Curriculum Vitae: Minnie H. Patel

Personal Data

Office: Dept. of Industrial & Systems Engg.
San Jose State University
San Jose, CA 95192
Tel: (408) 924-4152
Fax: (408) 924-4040
E-Mail: npatel@sjsu.edu

Home: 180 Coffeeberry Dr
San Jose, CA 95123
Tel: (408) 225-9916

Professional Objectives

To teach and conduct research in supply chain, operations research and statistical methods for systems analysis and design in both manufacturing and service industries, integrating statistical thinking for quality improvement in engineering and management.

Education

Ph. D. Industrial and Systems Engineering, Georgia Institute of Technology, 1988.
Major: Operations Research Applications, Minors: Mathematics and Applied Statistics
Dissertation: "A New Approach to Solving a Stochastic Multilocation Distribution Problem."
Advisor: Prof. Stuart J. Deutsch

"We consider a multilocation distribution problem with stochastic demand at demand points and stochastic supply at supply points having a joint multivariate normal probability distribution. The parameters of the multivariate normal distribution are assumed to be unknown which do not allow for a direct optimization. An indirect optimization approach was developed by transforming problem to an identical network structure of statistical space-time models. Heuristic methods were developed to solve such problems without direct optimization in the original form."

M. S. Operations Research, Georgia Institute of Technology, 1984.

M. S. Systems Engineering, University of Illinois, Chicago, 1981.
Thesis: "Optimal Path Location on a Tree Network"
Advisor: Prof. Edward Minieka

M. Sc. Statistics, Maharaja Sayajirao University of Baroda, Baroda, India, 1978.

B. Sc. Statistics, Maharaja Sayajirao University of Baroda, Baroda, India, 1976.

Employment History

2011-Present Professor, Department of Industrial & Systems Engineering, San Jose State University, San Jose, CA

2002-2011 Associate Professor, Department of Industrial & Systems Engineering, San Jose State University, San Jose, CA

2001-2002 Chair & Associate Professor, Department of Industrial & Manufacturing Engineering, University of Wisconsin-Milwaukee, Milwaukee, WI

1996-2001	Associate Professor, Department of Industrial & Manufacturing Engineering, University of Wisconsin-Milwaukee, Milwaukee, WI
1998-1999	Visiting Associate Professor, Department of Industrial Engineering & Management Systems, University of Central Florida, Orlando, Florida
1997 Summer	Adjunct Professor, Department of Industrial Engineering and Management Systems, University of Central Florida, Orlando, Florida
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1990-1996	Assistant Professor, Department of Industrial & Manufacturing Engineering, University of Wisconsin-Milwaukee
1987-1990	Assistant Professor, Management Science Program, University of Tennessee, Knoxville
1982-1987	Probability and Statistics Lab Coordinator and Teaching Assistant, Department of Industrial and Systems Engineering, Georgia Institute of Technology
1981-1982	Operations Research Analyst, World Book, Inc., Chicago, IL
1980-1981	Teaching Assistant, Department of Systems Engineering, University of Illinois-Chicago

Consulting Experience

Consulting services to a major national bank to improve management of customer accounts. Specifically to develop a segmentation system for the project. Milwaukee, WI, 1996.

Developed an integer-programming model to determine optimal allocation of the strategies to maximize total dollars collected from delinquent customer accounts, Household International, Chicago, Il, 2002.

Teaching Experience

Courses Taught at San Jose State University, University of Wisconsin-Milwaukee, University of Tennessee-Knoxville, and Georgia Institute of Technology

Undergraduate/Graduate

Basic Optimization Techniques
Introductory Statistics for Physical Sciences and Engineering Students
Introduction to Computer Simulation (EZSIM, ARENA)
Production and Operations Management
Management Information Systems
Engineering Statistics
Probability and Statistics
Engineering Economic Analysis
Supply Chain Engineering
Operations research

Graduate

Deterministic Methods in Operations Research
Regression Analysis
Applied Stochastic Processes
Computer Simulation
Production Management
Engineering Statistical Analysis (M.S. Program in Engineering Management at UWM)
Probabilistic Approach to Operations Research
Inventory Planning and Control (Independent Study)
Financial Methodt for Engineers
Advanced Operations Research

Special Cohort Programs: At Graduate level at the University of Central Florida (UCF), University of Wisconsin-Milwaukee, and at San Jose State University:

Special Topics: Engineering Economic Ananlysis (ENGR 297D, Aug 10 2005 to September 28, 2005 at Lockheed Martin Space Systems and April 24 2006 to June 16, 2006 and April 24, 2009 to June 16, 2009 at Rose Orchard Cohort #5, Cohort #7, Cohort #11, and Cohort #13 in the MBA/MSE program offered by San Jose State University)

Statistics for Engineers (Spring 2002, Executive Mster's Degree Program in Engineering at University of Wisconsin-Milwaukee)
Probability & Statistics for Engineers (STA 5156: taught at UCF and at KSC, NASA in the Master's Degree Program in Engineering Management, Fall 1998)
Operations Research (ESI 5316: taught at UCF and at KSC, NASA in the Master's Degreee Program in Engineering Management, Spring 1999)

At Undergraduate Level:
Engineering Statistics (STA 3032 taught at UCF at undergraduate level, Summer 1996, Fall 1998)
Operations Research (ESI 4312: taught at UCF at undergraduate level, Spring 1999)

Short Courses

Manufacturing Engineering Basics, September 16-17, 1999 offered through the University Center for Continuing Education-Milwaukee, Wisconsin

Prepared and taught material on two sections: *Probability and Statistics* and *Statistical Process Control* for the course.

Graduate Students Advisement Activities

Graduated eleven M.S. students
Graduated two Ph.D. students
Supervised Two Advanced Independent Study Projects
Served on twenty six thesis committees
Served on eleven Ph.D. dissertation committees
Supervised one Ph.D. internship project

Undergraduate Students Activities

Supervised one internship project, supervised independent study in plant layout and material handling, and project management

Publication Record

Thirty four refereed publications

One Study Guide for a management science Textbook

One solution manual of a Quality Control textbook
Four Georgia Tech Report Series papers
Nine national conference paper abstracts
Four IIE Research Conference Abstracts

Professional Societies and Service Record

Director of Membership of the Institute of the Industrial Engineers (IIE) 2002-2004
Director of the Operations Research Division (OR) of the Institute of Industrial Engineers (IIE) 2000-02
Newsletter Editor of the OR Division of IIE, 1997-1999
Faculty Advisor, Society of Women Engineers UWM student Chapter, 1994-1998
Active member of IIE, ASEE
Chaired eight technical sessions at national and international level conferences
Organized two technical sessions at national and international level conferences.

Graduate Student Activities

Ph. D. Committees
Russell Bellford (advisor)
Ganapathyraju Srinivas (co-advisor)
William A. Berezowitz (member)
Tson-Da Chou (member)
Manocher Djassemi (member)
Pichaya Rachdawong (member)

Christos Pournaropoulos (member)
Shih-Jen Li (member)
Debopam Chakraborty (member)
Gang Yu (member)

Masters Thesis Committees

Deborah Nettles (advisor)
Susan Lied (advisor)
Savitha Kasturi (advisor)
Chandrasekhar Ramachandra (advisor)
Arun Chidambaram (advisor)
Mark Kachel (advisor)
Mehrdad Kazemi (advisor)
Minoo Seifoddini (advisor)
Vaidyanathan Shankar (co-advisor)
Irfan Manzoor (co-advisor)
Daniel Hauer (co-advisor)
John Hamm (member)
Jeff Lange (member)
Coomar Parmeshswaram (member)
Karen Furmack (member)
Ronald Baus (member)
Kidest Eskender (member)
Zandhy Utama (member)
Bobby Tjahjana (member)
Adelina Castillo (member)
Tayyib A. Tayyib (member)
Abhijit Divekar (member)
Ashish Seth (member)
Gerardo Tamez (member)
Timothy Bickel (member)
Manjeet Arora (member)

Ph.D. Student Graduated

Srinivas G., "Qaudtree Based Mapping and Path Planning for a Teleoperated Mobile Robot", 2002

Bellford, R., "Stage-Wise Decision Making of the Capacity Planning and Control of Telecommunications Switching Systems", 2001

Masters Students Graduated at Univeristy of Wisconsin-Milwaukee

Manzoor, I, “Implementation of Lean Manufacutring in a High Variety Industry,” 2002
Shankar, V., “Quoting Accurate Lead Times for a High Volume High Variety Industrial Supply Chain Using Simulation,” 2002
Haur, D., “A Case Study of Leeson Electric Demonstrating the Use of Vertical Integration as a Tool to Increase the Success of Lean Manufacturing Implementation,” 2002
Kazemi, M., “A New Method for Solving Hemispherical Minimax Location Problem”, 1998.
Chidambaram, A., “A New Approach to Solve for the Global Minimax Point on a Sphere”, 1996.
Kachel, M., “Genetic Algorithms for Finding the Extreme Values of Functions”, 1995.
Seifoddini, M., “A probabilistic Grouping Efficiency Measure for Machine Components Charts, 1993
Kasturi, S., “Optimal Location of Obnoxious Facilities Considering Risk of Toxic Pollutant Release into the Atmosphere”, 1993.
Ramachandar, C., “Weighted Average Distance Results for Regions With Pockets/Zones of Demand, 1993.
Nettles, D., “A Linear Programming-Based Method for Determining Whether or Not n Demand Points are on a Hemisphere”, 1992.
Lied, S., “Alternative Crew Allocation Methods at Midway Airlines”, 1992.

Master’s Thesis Completed at San Jose State University

D. Chakraborty, “A Mathematical Model for Retirement Planning,” January 2007.

Master’s Projects Completed at San Jose State University

H. Dave, “ Program Management Analysis: Benchmarking Standard Procedures After Evaluating Two Companies,” May 2013
S. Kaippa Srinivasulu, “ Challenges Faced by Medical Device Startup Companies and Recommended Solutions,” May 2013
J. Matntravadi, “Business Analysis for a Bio-Pharmaceutical Company on the Evaluation of a New Medicatio,” May 2013

A. Mehra, " Statistical Analysis of Road Accidents in California State," May 2013
J. Youssef, "Introducing Lean Concepts in S J Warehouse, Imrproving Inventory Flow & Operation, Mountz Inc.," May 2013
P. Gaddampally, Challenges in Resource Optimization Implementation," May 2013
D. Choudhari, "Supply Chain Management in High Tech Industry," May 2013
S. Patil, "Implementation of Overall Equipment Effectiveness (OEE) System at a Metal Enclosure Manufacturing Plant," May 2012
N. Paul, "Construction Supply Chain Management," May 2012
G. Singh, "Total Quality Management – Implmentation and Performance," May 2012
V. Bhatt, "Six Sigma Improvement Project at Super Scientific Works Pvt. Ltd." May 2012
R. Patel, "Role of Demand Forecasting in Supply Chain," May 2012
S. Nai, "Quality Environment by Implementing Lean 5S-A A Case Study of Full Bloom Baking Company," May 2012
Naik, H, "An Optimization Model to Improve Suppply Cahin Profitability of a Chemical Distribution Company," December 2011
Sheth, J, "Imrpoving Customer Satisfaction Score Using Lean Six Sigma Methodology," December 2011
A. Philip, "Business Process Kaizen for Manufacturing," Summer 2011
M. Rodriguez, "Reducing Claims in a Customer Loyalty Program," Summer 2011
V. Patel, "Lean Six Sigma Process iMprovement Project," Summer 2011
C. Nahn, "Portable Equipment Management Project," May 2011
S. Sharma, "Process Reliability & Continuous Improvement," May 2011
J. Shah, "Logistics of Supply Chain: Transportation Model," May 2011
L. Hernandez, "From 3G to 4G: A Comprehensive Analysis of the Ecosystem and the Technology that Provides a Better Mobile Internet User Experience," May 2011
A. Paldhe, "Process Failure Mode & Effect Analysis (pFEMA) for McAfee X86 Server Platform," May 2011
R. Vishwanathan, "AsteelFlash Inc Inventory Process Improvement Using Six Sigma," May 2011
A. Jamal Abdollahi, "Integer Programming for student Program Design and scheduling over a Planning Horizin," May 2011
S. Sun, "Managed Referral Processes," December 2010.
M. Gadad, "Statistical Quality Control on DI Water Generation System Using Six Sigma Approach," December 2010
S. Murali, "Desigining a Balanced Scorecard for a Technology Company," December 2010
N. Sharma, "Assessment of Meal Planning Service Model," December 2010
R. Shah, "Lean Supply Chain Management at Food Manufacturing Company," December 2010
A. Purohit, "Lean Manufacturing and Its Implementation on Reverse Logistics," December 2010
A. Swathi, "Reducing Number of Never Active Customers in An Online Payment," December 2010
H. Ghaffari, "A Playbook of Using Lean Manufacturing Techniques," December 2010
S. Ballal, "Supply Chain Risk Management", December 2010
A. Saraf, "Yield Improvement of a Crruflex Powder Coating Process Using Six Sigma Methodologies, December 2010
S. Jara, "Information Technology for Supply Chain Management," December 2010
H. Mehta, "Reduction of Return Material for Step Motor for XYZ Company, November 2010
H. Hussain, "Optimized Resource Planning for 3G Net Inc. Using Simulation,", May 2010
C. Fuster, "Business Plan for an International Trad Start-Up Company," May 2010
A. Sooch, "Green Engineering in Automobile Industry," May 2010
M. Qazi, "Analysis of Yield Loss Factors of a Semiconductor Chip at XYZ Semiconductor Company," May 2010
S. Fawad, "Quality Control of Voltage Regulatators," May 2010
S. Pillapallem, "Bivariate Statistical Process Control for Etching Process," May 2010
A. Anne, "Optimized Distribution Network: Twin Creek Technologies, Inc," May 2010
S. Shah, "Logistic Cost Reduction Project for an XYZ Grocery Cahin," May 2010
P. Buddaraju, "Kanban Pull System: Lean Supply Chain Management in Electronics Manufacturing Industry," May 2010
A. Tyagi, "lean/Six Sigma Improvement in Banking," December 2009
S. Kallo, "Design of Primary Freight Model at Joyce India," December 2009

S. Rao, “Examining/Developing Logistics for Supply Chain Management Practices in India,” December 2009

N. Chadha, “Cost Versus Quality: service Industry (Call Center),” December 2009

P. Patel, “Design and Analysis of Experiemnt in a Repeatable Bulk Wet Etch Process for Silicon Membrane,” December 2009

E. Tan, “Shopping Box Project at SK,” December 2009

J-P C. Saludo, “ Quality Improvement for High Reliability Space Hardware,”, May 2009

C. Paiz, “Six Sigma Fluidic Improvement Project,” May 2009

A. Bhavsar, “Project Management for Refinery and Petrochemical Industries, December 2008

T. Bhavsar, “Design for Green - Bioethanol, Decemberl 2008

P. Parikh, “Developing Revenue Management Model for an Online Retailer,” May 2007

I. Ul_Rahman, “Quality Management Practices in Semiconductor Equipment Manufacturing Industry,” May 2007

T. Khan, “Correlation of Wafer Parametrics to Slider Parametrics in Head Manufacturing Industry,” May 2007

E. Wen Che, “Designing an Inventory Replenishment Policy with a Full Truck Load Constraint for XYZ Company,” December 2006

R. Salte, “Reducing Waste in a Small Scale Medival Device Company Using Lean Techniques,” December 2006.

P. Davis, “Lean Manufacturing Improvement in a Medical device Company,” December 2006

B. Raviv, “Financial Advantage for Santa Clara Valley Medical Center (SCVMC) Using Group Purchasing Organization (GPO) VS. Competetive Bidding,” December 2006

S. Sankaran, “Application of Lean / Six Sigma Manufacturing Techniques in a Semiconductor Company,” December 2006

N. Farooqi, “Simulation Modeling and Design of of Layouts for XYZ Grocery Store,” November 2006

S. Chegu, “Inventory Management of Freezer Items for a Bay Area Grocer,” August 2006

R. Mukutula, “Optimization of Web Marketing Campaigns Using Linear Programming,” August 2006

K. Revathy Marthandan and T. Bhograi, “Developing Optimal Inventory Policies for a Cell Phone Distributor,” May 2006

J. Kai and Y. Yen, “A Project Metric Center for Firmware Development in a Medical Device Project,” Engineering Management Concentration, May 2006

F. Masri, A Decision Model Based Approach for Business Process Outsourcing,” Engineering Management Concentration , May 2006

E. Tjhai, “Optimal Pricing and Optimal Timing ifor Fashion Retailers,” May 2006

S. Dharnidharka and P. Madhavan, “An Approach for Simplification of Supply Chain Business Processes for SOX Compliance,” Engineering Management Concentration, December 2005

A. Kurella, A. Ramayanapu, and E., Sankaran, “Real Option Analysis of IT Projects,” Engineering Management Concentration , December 2005

M. L. Tekmen, “ Reverse Logistics: Increasing the Efficiency of Reverse Logistics Chain,” June 2005

L. Dhanasekaran, “Demand Signaling System (DSS) in Hyundai Motor India Limited,” May 2005

R. Acharya, A. Gopalkrishnan, and N. Isavastar, “Retail Revenue Management,” May 2005

A. Warraich, “Growing and Managing a Small Business,” April 2005

R. Dasgupta & M. Firas Jabri, “Offshore Business Process Outsourcing: Factors for Vendor Selection and an Analysis of Vendor Nations,” Engineering Management Concentration,” December 2004

Y. Sangani, “Process Capability Analysis in Semiconductor Industry: An Approach Based on Process Capability Indices,” December 2004

W. Lilakanjanakul, “About Reverse Logistics,” October 2004

H. Tanggyono, “Quality Costs at Hantel Technologies,” December 2004

P. Ravi, “Online Accounting and Manufacturing at MD Resource Company Using PeachTree Software,” October 2004

K. Velusamy, “Quality Management System in a Medical Device Company,” August 2004

S. Ongoiba, “RosettaNet Implementation Penetration Road Map: Logistics/3PL as Next Milestone,” May 2004

S. Solanki, “Increase Supply Chain Efficiency for a Semiconductor Manufacturer,” May 2004

D. Yellamraju, “Total Quality Management (TQM) Implementation at Paramit Corporation and Failure Analysis of DiviCom Encoder,” March 2004

G. Patel, “Development of Supply Chain Portal,” December 2003
S. Chatterjee, “Biopharmaceutical Project Management,” Engineering Management Concentration, December 2003
V. Moktali and K. Naik, “Business Strategy for a Start-up Company,” Engineering Management Concentration, December 2002

Advanced Independent Study Reports Supervised

Bernd Strassburger, "A Proposal for Alignment of Production Strategy at Helwig Carbon Products," December 2002.

Vaidyanathan Shankar, "Review of Inventory Decisions in Supply Chains," December 2001.

Refereed Journal Publications

1. J. Tsao and M. H. Patel, “An Intutive Desiogn Pattern for Sequentially Estimating Parameters of a 2k Factorial Experiment with Active Confounding Avoidance and Least Treatment Combinations,” under Accepted, August 2013.

2. W. Wei, M. H. Patel, and A. Choy, “A Two-stage Stochastic Programming Model for Integrated Airport Surface Operations under Uncertainties,” to be published in International *Journal of Industrial & Systems Engineering*.

3. A. Basu and M. H. Patel, “To Market or not: Should Arlo Inc. Commercialize its Soap Dispenser Product?” *Journal of Critical Incidents*, July 2011.

4. A. Basu and M. H. Patel, “Serus: Continue Bootstrap or Seek VC Funding?” *Journal of Critical Incidents*, **2**, 116-123, 2009.

5. M. H. Patel and J. Tsao, “Recursive Apportionment of Censored Items in Maximum Likelihood Estimation of Non-Parametric Life-time Distribution with Censored Data,” *International Journal of Reliability, Quality and Systems Engineering*, **16**(3), 213-234, 2009.

6. M. H. Patel, W. Wei, Y. Dessouky, Z. Hao, R. Pasakdee, “Modeling and Solving an Integrated Supply Chain System,” *International Journal in Industrial Engineering-Theory, Applications, and Practice*, **16**(1), 13-22,2009.

7. Y. Dessouky, Tsao, J., Patel, M., Zeta, J. and Zhou, L., “A Simulation Study of the Productivity of Large Trucks with Shorter Trailers”, *International Journal of Industrial and Systems Engineering*,**2**(3), pp. 261-285, 2007.

8. M. H. Patel, Y. Dessouky, S. Solanki, and E. Carbonel, “Air Cargo Pickup Schedule for Offshore Manufacturing,” Special Issue of *Computers & Industrial Engineering*, May 2005, **51**(3), 553-565, (2006)

9. A. J. Horowitz and M. H. Patel, "The Network Signal Design Problem for Long-Range Travel Forecasting," *The ASCE Journal of Transportation Engineering*, **131**(5), pp. 183-192 (2005)

10. M. H. Patel and A. Chidambaram, “A New Approach to Locate the Global Minimax Point on a Sphere Using the Euclidean Distance Measure," *Special Issue in Facility Location, International Journal of Industrial Engineering-Applications and Practice*, **9**, pp. 96-102 (2002).

11. A. J. Horowitz and M. H. Patel, "Through-Trip Tables for Small Urban Areas, A method for Quick-Response Travel Forecasting," *Transportation Research Record*, No. **1685**, (1999).

12. M. H. Patel, "A Linear Program to Detect Extrapolation in Predicting New Responses of a Multiple

Linear Regression Model," *Computers & Industrial Engineering* **28**(4), pp. 787-791 (1995).

13. M. H. Patel, "Spherical Minimax Location Problem Using the Euclidean Norm: Formulation and Optimization," *Computational Optimization and Applications* **4**, pp. 79-90 (1995).

14. M. H. Patel and A. J. Horowitz, "Optimal Routing of Hazardous Materials Considering Risk of Spill," *Transportation Research A*, **28A**(2), pp. 119-132 (1994).

15. S. J. Deutsch, M. H. Patel, and A. J. Dieck, "Comparison of Stochastic Approaches to the Transportation Problem: A Case Study," *IEEE Transactions on Engineering Management*, **41**(2), pp. 152-164 (1994).

16. S. J. Deutsch, M. H. Patel, and A. J. Dieck, "The Effect of Space-Time Demand Processes on the Solution of Transportation Problems," *Computers & Industrial Engineering*, **26**(1), pp. 181-192 (1994).

17. M. H. Patel, D. L. Nettles, and S. J. Deutsch, "A Linear-Programming-Based Method for Determining Whether or not *n* Demand Points are on a Hemisphere," *Naval Research Logistics*, **40**(4), pp. 543-552 (1993).

18. D. K. Saldin, X. Chen, N. C. Kothari, and M. H. Patel, "Atomic Position Recovery by Iterative Optimization of the Reconstructed Image: Overcoming Limitations of Holographic Crystallography," *Physical Review Letters*, **70**(8), pp. 1112-1115 (1993).

19. E. Minieka and M. H. Patel, "On Finding the Core of a Tree With a Specified Length," *Journal of Algorithms*, **4**, pp. 345-352 (1983).

Refereed Conference Proceedings Publications

1. H.-S. J. Tsao and M. H. Patel, “Identifying a Minimal Set of Test Conditions in 2^k Experimental Design to Satisfy Any Desired Resolution,” 41st International Conference on Computers & Industrial Engineering, July 2011

2. Y. Dessouky and M. H. Patel, “Computing the Carbon Footprint Supply Chain for the Semiconductor Industry: A Learning Tool,” 41st International Conference on Computers & Industrial Engineering, accepted July 2011

3. M. H. Patel, H-S J. Tsao, and Z. Abdullahi, “Integer Programming for Student Program Design and Scheduling,” Industrial Engineering and Research Conference (IERC) 2011 Proceedings, Reno, NV, May 2011.

4. A. Basu and M. H. Patel, “Experience of Developing and Assessing a Case Study for Teaching Engineering Entrepreneurship at San Jose State University,” American Society of Engineering Education (ASEE) 2009 Annual Conference Proceedings, Autin, Tx, June 2009

5. S. Dhar and M. H. Patel, “A Mobile Web Services Framework to Reduce Inventory for an Anssemble-To-Order Manufacturer, Decision Sciences Institute 2007 Proceedings, 38th Annual Meeting, 841-846,Phoenix, AZ, Nov 17-20, 2007

6. D. Chakraborty and M. H. Patel, “A Mixed-Integer Programming Formulation of Retirement Planning Problem,” Industrial Engineering and Research Conference (IERC) 2007 Proceedings, May 2007.

7. M. H. Patel and A. Basu, “How to weave Entrepreneurship in the Undergraduate Curriculum at San Jose State University,” American Society of Engineering Education (ASEE) 2006 Annual

Conference Proceedings, Chicago, June 2006

8. M. H. Patel, “A Classification of Economic Evaluation Methods of Hazard Mitigation Strategies,” IERC 2005 Proceedings, Atlanta, GA, January 2005

9. M. H. Patel & C. Mecwan, “Refurbishing Supply Chains: Issues & Impacts,” 34th International Conference on Computers & Industrial Engineering Proceedings, PP 703-708, November 2004

10. M. H. Patel, Y. Dessouky, and S. Solanki, “Deterministic Models for Determining Air Cargo Pick-Up Schedule,” 34th International Conference on Comuters & Industrial Engineering Proceedings, pp. 709-714, November 2004

11. B. Strassberger, M. H. Patel, T. H. Chang, "Positioning Production Strategies with Markets to Enhance Customer Satisfaction in a High-Variety Job Shop—A Case Study," *Hawaii International Conference on Business Proceedings*, Honolulu, Hawaii, June 2002

12 M. H. Patel and M. Kazemi, "A Quadratic Programming Formulation of Hemispherical Minimax Location Problem," *1998 International Conference on Industry, Engineering, and Management Systems Proceedings, PP 125-130*, Cocoa Beach, FL, (1998).

13. M. H. Patel and S. Kasturi, "Optimal Location of an Obnoxious Facility Causing Atmospheric Pollution," *1995 International Conference on Industry, Engineering, and Management Systems* proceedings, pp 318-324, Cocoa Beach, FL, (1995).

14 M. H. Patel and S. J. Deutsch, "Hierarchical Transportation Model Forms," *1995 International Conference on Industry, Engineering, and Management Systems* proceedings, pp 312-317, Cocoa Beach, FL, (1995).

15. M. H. Patel and C. Ramachandra, "New Average Distance Results," *Third Industrial Engineering Research Conference (IERC) Proceedings*, pp. 255-260 (May 1994).

Study Guide and Instructor's Manual

M. H. Patel, *Study Guide for Winston Albright's Practical Management Science* Textbook published by Duxubury Press (2001).

G. Wasserman and M. H. Patel, *Instructor's Manual to Modern Methods for Quality Control and Improvement*, Published by John Wiley & Sons (1987).

ISyE Report Series Papers

S. J. Deutsch and M. H. Patel, "Spatially Augmented Transportation Network (SATN) Approach to the Stochastic Multilocation Distribution Problem, Part I: Modeling Formulations," ISyE Report Series, Georgia Institute of Technology, 1989.

S. J. Deutsch and M. H. Patel, "Spatially Augmented Transportation Network (SATN) Approach to the Stochastic Multilocation Distribution Problem, Part II: Optimization and Examples," ISyE Report Series, Georgia Institute of Technology, 1989.

S. J. Deutsch and M. H. Patel, "An Iterative Procedure for Optimization of a Spatially Augmented Transportation Network (SATN) Model," ISyE Report Series, Georgia Institute of Technology, 1989.

S. J. Deutsch and M. H. Patel, "Measuring the Necessity of a Stochastic Representation of a Transportation Problem," ISyE Report Series, Georgia Institute of Technology, 1989.

Invited Presentations

M. H. Patel, "On Spherical Minimax Location," presented at *INFORMS National Meeting*, Salt Lake City, UT, May 2000

M. H. Patel, "A Linear-Programming-Based Method for Determining Whether or Not n-Demand Points are On a Hemisphere", Department of Mathematical Sciences, University of Wisconsin-Milwaukee, February 1993.

Conference Presentations

H.-S. J. Tsao and M. H. Patel, "Identifying a Minimal Set of Test Conditions in 2^k Experimental Design to Satisfy Any Desired Resolution," to be presented at the 41st International Conference on Computers & Industrial Engineering, Los Angeles, CA, September 2011

Y. Dessouky and M. H. Patel, "Computing the Carbon Footprint Supply Chain for the Semiconductor Industry: A Learning Tool," to be presented at the 41st International Conference on Computers & Industrial Engineering, Los Angeles, CA, Sepember 2011

M. H. Patel, H-S J. Tsao, and Z. Abdullahi, "Integer Programming for Student Program Design and Scheduling," Industrial Engineering and Research Conference (IERC) 2011 Proceedings, Reno, NV, May 2011

A. Basu and M. H. Patel, "Experience of Developing and Assessing a Case Study for Teaching Engineering Entrepreneurship at San Jose State University," American Society of Engineering Education (ASEE) 2009 Annual Conference Proceedings, Autin, Tx, June 2009

A. Basu and M. H. Patel, "Serus: Continue Bootstrap or Seek VC Funding?" presented at MBAA-SCR Conference, Chicago, IL, March 2009.

D. Chakraborty and M. H. Patel, "A Mixed-Integer Programming Formulation of Retirment Planning Problem," presented at the Industrial Engineering Research Conference (IERC), Nashville, May 2007.

S-J Li, and M. H. Patel, "Lessons Learned through Misapplications of Process Control Charts in Service industry," presented at Industrial Engineering Solution Conference, Nashville, Tn, May 2007.

A. Basu and M. H. Patel, "Case Study: The Founding of Serus," presented at the North American Case Research Association, San Diego, October 2006.

M. H. Patel and A. Basu, "How to weave Entrepreneurship in the Undergraduate Curriculum at San Jose State University," presented at the American Society of Engineering Education (ASEE) 2006 Annual Conference, Chiago, June 2006

M. H. Patel, "A Classification of Economic Evaluation Methods of Hazard Mitigation Strategies," presented at IERC 2005, Atlanta, GA, May 2005

M. H. Patel & C. Mecwan, "Refurbishing Supply Chains: Issues & Impacts," presented at 34th International Conference on Comuters & Industrial Engineering, san Francisco, CA, November 2004

M. H. Patel, Y. Dessouky, and S. Solanki, "Deterministic Models for Determining Air Cargo Pick-Up Schedule," presented at 34th International Conference on Comuters & Industrial Engineering, San Francisco, CA, November 2004

M. H. Patel and A. J. Horowitz, “Computational Issues Associated with the Network Signal Design Problem,” presented at the INFORMS Annual Meetring, San Jose, CA, November, 2002

B. Strassberger, M. H. Patel, T. H. Chang, "Positioning Production Strategies with Markets to Enhance Customer Satisfaction in a High-Variety Job Shop—A Case Study," Hawaii International Conference on Business, Honolulu, Hawaii, June 2002

M. H. Patel and T. H. Chang, "Statistical Thinking and Statistical Modeling in POM," Production and Operations Management conference, San Francisco, CA, POM 2002.

T-H Chang and M. H. Patel, "Quality Concepts in Operations Design and Control: I. Statistical Thinking in Modeling by Tsong-how Chang and M. H. Patel," presented at the Industrial Engineering Research Conference (IERC), Dallas, TX, 2001

T-H Chang and M. H. Patel, "Quality Concepts in Operations Design and Control: II. SPC in Operations Management by Tsong-how Chang and M. H. Patel," presented at the Industrial Engineering Research Conference (IERC), Dallas, TX, 2001

A. J. Horowitz and M. H. Patel, "Through Trip Tables for Small Urban Areas: A Method for Quick Response Travel Forecasting", presented at the 78th Annual Meeting of the Transportation Research Board, Washington DC, January 13, 1999.

M. H. Patel and M. Kazemi, "A Quadratic Programming Formulation of Hemispherical Minimax Location Problem," *1998 International Conference on Industry, Engineering, and Management Systems (IEMS '98)* proceedings, Cocoa Beach, FL (1998).

A. Chidambaram and M. H. Patel, "A Linear-Programming-Based Method to Determine the Global Minimax Location on a Sphere," presented at *INFORMS National Meeting*, Los Angeles, April 1995.

M. H. Patel and S. Kasturi, "Optimal Location of an Obnoxious Facility Causing Atmospheric Pollution," presented at the *International Conference on Industry, Engineering, and Management Systems (IEMS '95)*, March 1995, Cocoa Beach, FL.

M. H. Patel and S. J. Deutsch, "Hierarchical Transportation Model Forms," presented at the *International Conference on Industry, Engineering, and Management Systems (IEMS '95)*, Cocoa Beach, FL, March 1995.

M. Seifoddini and M. H. Patel, "A Probabilistic Grouping Efficiency Measure for Machine-Component Charts presented at *TIMS/ORSA Joint National Meeting*, Boston, MA (April, 1994).

C. Ramachandra and M. H. Patel, "Weighted Average Distance Results for Estimating Transportation Cost," presented at *TIMS/ORSA Joint National Meeting*, Phoenix, AZ (October, 1993).

M. H. Patel and A. J. Horowitz, "Optimal Routing of Hazardous Materials Considering Risk of Spill", presented at *TIMS/ORSA Joint National Meeting*, Chicago, Illinois (May, 1993).

D. K. Saldin, N. C. Kothari, X. Chen, and M. H. Patel, "Holographic Reconstruction by Iterative Optimization", presented at the Second Workshop on Holography and Local Diffraction at Surfaces, El Escorial, Spain (September, 1992).

D. L. Nettles and M. H. Patel, "A Method for Locating a Minimax Point of *n* Demand Cities on a Sphere", presented at the *TIMS/ORSA Conference*, Orlando, Florida (April, 1992).

M. H. Patel and S. J. Deutsch, "Measuring the Necessity for Stochastic Representation of a Transportation Problem", presented at the *TIMS/ORSA Conference*, Orlando, Florida (April, 1992).

M. H. Patel, S. J. Deutsch, and A. J. Dieck, "A Comparison of Stochastic Methods and Approximations in a Transportation Problem", presented at the *TIMS/ORSA Conference*, Orlando, Florida (April, 1992).

M. H. Patel and S. J. Deutsch, "An Iterative Procedure for Optimization of Spatially Augmented Transportation Network (SATN) Model", presented at the *TIMS/ORSA Conference*, Las Vegas, Nevada (May, 1990).

M. H. Patel and S. J. Deutsch, "Spatially Augmented Transportation Network (SATN) Approach to the Stochastic Transportation Problem", presented at the *TIMS/ORSA Conference*, Denver, Colorado (October, 1988).

Awards and Research Fellowships/Grants

College of Engineering Applied Materials Award for Teaching Excellence, April 2010

Newnan Teaching excellence Award, $5,000, May 2009

Forum on Service Science, Management and Engineering (SSME) at SJSU Grant, “Developing a Service Science Management and Engineering Curriculum,” with y. Dessouky in the amount of $3000 and 0.2 faculty buyout time, Summer 2007

SJSU-CoE Faculty Development Grant, “Developing Lean Six Sigma Certification Program within ISE Master’s Degree Curriculum,” with Y. Dessouky and J. Tsao in the amount of $12,500, Summer 2007

College of Engineering Faculty Development Research Grant with Y. Dessouky and Wenbin Wei in the amount of $20,000, Summer 2006

CCLI-EMD Program, National Science Foundation (NSF), “Development of Course Material for Engineering Entrepreneurship,” with A. Basu in the amount of $74,030, 2005-2008

College of Engineering Faculty Development Research Grant with Y. Dessouky in the amount of $7,000, San Jose State University, Summer 2004

Professional Development Grant Award in the amont of $2,500, San Jose State University, November 2003

Teaching Excellence Grant Award with Y. Dessouky in the amount of $10,000, College of Engineering & Applied Science, San Jose State University, July 2003.

Professional Development Grant Award in the amont of $2,500, San Jose State University, November 2002.

Campus/College Computer Acquisition Program Award in the amount of $1200 from the provost office and $800 from the Dean's office, 1997.

The Graduate School Research Committee Award in the amount of $7,168 for academic year 1994-1995.

The Graduate School's Research Incentive Program's one course buy-out awarded for Spring 1993-94 semester, University of Wisconsin-Milwaukee.

College of Engineering and Applied Science Faculty Research Support, Summer of 1991 and 1992, University of Wisconsin-Milwaukee, in the amount of $ 5,000 each.

College of Business Faculty Research Fellowships, Summer of 1988 and 1989, University of Tennessee, in the amount of $ 6,000 each.

Gold Medal awarded for standing first among the successful Master of Science Statistics candidates, Maharaja Sayajirao University of Baroda, Baroda, India, 1978.

Cash Prize awarded for standing first among the entire School of Science graduating with Masters degree, Maharaja Sayajirao University of Baroda, Baroda, India, 1978.

Cash Prize awarded for standing first among the Bachelor of Science candidates graduating with Statistics as major and Mathematics and Economics as minors, Maharaja Sayajirao University of Baroda, Baroda, India, 1976.

Service

National Science Foundation
Served as a panel reviewer for CCLI Phase I Program proposals, National Sscience Foundation, July 25-26, 2005

San Jose State University

CoE Assessment Facilitator (Fall 2006-Spring 08)

College Level
COE Assessment Failitator (2006-2008)
CoE Assessment Task Force (Fall 2006-Present)
Graduate Studies (Fall 2008-Present)
Program Planning and Review Committee (Fall 2006-Spring 2007)
Student Services Committee (2005-2006t)
Undergraduate Curriculum Committee (Spring 2006-Spring 2007)
Graduate Studies & Research, member, (2003-2004)
ABET Task Force, member, (2002-2003)

Student Service
ISE Student Club Advisor (2002-Present)
Bhakti Yoga Club Advisor (Fall 2006-Spring 2008)

University of Wisconsin-Milwaukee Committee Activities
University Level
Honorary Degrees Committee, member, 1995-1998.
Computer Policy Committee, member, 1995-1996.
Undergraduate Academic Misconduct Hearing Committee, College of Engineering Representative, 1994-1998

College Level
Scholastic Appeals Committee, 2001-2002
Policies and Procedures Committee (Dean's ad-hoc committee), 2001-2002
Outreach Activities Committee (Dean's ad-hoc committee), 2001-2002
ABET Coordinator Committee, Department member, 1999-2002.
Engineering Management Program Committee, member, 2000-2002.
Curriculum Committee, member, 1999-2002
Curriculum Committee, member, 1994-98.
Awards and Recognition Committee, Chair, 1995-96.
Awards and Recognition Committee, member, 1997-98.
Total Quality Maangement—Student Development Committee, member, 1993-94.

Departmental Level
Faculty Search and Screen Committee, member, 1999-2000
Ph.D. Qualifying Examination Committee, 1992-Present
Faculty Search Committee, member, 1997-98.

Teaching Assistants Selection Committee, member, 1992-1998.
Peer Teaching Evaluation Committee, member, 1993-1995, 1999-Present.
Department Name Change Justification Committee, member, 1992-1993.
Department Graduate Admissions Committee, member, 1994-1998, 1999-Present.

Other University/College/Departmental Level Services
Mechanical/Industrial Engineering Focus/Advisory Group, Center for Continuing Education Center, UWM, September 24, 2001
Engineering Management Committee, Chair, 2001-2002
Faculty Search Committee, Department of Civil Engineering and Mechanics, member, 1998.
UWM Faculty Mentoring Program, mentor, 1997-present.
15th Annual Visitation for Information Preparation (VIP) Day, UWM, mentor, 1997.
14th Annual Visitation for Information Preparation (VIP) Day, UWM, mentor, 1996.
ABET Coordinator for the Department of Industrial & Manufacturing Engineering, 1996-1997, 1999-Present.
Library Representative of the Department of Industrial & Manufacturing Engineering, 1992-present.

Other Professional Services
Vice-President of the Institute of Industrial Engineers (IIE) Membership, Fall 2002-Spring 2004
Director of the Operations Research Division (OR) of the Institute of Industrial Engineers (IIE). 2000-2002
Newsletter Editor of the OR Division of IIE, 1997-1999
Faculty Advisor, Society of Women Engineers UWM student Chapter, 1994-2001
Active member of IIE, INFORMS, IEEE Engineering Management Society
Organized a OR Division of IIE sponsored track of papers, IERC 2001
Chaired eight technical sessions at national and international level conferences
Referee of IEEE Transactions on Engineering Management, Operations Research Letters, Transportation Research B, Applied Mathematical Modeling, and Computers & Industrial Engineering journals and IERC '95 conference proceedings papers.

Technical Session Organizations

The Operations Research Division of the Institute of Industrial Engineers sponsored track of sessions in the area of operations research organized for the Industrial Engineering Research Conference (IERC), Dallas, TX, (2001)

A technical Session in quality engineering and optimal design, International Federation of Operations Research Societies (IFORS), Fourth Specialized Conference: OR and Engineering Design (1995).

A technical session in quality engineering, TIMS/ORSA, Detroit, MI (1994).

Talk Series Organization
This is in line with Chancellor Nancy Zimpher's *Milwaukee Idea* to reach local community.

Talk Series on *Self-Development Through Vedantic Wisdom* organized through the *Students of India Association* (SIA) at UWM, December 3-4, 1999.

Talk Series on *Cultivating Pure Love* organized through *Peace Resource Institute and Students of India Association (SIA)* at UWM, *April 28-29, 2000.*

Workshops/Short Course & Retreats attended
"Supply Chain Performance Measurement," course offered by the Institute of Industrial Engineers (IIE), Atlanta, GA, March 20-22, 2004,
World Class Logistics and Supply Chain Startegy, Logistics Institute of Georgia Tech, Atlanta, GA, March 18-21, 2003
AutoMod Simulation Training Workshop, December 5-6, 2001
Department Chair's Retreat, University of Wisconsin-Mlwaukee, August 28-29, 2001
NSF Sponsored ABET Regional Faculty Workshop, September 23-24, 2000

TQM Retreat, College of Engineering & Applied Science, Lake Geneva, WI, 1992

Professional Affiliation: Senior Member of the Institute of Industrial Engineers, Member of American Society of Engineering Education
Programming Languages: FORTRAN, BASIC
Simulation Packages: GPSS, EZSIM, ARENA, AutoMod, ProModel
Statistical Packages: SAS, BMDP, MINITAB
Applications Software: TK Solver, Lotus 1-2-3, dBase, Microsoft Word for Windows, Microsoft Excel, Mathematica, Matlab

REFERENCES

RELATED COURSEWORK

Name	Course #	Where Taken	Grade
SYSTEMS ANALYSIS			
Inventory Systems	ISyE 6306	Georgia Tech	A
Scheduling Theory	ISyE 6307	Georgia Tech	A
Analysis of Production Operations	ISyE 6308	Georgia Tech	A
Location Theory	ISyE 6680	Georgia Tech	A
Theory of Transportation Networks	SYSE 460	Univ. of Ill.	A
Probabilistic Models in Operations Research	ISyE 6650	Georgia Tech	B
Queuing Theory	ISyE 6656	Georgia Tech	B
Advanced Queuing Theory	ISyE 7656	Georgia Tech	A
Decision Theory	SYSE 451	Univ. of Ill.	A
Applied Regression Theory	ISyE 6401	Georgia Tech	B
Time Series Analysis	ISyE 6402	Georgia Tech	A
Reliability Engineering	ISyE 6805	Georgia Tech	A
Statistical Quality Control	NA	M. S. Univ.	A
Advanced Engineering Economy	ISyE 6225	Georgia Tech	A
Statistical Space-Time Modeling	ISyE 8601	Georgia Tech	A
MATHEMATICAL PROGRAMMING AND OPTIMIZATION			
Linear Models in Operations Research	ISyE 6669	Georgia Tech	A
Nonlinear Models in Operations Research	ISyE 6670	Georgia Tech	A
Optimization Foundations	ISyE 7671	Georgia Tech	A
Optimization Adjacent Extreme Point Methods	ISyE 7672	Georgia Tech	B
Advanced Nonlinear Programming	ISyE 8602	Georgia Tech	B
Decomposition Methods for Large Systems	ISyE 7678	Georgia Tech	A
Deterministic Models in Operations Research	ISyE 6671	Georgia Tech	A
Computational Complexity	ISyE 8704	Georgia Tech	B
STATISTICS			
Multivariate Analysis	NA	M. S. Univ.	A
Design of Experiments	NA	M. S. Univ.	A
Sampling Theory	NA	M. S. Univ.	A
Mathematical Statistics I	Math 4241	Georgia Tech	A
Econometrics	NA	M. S. Univ.	A
Probability Theory and Measure Theory	NA	M. S. Univ.	A
Testing of Hypotheses	NA	M. S. Univ.	A
MATHEMATICS			
Finite Dimensional Vector Spaces	Math 4301	Georgia Tech	A
Scientific Computing I	Math 4640	Georgia Tech	A
Scientific Computing II	Math 4641	Georgia Tech	A
Introduction to Analysis I	Math 4311	Georgia Tech	A
Introduction to Analysis III	Math 4313	Georgia Tech	A
Theory of Matrices	NA	M. S. Univ.	A
Theory of Complex Variables	NA	M. S. Univ.	A

S. Dharnidharka and P. madhavan, “An Approach for Simplification of Supply Chain Business Processes for SOX Compliance,” in progress