Systems", *Transportation Research- Part E: Logistics and Transportation Review*, **38**: 405-422, 2002.
- Pulat, S., Kasap, S., and Splinter, G., "Simulation Study of an Ideal Primary Care Delivery System", **76**(2), *Simulation*, 2001: 78-86.
- Badar, A., Raman, S., Pulat, P. S., "Search-Based Selection of Sample Points for Form Error Estimation", *Proceedings of ASME-MED 2000*, November 2000: 73-80.
- Pulat, P. S., Foote, B. L., Kasap, S., Splinter, G., Lucas, M., "Data and Simulation Modeling to Estimate the Number of Primary Care Beds for the State of Oklahoma", *Topics in Health Information Management*, **19**(4), 1999: 36-46.
- Kim, Chae-Bogk, Pulat, P. S., Foote, B. L., and Lee, Dong Hoon, "Least Cost Tolerance Allocation and Bicriteria Extension," *International Journal of Computer Integrated Manufacturing*, **12**(5), 1999, 418-426.
- Raman, S., Desai A., Pulat, S. and Foote, B. L., "Teaching Manufacturing Integration through Research Deployed Software Modules," *The International Journal for Manufacturing Science and Production*, **2**(1), 1999: 27-35.
- Benson, B., Foote B. L., Cheung J., and Pulat S., "DoorFAST: A Constructive Procedure to Optimally Layout a Facility Including Aisles and Door Locations Based on Aisle Flow Distance Metric", *International Journal of Production Research*, **35**(7), 1997: 1825-1842 in conjunction with *International Journal of Production Research*, **35**(10), 1997: 2945.
- Pulat, P. S., and Horn S. J., "Time-Resource Tradeoff Problem", *IEEE Transactions on Engineering Management*, **43**(4), 1996: 411-417.
- Huang, F., Pulat, P.S., and Shih L., "Computational Comparison of Some Bicriterion Shortest Path Algorithms", *Journal of Chinese Institute of Industrial Engineers*, **13**(2), 1996: 121-125.
- Cheung, J., Lin, J., Foote, B., Pulat, S., Chang, C., "Solving the Failure to Fit Problem for Plant Layout: By Changing Department Shapes and Sizes", *European Journal of Operations Research*, **89**, 1996: 135-146.
- Nagarwala, M.Y., Pulat, P.S. and Raman, S., "A Slope-Based Method for Least Cost Tolerance Allocation", *Concurrent Engineering: Research and Applications*, **3**(4), 1995: 319-328.
- Pulat, P.S. and Badiru, A., "Computer Simulation Approach to Hierarchical Dynamic Decision Making," *Encyclopedia of Computer Science and Technology*, **33**(18), 1995:73-96.
- Kim, C., Pulat, P.S. and Foote, B., "Cut-tree Construction for Automated Facility Layout," *Computers and Industrial Engineering*, **28**(4), 1995:721-730.
- Kurup, K.K., Raman, S. and Pulat, P.S., "Computer-aided Mechanical Disassembly Sequence Generation," *Transactions of NAMRI, SME*, **23**, 1995:247-255.
- Nagarwala, M., Pulat, P.S. and Raman, S., "Process Selection and Tolerance Allocation for Minimum Cost Assembly", *Manufacturing Science and Engineering*, Alzeihmer (Ed.), ASME, PED **68**(1), 1994:47-55.
- Kang, M., Kapur, K., and Pulat, P.S., "Interactive Partitioning Criteria Set Method for Multiple Objective Linear Programming," *Computers and Operations Research*, **20**(4), 1993:435-446.
- Badiru, A.B., Pulat, P.S., and Kang, M., "DDM: Decision Support System for Hierarchical Dynamic Decision Making", *Decision Support Systems*, **10**, 1993:1-18.
- Lee, H. and Pulat, P.S., "Bicriteria Network Flow Problem: Integer Case", *European Journal of Operations Research*, **66**(1-2), 1993:148-157.
- Lokhandwala, M., Raman, S., and Pulat, P.S., "Integrated System for Tolerance Allocation and Tolerance Analysis", *Proceedings of the ASME Winter Annual Meeting, Concurrent Engineering* (D. Datta, A. C. Woo, editors), PED **59**, 1992:195-209.
- Fernandez, K., Raman, S., Pulat, P.S., "Software for Allocation of Tolerances", *NASA Tech Briefs*, MFS 27256, July 1992:88-89.

- Panchal, K., Raman, S. and Pulat, P.S., "Computer-Aided Tolerance Assignment Procedure (CATAP) for Design Dimensioning", *International Journal of Production Research*, **30**(3), 1992:599-610.
- Pulat, P.S., Huarng, F. and Lee, H., "Efficient Solutions for the Bicriteria Network Flow Problem", in the special issue of *Computers and Operations Research on Multiple Criteria Optimization*, **19**(7), 1992:649-655.
- Pulat, B.M. and Pulat, P.S., "A Decoupling Inventory Model and an Application", *IEEE Transactions on Engineering Management*, **39**(1), 1992:73-76.
- Pulat, B.M. and Pulat, P.S., "A 3-D Competitive Manufacturing Model", *Industrial Engineering*, July 1991.
- Raman, S., Panchal, K. and Pulat, P.S., "Computer-Aided Tolerance Assignment", *Computers and Industrial Engineering*, **21**, 1991:67-71.
- Lee, H. and Pulat, P. S., " Bicriteria Network Flow Problem: Continuous Case", *European Journal of Operations Research*, **51**(1), 1991:119-126.
- Kapur, K.C., Raman, S. and Pulat, P.S., "Methodology for Tolerance Design Using Quality Loss Function", *Computers and Industrial Engineering*, **19**, 1990:254-257.
- Pulat, P.S., "Maximum Outflow in Generalized Networks", *European Journal of Operations Research*, **43**(1), 1989:65-77.
- Pulat, P.S. and Pulat, B.M., "Throughput Analysis in an Automated Material Handling System", *Simulation*, **52**(5), 1989:195-198.
- Pulat, P. Simin, "A Decomposition Algorithm To Determine The Maximal Flow In A Generalized Network", *Computers and Operations Research*, **16**(2), 1989:161-172.
- Pulat, P. Simin, "On The Relation of Max-flow To Min-cut for Generalized Networks", *European Journal of Operations Research*, **39**, 1989:103-107.
- Pulat S. and Leemis L., "Network Reliability Availability Analysis to Minimize Downtime Costs for Communication Networks", *Microelectronics and Reliability*, **29**(1), 1989:37-48.
- Pulat, P.S., "Network Reliability with Arc Failures and Repairs", *IEEE Transactions in Reliability*, **37**, 1988:268-274.
- Pulat, P.S., "Cost Time Trade-Offs in Deterministic Activity Networks", *Industrial Engineering*, **17**, May 1985:20-24.
- Pulat, B.M. and Pulat, P.S., "A Computer Aided Workstation Assessor for Crew Operations--WOSTAS", *International Journal of Man-Machine Studies*, **22**, 1985:103-126.
- Elmaghraby, S.E. and P.S. Pulat, "Optimal Compression of Networks with Multiple Due Dates", *Naval Research Logistics Quarterly*, **26**, 1979:331-347.

PROCEEDINGS:

- Pulat, S., Shen, G., Kumar, N., Ingalls, R., and Kamath, M., "Development of a Freight Flow Model", *Proceedings of the IERC*, CD-ROM, May 2004, Houston, TX.
- Kumar, N., Pulat, S., Shen, G., Ingalls, R., and Kamath, M., "Database and Software Applications in Freight Planning", *Proceedings of the IERC*, CD-ROM, May 2004, Houston, TX.
- Prabandari, A., Pulat, P. S., and Shehab, R., "Computational Approach to Global Optima for Unconstrained Optimization Problems" *Industrial Engineering Research '99 Proceedings*, May 1999, Phoenix, AZ.
- Raman, S., Pulat, P. S., Foote, B. L., Grant, H., and Court, M. C., "Curriculum for Integrating Manufacturing Enterprise Decisions", *Proceedings of the NSF Grantees Conference on Design and Manufacturing*, Long Beach, CA, 1999.
- He, J., Altan, C., and Pulat, S., "An Integrated Approach to Optimal Product and Process Design for Molded Composite Materials," *Proceedings of the 2nd International Conference on Engineering Design and Automation*, CD-ROM, H. Parsei (Ed.), 1998.
- Raman S., Foote B., Pulat S., Grant H., and Badiru A. B., "Curriculum for Integrating Manufacturing Enterprise Decisions (CIMED), *Proceedings of the 1997 ASEE Annual Conference*, 1997, Session 1526-14:14-1 to 14-8.
- Raman S. and Pulat S., "An Integrated Approach to Process Selection and Least Cost Tolerancing", *1997 Proceedings of the Sixth IERC Conference*, 1997: 246-250.

- Foote, B., Pulat, S., Raman, S., Badiru, A.B., and Kamath, M., "Integrated Models for an Hybrid Assembly Job Shop", *Proceedings of the 1997 NSF Design and Manufacturing Conference*, January, 1997:125-126.
- Raman S., Foote F. L., Pulat P. S., Grant F. H., and Badiru A. B., "Curriculum for Integrating Manufacturing Enterprise Decisions (CIMED)", *Proceedings of the 10th Mid-America Symposium on Emerging Computer Technologies '96*, October 1996:111-117.
- Foote, B., Pulat, P.S., Badiru A., Raman S., and Kamath M., "A Framework for Integrated Production Planning and Scheduling in a Hybrid Assembly Job Shop Under Uncertainty", *Proceedings of the 1995 NSF Design and Manufacturing Grantees Conference*, May 1995:261-262.
- Chang, C., Foote, B.L., Pulat, P.S. and Cheung, J., "Aisle Construction Algorithms for Plant Layout Problems", *Proceedings of the Third IERC*, May 1994:577-581.
- Foote, B.L., Pulat, P.S. and Cheung, J., "Automatic Plant Layout Design with Unequal Department Size and Fixed Shape", *Proceedings of the 1994 NSF Design and Manufacturing Grantees Conference*, MIT Cambridge, MA, January 1994:151-152.
- Foote, B.L., Pulat, P.S. and Cheung, J., "Algorithms for Automatic Drawings of Optimal Layout", *Proceedings of the 1993 NSF Design and Manufacturing Systems Conference*, Charlotte, NC, 1993:1043-1050.
- Foote, B.L., Lin, J., Pulat, P.S., Chang, C. and Cheung, J., "Hybrid Genetic Algorithm for Container Packing in Three Dimensions", *Proceedings of the 9th Conference for Applications*, Orlando, FL, March 1993.
- Foote, B.L., Pulat, P.S., Raman, S., Badiru, A. and Kamath, M., "A Framework for Integrated Production Planning and Scheduling in a Hybrid Assembly Job Shop Environment Under Uncertainty", *Proceedings of the 2nd Industrial Engineering Research Conference*, May 1993:853-857.
- Huang, F., Pulat, P.S., and Ravindran, A., "An Algorithm for Bicriteria Network Flow Problem", *Proceedings of the 10th International Conference on Multiple Criteria Decision Making*, Taipei, Taiwan, **3**, 1992.
- Lin, J.L., Foote, B., Pulat, S., Chang, C., and Cheung, J., "Solving the Failure to Fit Problem for Plant Layout: By Changing Department Sizes," *Proceedings of the 6th Oklahoma Symposium on Artificial Intelligence*, Tulsa, OK, 1992:202-210.
- Lin, J.L., Foote, B., Pulat, S., and Cheung, J., "An Improved Smile Algorithm for Container Packing in Three Dimensions", *Proceedings of the 6th Oklahoma Symposium on Artificial Intelligence*, Tulsa, OK, 1992:252-258.
- Foote, B., Lin, J.L., Pulat, S., and Cheung, J.Y., "Solving the Failure to Fit Problem for Plant Layout: By Changing Department Shapes," *Proceedings of the International Symposium on Artificial Intelligence*, Cancun, Mexico, 1992:159-166.
- Pulat, B.M. and P.S. Pulat, "Performance Analysis of Automated Storage and Retrieval Systems-A Comparative Approach", *The Proceedings of the Winter Simulation Conference*, December 1988:591-596.
- Foote, B.L. and Pulat, P.S., "The Real World as a Laboratory: Senior Design in the University of Oklahoma, School of Industrial Engineering," *Proceedings of the 23rd Annual ASEE Midwest Conference*, March 1988:II-C 19-24.
- Pulat, P.S., "Cost Time Trade-Offs in Deterministic Activity Networks", *Software for Engineers and Managers* (ed. Gary Whitehouse), **II**, 1987:54-56.

PROGRESS/FINAL REPORTS:

- Ingalls, R., Pulat, P.S., Shen, G., and Kamath, M., "Freight Movement Model: Phase II Report: Databases and Models for Regional Freight Movement", Oklahoma Transportation Center, October, 2003.
- Ingalls, R., Pulat, P.S., Shen, G., and Kamath, M., "Freight Movement Model: Phase I Report", Oklahoma Transportation Center, October, 2002.
- Pulat, P.S., Dechert, J., "Design of a Performance Evaluation and Improvement System for the Oklahoma Health Care Authority", Final Report, 1999.

- Pulat, P. S., Foote, B. L., and Kasap, S., "Primary Care Bed Planning for the State of Oklahoma," Final Report submitted to Oklahoma Health Care Authority, 1998.
- Foote, B.L. and Pulat, P.S., "A General Methodology for Locating Primary Care Facilities and Sizing Primary Care In-House Resources", Final Report, Health Care Reform Initiative Group of Oklahoma, 1994.
- Pulat, P.S. and Raman, S., "Decision Support System for Tolerance Allocation Problem", Final Report, NASA Grant NAG8-137, 1993.
- Raman, S. and Pulat, P.S., "Decision Support System for Tolerance Allocation Problem", Annual Report, NASA Grant NAG8-137, 1991.
- Pulat, P.S. and Raman, S., "Decision Support System for Tolerance Allocation Problem", Annual Progress Report, NASA Grant NAG8-137, 1990.
- Pulat, P.S., "User's Manual for Energy Forecasting Model Software", Energy Research Center, University of Oklahoma, 1990.
- Pulat, P.S. and H.L. Martin, " Distribution of Functionality and Levels of Functionality as a Solution to the CONOPS Problem", *Final Report*, Army Research Office, DSSG29-81-G-0009, 1984.

BOOK REVIEWS (published):

- Network Optimization and Applications* by Bala Shetty, *Annals of Operations Research*, Vol. 20, 1989, *European Journal of Operations Research*, **47**(3), 1990:396-397.
- Readings in Decision Analysis* by Simon French, Chapman and Hall, New York, NY, 1989, *Journal of Quality Technology*, **22**(2), 1990:168.

RESEARCH PRESENTATIONS:

Invited Papers/seminars/colloquia

- Moses, S., Pulat, P.S., Grant, H., and Gruenwald, L., "Due-date Promising Models", EURO/INFORMS Joint International Meeting, Istanbul, Turkey, July 2003.
- Moses, S., Grant, H., Gruenwald, L., and Pulat, P.S., "Real-Time Promising for Authority Domains Operating in a Build-to-Order Mode", NSF Design, Service, and Manufacturing Conference, Birmingham, AL, Scalable Enterprise Systems Presentation, January 2002.
- Moses, S., Grant, H., Gruenwald, L., and Pulat, P.S., "Real-Time Promising for Authority Domains Operating in a Build-to-Order Mode", NSF Design, Service, and Manufacturing Conference, San Juan, Puerto Rico, January 2002.
- Moses, S., Grant, H., Gruenwald, L., and Pulat, P.S., "Real-Time Promising for Authority Domains Operating in a Build-to-Order Mode", NSF Design, Service, and Manufacturing Conference, Tampa, FL., January 2000.
- Pulat P. S., " Strategic Planning for Service Parts Distribution", Guest Speaker, Oklahoma Roundtable, Council of Logistics Management, September 2000 (also presented as the INFORMS Student Chapter Seminar, 2000).
- Pulat, P. S., Moses, S., " Value Chain Design: Challenges and Opportunities", guest speaker at Lucent Technologies, April 2000.
- Pulat, P. S., "Education: A Ticket to Many Opportunities", guest speaker at Lucent Technologies for National Women's History Month, March, 2000.
- Prabandari A., Pulat, P.S., and Shehab R., "Computational Approach to Global Optima for Unconstrained Optimization Problems", Industrial Engineering Research '99 Conference, Phoenix, AZ, May 1999.
- Pulat, P.S., "Time-Resource Trade-Off of Project Schedules", INFORMS Conference, Dallas, TX, 1997.
- Pulat, P.S., "Tabu Search Application to Unequal-Size and Fixed-Shape Facility Layout Problem", invited seminar, Industrial and Systems Engineering, Oklahoma State University, November 1995.
- Pulat, P.S. and Horn, S., "Interactive Multiple Criteria Time-Resource Tradeoff Problem", invited paper, ORSA/TIMS Joint National Meeting, Phoenix, AZ, November 1993.

- Kim, C., Foote, B.L., Pulat, P.S., Benson, B. and Tillinghast, T., "Implementation of B & B Scheme to Solve the Rectilinear Facility Layout Problem with Constraints on Department Dimensions", invited paper, ORSA/TIMS Joint National Meeting, Detroit, MI, October 1994.
- Pulat, P.S., Trafalis, T. and Couellan, N., "Application of Interior Point Methods to A Project Management Problem", invited paper, ORSA/TIMS Joint National Meeting, Boston, MA, April 1994.
- Horn, S., Pulat, P.S. and Trafalis, T., "Multi-criteria Project Scheduling", invited paper, TIMS XXXII Meeting, Anchorage, AK, June 1994.
- Norman, B. and Pulat, P.S., "On the Traveling Salesman Problem", Production and Operations Management Conference, New York, NY, November 1991.
- Pulat, P.S., "Decision Support System for Energy Forecasting", 3rd Conference of the Oklahoma Judgmental Decision Making Group, University of Oklahoma, Norman, OK, November 1990.
- Pulat, P.S., "Decision Making Models for Energy Management", Oklahoma Summer Youth Academy, University of Oklahoma, Norman, OK, 1990.
- Pulat, P.S., "A Dynamic Decision Making Model," Industrial Engineering Symposium, University of Oklahoma, Norman, OK, 1989.
- Pulat, P.S., "Polynomially Bounded Max-Flow Algorithm for Generalized Networks", Bilkent University, Ankara, Turkey, 1987.
- Pulat, P.S., "Application of Operations Research to Industrial Problems", American Institute of Industrial Engineers, Greensboro, NC, 1984.
- Pulat, P.S., "Maximum Flow Problem for Generalized Networks", North Carolina State University, Raleigh, NC, 1984.
- Pulat, P.S., "Networks as an Aid to Decision Making Process", NASA-AMES Research Center, Moffett Field, CA, 1984.
- Pulat, P.S., "Max-min Flow for Generalized Networks", University of Oklahoma, Norman, OK, 1983.

CONTRIBUTED PAPERS/SEMINARS/COLLOQUIA

- He, J., Altan, C., and Pulat, S., "An Integrated Approach to Optimal Product and Process Design for Molded Composite Materials," Conference on Engineering Design and Automation, Hawaii, August, 1998.
- Huang, F., Pulat, P.S., and Ravindran, A., "An Algorithm for Bicriteria Network Flow Problem", 10th International Conference on MCDM, Taipei, Taiwan, 1992.
- Rahman, A., and Pulat, P.S., "Generation of Efficient Cuts for the Two Commodity Network Flow Problem", ORSA/TIMS Conference, San Francisco, CA, November 1992.
- Norman, B. and Pulat, P.S., "On the Traveling Salesman Problem", ORSA/TIMS Conference, November 1991.
- Pulat, P.S. and Raman, S., "Tolerance Allocation Models", ORSA/TIMS Conference, November 1991.
- Pulat, P.S., Badiru, A. and Kang, M., "Decision Support System for Forecasting with Probabilistic Factor Interactions", ORSA/TIMS Conference, Anaheim, CA, November 1991.
- Raman, A. and Pulat, P.S., "Multiple Criteria Project Scheduling Problem", ORSA/TIMS Conference, November 1991.
- Pulat, P.S., Kapur, K. and Kang, M., "Interactive Partitioning Multiple Criteria Programming", ORSA/TIMS Conference, Nashville, TN, May 1991.
- Pulat, P.S. and Huang, F., "BINET: Bicriteria Network Flow Programming for Continuous Variables", ORSA/TIMS Conference, Nashville, TN.
- Pulat, B.M. and Pulat, P.S., "Exploring the Dimensions of a 3-D Competitive Manufacturing Model, International Engineering and Technology Manufacturing Conference, Portland, OR, October 1991.
- Pulat, P.S., Lee, H. and Huang, F., "Multicriteria Network Flow Problem", MCDM Conference, August 1990.
- Lee, H. and Pulat, P.S., "Integer Solutions to Bicriteria Network Flow Problems", ORSA/TIMS Conference, October 1989.

- Pulat, P.S. and Lee, H., "Geometrical Interpretation of Linear Fractional Programming(LFP)", ORSA/TIMS Conference, October 1988.
- Pulat, P.S., "Network Reliability Calculations with Arc Failures and Repairs", ORSA/TIMS Conference, May 1987.
- Pulat, P.S., "Multiterminal Flow Problem for Generalized Networks", ORSA/TIMS Conference, April 1986.
- Pulat, P.S. and Elmaghraby, S.E., "Polynomially Bounded Max-Flow Algorithm for Generalized Networks", ORSA/TIMS Conference, November 1984.
- Pulat, P.S., "Max-Min Flows for Generalized Networks", ORSA/TIMS Conference, November 1983.
- Pulat, P.S. and Elmaghraby, S.E., "Optimal Compression of Networks with Multiple Due Dates". ORSA/TIMS Conference, November 1977.

PROFESSIONAL ASSOCIATIONS

Senior Member, Institute of Industrial Engineers

REFEREE/REVIEWER FOR

Journal of Operational Research Society
 Computers and Industrial Engineering
 Computers and Operations Research
 IEEE Transactions on Reliability
 Mathematical Reviews
 Naval Research Logistics
 Networks
 OPSEARCH
 IEEE Transactions on Engineering Management

PROFESSIONAL SOCIETY ACTIVITIES

- President Elect, Council of Industrial Engineering Academic Department Heads (CIEADH), May 2003.
- Organizing Committee, 2003 IIE Doctoral Colloquium, Portland, OR.
- Benchmarking Committee Member, Council of Industrial Engineering Academic Department Heads, 2001-2002.
- Conference Program Committee Member, PICMET Conference 2001.
- CAREER Grant Proposal Review Panel Member, National Science Foundation, November, 2000, 2002.
- Engineering Optimization Cluster Chair, Institute of operations Research and Management Science, Salt Lake City, Utah, May 2000.
- Conference Program Committee Member, PICMET Conference '97 and PICMET Conference '98.
- Faculty Advisor, INFORMS Student Chapter, 1995-1999.
- Program Review Panel, Member, American Council for Education.
- Faculty Advisor, Society of Women Engineers, August 1993- May 1998.
- Vice-president for Membership, Institute of Industrial Engineering OKC Senior Chapter, 1994-1995.
- Associate Area Editor, IIE Transactions 1992, 1993.
- Faculty Advisor, ORSA Student Chapter, 1990, 1992.
- Faculty Advisor, Competition team on "Energy: 2015", University of Oklahoma, 1990.
- Faculty Advisor, American Society of Mechanical Engineers Mini-Baja Team, University of Oklahoma, 1987-1988, 1990.
- Faculty Advisor, Institute of Industrial Engineers University of Oklahoma Chapter, 1986-1988.
- Faculty Advisor, Society of Women Engineers - University of Oklahoma, August 1985- May 1990.
- Vice-President for Membership, OKC Senior Chapter of Institute of Industrial Engineers, 1986.

COMMITTEE AND OTHER SERVICE ACTIVITIES

UNIVERSITY OF OKLAHOMA: (1985-Present)

University Level:

Panel Member, Academic Promotion and Tenure, PACWI, 2003.
 Panel Member, Research Funding, New Faculty Colloquium, 2003
 Member, University Faculty Appeals Board, 1998-2001.
 Member, NCA University Accreditation Committee, 2000-2001.
 Member, University Departmental Review Committee, 2000-2002.
 Member, Advisory Committee on International Relations, 1996-present
 Member, University College Faculty Advisory Committee, 1995-2000.
 Member, Institutional Review Board, 1995-1996.
 Member, Office of International Programs Advisory Board, 1992-1996.
 Member, Rita Lottinville Prize for Freshman Committee, 1994-1997.
 Teach Test Panel, 1993-1996
 Member, Faculty Appeals Committee, 1992 - 1994.
 Cleo Cross International Student Scholarship Committee, 1992.
 Member, University Faculty Welfare Committee, 1988-1989.

College Level:

College-wide instructional Workload Study, 2003.
 Member, Dean's Advisory Committee on Tenure and Promotion, 1998- 2001.
 Member, Dean's Search Committee, 1998.
 IE Undergraduate Program Liaison, 1992-1993.
 Member, Curriculum Committee, 1989-present.
 Member, Academic Appeals and Misconduct Committee, 1988-1998.
 Member, B.S. in Engineering Committee, 1987-1991.
 Member, Engineering Convocation Committee, 1986-1989.

School Level:

Advisor, Scholarship students, 1998- 2001.
 Chair, IE Director Search Committee and Production Faculty Search Committee, 1998.
 Member, Graduate Programs Committee, 1996-1997,1998-1999.
 Chair, IE Undergraduate Program Committee, 1994-1995, 1996-1998, 1999-2001.
 Member, Committee A, 1993-1995, 1997-present.
 Director, Optimization Laboratory, 1993-present.
 Member, IE Graduate Committee, 1992-1995.
 Chair, OR Area Committee, 1992-1999.
 Chair, Graduate Committee, 1990-1992.
 Graduate Liaison, 1990-1992.
 Member, Faculty Search Committee, 1989-1990.
 Member, Committee A, 1988-1990.
 Chair, IE Undergraduate Program Committee, 1989-1990.
 Chair, Operations Research Area Committee, 1988-1989.
 Member, George Gibson Scholarship Committee, 1988.
 Member, Academic Program Review Committee, 1987.
 Member, Self Assessment Committee, 1987.
 Member, Undergraduate Program Committee, 1985-1988.

NORTH CAROLINA A&T STATE UNIVERSITY: (1980-1985)

Senator, University Senate, 1981-1983.
 Member, College of Engineering Grade Appeals Board, 1985.
 Member, Industrial Engineering Faculty Search Committee, 1985.
 Library, Industrial Engineering, 1982-1985.
 Member, Graduate Program Committee, Industrial Engineering, 1983-1985.
 Editor, Industrial Engineering Alumni Newsletter, 1984-1985.
 Chair, Industrial Engineering Scholarship & Awards Committee, 1980-1982.