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EDUCATION

Ph.D. 1993 Industrial & Management Systems Engineering, Arizona State University.
M.S. 1987 Industrial & Management Systems Engineering, Arizona State University.
B.S. 1984 Industrial Engineering, University of Wisconsin-Madison.

INDUSTRIAL EXPERIENCE

Consulting Engineer, 1990-Present
Clients: Applied Materials, Texas Instruments, General Electric, JDS Uniphase, Power Integrations, American Casting, United Parcel Service, Paramount Farms, Desert Samaritan Hospital, Ingersoll-Rand, HMT Technology, TTM Technology, Vavni, Kalkan Foods, Christopher Ranch, Popular ReCare, FAA, Folsom Dog Resort, Morgan Technical Ceramics, LitePoint .

TRW Inc., Ballistic Missiles Division, 1988-1990
Systems Analyst - Developed simulation models to determine the system effectiveness of the Midgetman and Peacekeeper/Rail garrison mobile missile systems.

Pritsker Corporation, 1985-1986
Systems Analyst - Developed simulation models to evaluate and analyze large industrial organizations, developed software to enhance SLAM in particular material handling features, developed an IDEF0 model for an Army depot.

AREAS OF RESEARCH AND TEACHING INTEREST

Lean and Quality Management
Data Analytics
Supply-Chain Modeling
Simulation Modeling and Analysis
Integrated Production Management
Applied Statistics and Operations Research

ADMININISTRATOR EXPERIENCE

San Jose University, Chair Department of Industrial and Systems Engineering, Fall 2009-Present

San Jose University, Associate Chair Department of Industrial and Systems Engineering, Fall 2008-2009.

San Jose University, Acting Chair Department of Industrial and Systems Engineering, Fall 2006.

San Jose State University, Director, MSE/MBA Dual Degree Program, Lockheed Martin, 2005-2010

San Jose State University, Director, Systems Engineering Certificate, British Aerospace Engineering, 2004-2005

San Jose State University, Lab Director**,** Manufacturing Information Systems Engineering, 2004-Present.

TEACHING EXPERIENCE

San Jose University, Department of Industrial and Systems Engineering, 1997-Present
Full/Associate/Assistant Professor:

ISE 102 Engineering Economic Systems
ISE 110 Manufacturing Processes
ISE 115 Computer Integrated Manufacturing
ISE 125 Software Systems Engineering
ISE 130 Engineering Statistics
ISE 131 Statistical Process Improvement
ISE 140 Operations Planning and Control
ISE 167 Systems Simulation
ISE 196R Systems Reliability
ISE 222 Advanced Systems Engineering
ISE 230 Advanced Operations Research
ISE 241 Advanced Operations Planning and Control
ISE 265 Advanced Systems Simulation

Santa Clara University, Department of Operations Management Information Systems, 1998-2003, 2014-

Adjunct Lecture:

OMIS 357 Operations Management
OMIS 362 Computer Simulation Modeling
OMIS 372 Systems Analysis and Design

Applied Materials, 1998-2000
Adjunct Instructor

ISE 102 Engineering Economic Systems
ISE 110 Manufacturing Processes
ISE 115 Computer Integrated Manufacturing
ISE 125 Software Systems Engineering
ISE 131 Statistical Process Improvement
ISE 140 Operations Planning and Control
ISE 167 Systems Simulation
ISE 196R Systems Reliability
ISE 265 Advanced Systems Simulation

Miami University, Systems Analysis Department,1994-1997
Assistant Professor:

SAN 584 Analysis of Manufacturing Systems
SAN 582 Analysis of Inventory Systems
SAN 571 Simulation
EGR 437 Computer Integrated Manufacturing
EGR 334 Quality Planning and Control
SAN 372 Analysis of Stochastic Systems
SAN 163 Introduction to Computer Concepts and Programming
SAN 154 Personal Computer Concepts and Application

Arizona State University, Department of Industrial & Management Systems Engineering, 1990-1994,1986-1987, *Faculty/Teaching Associate*:

IEE 577 Decision and Expert Systems Methodology
IEE 533 Scheduling and Network Analysis Models
IEE 543 Computer-Aided Manufacturing & Control
ECE 383 Probability and Statistics for Engineering
ECE 106 Engineering Problem Solving

FUNDED RESEARCH PROJECTS AS PI/CO-PI

External

Department of Veterans Affair:VERC, $40,000, 2016-2017.
Applying data and statistical analytics to improve care delivery practices and patient outcomes

Department of Veterans Affair:VERC, $55,900, 2015-2016.
Applying data and statistical analytics to identify ICU risky patient states.

Department of Veterans Affair:VERC, $56,676, 2015-2016.
Professional Development CPAC LEAN/Lean Six Sigma.

CalTrans: PATH - $24,888 2008.

Developing Operating Rules and Simulating Performance for One-dedicated-lane Bus Rapid Transit/Light Rail Systems

CalTrans: PATH - $58,948 2004-2005.
Automatic steering for Conventional Truck Trailers: Development and Assessment of Operating Concepts for Improving Safety, Productivity and Pavement Durability.

National Science Foundation – University of Southern California, $3,200, 2003.
Debugging of the scheduling module for the Virtual Factory Teaching System, developed at USC, for teaching students in manufacturing, engineering, and business programs to better understand the complexities of factory dynamics.

Applied Materials, $15,100, 2001.
Development of a model to evaluate various test strategies.

California Workforce Initiative Allocation Funds, $10,000, 2001-2002.
Promotion of activities for increasing Industrial and Systems Engineering enrollment, retention, and graduation rate.

Society of Manufacturing Engineering, $70,000, 2000-2002
Support the purchase of capital equipment for the Microelectronics Process Engineering laboratory at San Jose State University.

NSF Undergraduate Education Division, $478,817, 2000-2002.
Development of an interdisciplinary Microelectronics Process Engineering Curriculum that educates B.S. level process engineers for microelectronics.

National Science Foundation – University of Southern California, $20,119, 1999-2002.
Assessment of a Virtual Factory Teaching System, developed at USC, for teaching students in manufacturing, engineering, and business programs to better understand the complexities of factory dynamics.

Internal

COE Endowment for STAR Fellows Program: $79,750. 2018-2019.

COE Endowment for Supply Chain Analytics Curriculum Development, $2000, 2018.

COE Endowment for Service Systems Engineering Innovation Center $150,000,2016/17
Start-up funds to develop research projects in research engineering for a team of 12 faculty.

2010 SJSU COE Development Grant Award, $15000, 2010.
Development of NSF Proposal for Carbon Footprint for Semiconductor Companies

2008 SJSU COE Development Grant Award, $10,000, 2008.
A Solution Approach to Calculating the Carbon Footprint Supply Chain for the Electronics Industry

2007 IBM award by Professor Louis Freund, $10000, 2007**.**

Benchmarking service engineering curriculum with other major institutions.

SJSU COE Development Grant Award, $17,500, 2007.
Development of a Six Sigma Certificate to be offered by the ISE department.

2006 SJSU COE Development Grant Award, $20,500, 2006.
Developing logistics models to improve supply chain material flow coordination.

2004 SJSU COE Development Grant Award, $7000, 2004.
Determining optimal pick-up schedules for multi-time zone manufacturing.

2003 SJSU-COE Instructional Development Grant, $10000, 2003.
Development of a supply chain concentration area for the ISE graduate program.

Professional Development Grant, $1500, 2002.
Purchase of the ASPROVA high speed scheduling software.

San Jose State University – Teaching Excellence Fund, $7000, 2002.
Development of a comprehensive case study to be implemented by the Virtual Factory Teaching System.

Professional Development Grant, $1500, 1998.
Presented research work at a major conference.

Shoupp Award, $3500, 1995-1997.
Development of an object-oriented virtual factory environment for linking logic controllers with a scheduling system in real-time.

OTHER SPONSORED RESEARCH PROJECTS WORKED ON

Fund for Improvement of Postsecondary Education, 2002
Assessment of the newly established Environmental, Health, and Safety Engineering Program.

Society of Manufacturing Engineering, 1998-2000
Development of a program to create and deliver appropriately designed curriculum to enable students of diverse education backgrounds to enter either the workforce or a community college program in manufacturing information systems engineering.

Rockwell International, 1993-1994
Implemented continuous simulation constructs into a function block discrete simulation model. The simulation model is used for validating control code logic that will be implemented into an Allen-Bradley PLC.

Honeywell Inc., 1990-1994
Assisted in the analysis, modeling, and development of an object-oriented model to support the simulation of batch and continuous processes for operator training in real-time.

Allied-Signal Aerospace Company, Garrett Engine Division, Summer 1992
Developed an IDEF0 functional model of precision gear manufacturing. The model considered

business functions starting with the proposal stage and continuing through to the fabrication stage.

United States Air Force, 1986-1987
Assisted in the technology transfer for an Air Force sponsored project known as Integrated Information Support System (IISS).

REFEREED JOURNAL PUBLICATIONS

20. Cancino, C., Amirbagheri, K., Merigó, J., and Dessouky, Y., (2019), "A Bibliometric Analysis of Supply Chain Analytical Techniques", Computers & Industrial Engineering", Computers and Industrial Engineering, 137.

19. Yang, Y., Zhong, M., Dessouky, Y., and Postolache, O. (2018) "An Integrated Scheduling Method for AGV Routing in Automated Container Terminals", Computers and Industrial Engineering, 126, 482-493.

18. Cancino, C., Merigó, J. M.,Coronado, F., Dessouky, Y., and Dessouky, M. (2017), "Forty years of Computers & Industrial Engineering: A bibliometric analysis", Computers and Industrial Engineering, 13, 614-629.

17. Patel, M. H., Wei, W., Dessouky, Y., Hao, Z., and Pasakdee, R. (2009), "Modeling and Solving an Integrated Supply Chain System", International Journal of Industrial Engineering- Applications and Practice, 16:1, 13-22.

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

15. Patel, M., Dessouky, Y., Solanki, S., and Carbonel,E. (2006) "Air Cargo Pick-Up Schedule for Single Delivery Location", Computers and Industrial Engineering, 51, 553-565.

14. Parent, D., Basham, E., Dessouky, Y., Gleixner, S., Young, G., and Allen, E. (2005) "Improvements to a Microelectronic Design and Fabrication Course", IEEE Transactions on Education, 48:3, 497-502.

13. Allen, E., Gleixner, S., Young, G., Parent, D., Dessouky, Y., and Vanasupa, L.(2002), "Microelectronics Process Engineering at San Jose State University: A Manufacturing-Oriented Interdisciplinary Degree Program,", International Journal of Engineering Education, 18:5, 519-525.

12. Dessouky, Y. and Bayer, A. (2002), "A Simulation and Design of Experiment Modeling Approach to Analyze Facility Maintenance Costs", Computers and Industrial Engineering, 43:3, 423-436.

11. Troy, D., Dessouky, Y., Hellstern, G., Ma, M., and Wang, Z. (2000), "Approaches to Work Cell Programming Language Design", International Journal of Computer Integrated Manufacturing, 13:2, 80-94.

10. Roberts, C.A., Dessouky, M.M., and Dessouky, Y.M. (1999), "A Virtual Plant Modeler, VPMOD, for Batch Chemical Processes", Journal of Intelligent Manufacturing, 10:2, pp 211-223.

9. Roberts, C.A., and Dessouky, Y.M. (1998), “An Overview of Object Oriented Simulation,” Simulation, 70:7, pp 359-368.

8. Schmahl, K., Dessouky, Y.M., and Rucker, D. (1997), "Measuring Hidden Costs of Quality " Production and Inventory Management Journal, Fourth Quarter, pp 58-63.

7. Dessouky, Y.M., and Roberts, C.A. (1997), "A Review and Classification of Combined Simulation", Computers and Industrial Engineering, 32:2, pp 251-264.

6. Dessouky, Y.M., Roberts, C.A., Dessouky, M.M., and Wilson, G. (1996), "Scheduling Multi-Purpose Batch Plants with Junction Constraints", International Journal of Production Research, 34:2, pp. 525-541.

5. Dessouky, Y.M., Roberts, C.A., and Beaumariage, T.G. (1995), "Object-Oriented Simulation Architecture with Real-Time Capabilities", International Journal of Production Research, 33:9, pp. 2471-2492.

4. Crowe, T.J. and Dessouky, Y.M. (1994), "A Simulation Analysis to Identify Information Flow Bottlenecks at a Printed-Circuit Board Manufacturer", International Journal of Industrial Engineering, 1:4, pp 285-294.

3. Dessouky, Y.M., Beaumariage, T.G., Roberts, C.A., and Ogle, M.K. (1993), "An Intelligent System for Batch Process Scheduling", Computers in Industry, 22, pp 233-247.

2. Dessouky, Y.M., and Mackulak, G.T. (1990), "Scheduling to Minimize Makespan When a Changeover Penalty Exits", Journal of Manufacturing Systems, 9:2, pp 139-150.

1. Dessouky, M.I., Dessouky, Y.M. and Dessouky, M.M. (1987), "A Case Study in Parallel Unrelated Machine Scheduling: A Heuristic Approach", Journal of Manufacturing Systems, 6:1, pp 23-36.

REFEREED CONFERENCE PROCEEDINGS

26. Cancino, C., Amirbagheri, K., Merigó, J., and Dessouky, Y., (2019), “Evolution of the Academic Research on Supply Chain and Global Warming”, accepted,Proceedings of the 49th Conference on Computers and Industrial Engineering, Beijing, China.

25. Dessouky, Y., Valladares, G., Valladares, C., Tsao, J. and Patel, M. (2018), “Simulating Performance for One-Dedicated-Lane Light Rail System – A Case Study”, Proceedings of International Joint Conference on Industrial Engineering and Operations Management, Lisbon, Portugal.

24. Erdogan, A., Patel, M.,Dessouky,Y.,Bidassie, B., and Sanchez, S. (2018) “Predictive Modeling of Post-Traumatic Stress Disorder”, Proceedings of the 2018 IISE Annual Conference, Orlando, Florida.

23. Patel,M.,Erdogan,E.,Dessouky,Y.,Bidassie, B., and Sanchez, S. (2017),“Statistical Modeling of Harms and Drivers in A VA Healthcare Application”, pp 1-8, Proceedings of the 47th Conference on Computers and Industrial Engineering, Lisbon, Portugal.

22. Cancino, C., Merigó, J. M.,Coronado, F., Dessouky, Y., and Dessouky, M. (2017), "Forty years of Computers & Industrial Engineering: A bibliometric analysis", pp 564-571, Proceedings of the 47th Conference on Computers and Industrial Engineering, Lisbon, Portugal.

21. Dessouky, Y., Ingham, K., Tsao, J. and Patel, M. (2015) "Simulating Performance for One-dedicated-lane Bus Rapid Transit/light Rail Systems",pp 921-928, Proceedings of the 45th Conference on Computers and Industrial Engineering, Metz, France.

20. Dessouky, Y., Patel, M., and Kaosamphan, T. (2011) "Computing the Carbon Footprint Supply Chain for the Semiconductor Industry: A Learning Tool",pp 187-192, Proceedings of the 41st Conference on Computers and Industrial Engineering, Los Angeles, CA.

19. Dessouky, Y., and Abdulrahim, S. (2004) "Lot Sizing and Sequence Dependent Setup Time for a Flowshop",pp 762-768, Proceedings of the 34th Conference on Computers and Industrial Engineering, San Francisco, CA.

18. Patel, M., Dessouky, Y., and Solanki, S. (2004)"Deterministic Models for Determining Air Cargo Pick-Up Schedule" pp 703-708, Proceedings of the 34th Conference on Computers and Industrial Engineering, San Francisco, CA.

17. Dessouky, Y., Steele, D., Allen, E., Gleixner, S., Young, G., and Parent, D. (2004) "Educational Modules based on Semiconductor Manufacturing for Teaching Statistical Concepts" pp. 756-761, Proceedings of the 34th Conference on Computers and Industrial Engineering, San Francisco, CA.

16. Thomas, E. and Dessouky, Y. (2003), "The Integrated use of Process Mapping & Simulation for a Product Design Process," pp. 251-258, Proceedings of the 31st Conference on Computers and Industrial Engineering, San Francisco, CA.

15. Gleixner S., Young, G., Vanasupa, L., Dessouky, Y., Allen, E., and Parent, D. (2002), "Teaching Design of Experiments and Statistical Analysis of Data Through Laboratory Experiments," Proceedings of 32nd ASEE/IEEE Frontiers in Education Conference, November, 2002, Boston, MA.

14. Young G., Gleixner, S., Parent, D., Dessouky, Y., Allen, E., and Vanasupa, L. (2002), "Course Assessment of the Microelectronics Process Engineering Program at SJSU," Proceedings of the 2002 American Society for Engineering Education.

13. Young, G., Gleixner, S., Parent, D., Dessouky, Y., Allen, E., and Vanasupa, L. (2002) "Assessment of the Microelectronics Process Engineering Program at SJSU," Procs. 2002 ASEE/SEFI/TUB International Colloquium on Global Changes in Engineering Education, Berlin, (October 2002).

12. Parent D., Dessouky, Y., Gleixner, S., Young, G., and Allen, E. (2001), "The Microelectronics Process Engineering Program at SJSU," Proceedings of the 14th Biennial IEEE University/Government/Industry Microelectronics Symposium, Richmond, VA.

11. Allen E., Gleixner, S., Parent, D., Young, G., Dessouky, Y., and Vanasupa, L. (2001), "Microelectronics Process Engineering: a non-traditional approach to MS&E," e-Procs. Materials Research Society Symposium on Materials Education , San Francisco, CA.

10. Bayer, A. and Dessouky, Y. (2001), “Forecasting for Maintenance Through Simulation and DOE Modeling”, pp 155-160, Advanced Simulation Technology Conference (ATSC) 2001 Proceedings, Seattle, Washington.

9. Dessouky, Y.M. and Senkandwa**,** B. (1999), **“**A Simulation Approach for Improving the Efficiency of the Department of Motor Vehicles”, pp. 1681-1684, 1999 Winter Simulation Conference Proceedings, Phoenix, AZ.

8. Harris, J., and Dessouky, Y.M. (1997), "A Simulation Approach for Analyzing Parking Space Availability at a Major University", pp. 1195-1198, 1997 Winter Simulation Conference Proceedings, Atlanta, GA.

7. Roberts, C.A, and Dessouky, Y.M. (1996), "Discrete-Event Control Network Simulation for Logic Validation", Simulation in Industry, Proceedings of the 8th European Simulation Symposium and Exhibition (ESS 96), Vol. II, pp 249-253, Genoa, Italy.

6. Dessouky, Y.M., Roberts, C.A., Lee Y., and Agre, J. (1996), "Continuous Simulation Approach for the Noumenon Factory Design Environment", 1996 Object-Oriented Simulation Conference Proceedings, pp 51-56, La Jolla, CA.

5. Dessouky, M.M, Dessouky, Y.M., Roberts, C.A. (1995), "An OO Approach to Discrete Event Dynamic Control of Batch Chemical Systems", 1995 Object-Oriented Simulation Conference Proceedings, pp 89-94, Las Vegas, NV.

4. Dessouky, Y.M., Maggioli, G., and Szeflin, D. (1994), "A Simulation Approach to Capacity Expansion for the Pistachio Hulling Process", 1994 Winter Simulation Conference Proceedings, pp 1248-1255, Orlando, FL.

3. Dessouky, Y.M., Roberts, C.A., and Beaumariage, T.G. (1994), "Object-Oriented Simulation Architecture for Operator Training for the Process Industry", 1994 Object-Oriented Simulation Conference Proceedings, Simulation Series, 26:2, pp 15-20. Tempe, AZ.

2. Roberts, C.A., Dessouky, Y.M., Beaumariage, T.G., and Lee, Y.J. (1994), "VPSim: A Virtual Plant Simulator for the Process Industries", 1994 International Conference on Object-Oriented Modelling Simulation Proceedings, pp 388-392, Barcelona, Spain.

1.Roberts, C.A., Beaumariage, T.G., Dessouky, Y.M. and Ogle, M.K. (1991), "Object-Oriented Simulation Tools Necessary for A Flexible Batch Process Management Architecture", 1991 Winter Simulation Conference Proceedings, pp 323-330, Phoenix, AZ.

REFEREED CONFERENCE POSTER SESSIONS

Allen, E., Gleixner, S., Young, G., Parent, D., and Dessouky, Y. (2001), “The Microelectronics Process Engineering Program: Building an Outcomes Based Curriculum”, 2001 ASEE Conference, NSF Showcase Session.

PRESENTATIONS

“A bibliometric Analysis of Supply Chain Analytical Techniques for Computers & Industrial

Engineering", *2019 International Conference on Management Science and Industrial Engineering,* Phuket, Thailand, 2019.

"Statistical Modeling of Harms and Drivers in A VA Healthcare Application", *47th Conference on Computers and Industrial Engineering*, Lisbon, Portugal, 2017.

"Forty years of Computers & Industrial Engineering:A bibliometric analysis", *47th Conference on Computers and Industrial Engineering*, Lisbon, Portugal, 2017.

"Simulating Performance for One-dedicated-lane Bus Rapid Transit/light Rail Systems", *45th Conference on Computers and Industrial Engineering*, Metz, France, 2015.

"Computing the Carbon Footprint Supply Chain for the Semiconductor Industry: A Learning Tool", *41st Conference on Computers and Industrial Engineering*, Los Angeles, CA, 2011.

"Lot Sizing and Sequence Dependent Setup Time for a Flowshop",*34th Conference on Computers and Industrial Engineering,* San Francisco, CA, 2004.

"Linking Teaching and Research Along the Tenure Track: Maintaining Balance in Your Personal and Professional" *NSF Sponsored New Century Scholar Workshop*, held at Stanford University, on August 3, 2000, Palo Alto, CA.

"Using Simulation To Investigate the Costs of Different Inspection Policies" *Fourth Annual Stanford Workshop on Interactive Learning: Games and Simulations for Teaching of Manufacturing Education* on June 15, 1999, Palo Alto, CA.

"A Simulation Approach for Analyzing Parking Space Availability at a Major University", *1997 Winter Simulation Conference*, Atlanta, GA.

"Continuous Simulation Approach for the Noumenon Factory Design Environment", *1996 Object-Oriented Simulation Conference*, La Jolla, CA.

"An OO Approach to Discrete Event Dynamic Control of Batch Chemical Systems", *1995 Object-Oriented Simulation Conference*, Las Vegas, NV.

"Object-Oriented Simulation Architecture for Operator Training for the Process Industry", *1994 Object-Oriented Simulation Conference*, Tempe, AZ.

"A Simulation Approach to Capacity Expansion for the Pistachio Hulling Process", *1994 Winter Simulation Conference*, Orlando, FL.

REVIEWER

Journals
Simulation Modelling Practice and Theory
Simulation: Transactions of the Society for Modeling and Simulation International

International Journal of Production Research
Computers & Industrial Engineering International Journal
International Journal of Modelling and Simulation
Decision Support Systems
International Journal of Simulation and Process Modelling
International Journal of Intelligent Systems Technologies & Applications

Conference Proceedings
International Conferences On Computers and Industrial Engineering
Object-Oriented Simulation Conferences, Society of Computer Simulation

Textbooks
Simulation with Arena, 5th edition, by David Kelton, Sadowski, and Swets
Supply Chain Focused Manufacturing Planning and Control, 1st Edition, by William Benton
Simulation Modeling and Arena Review, by Manuel Rossetti
Manufacturing Planning, and Control, 5th edition, by Vollmann, Berrym Whybark, and Jacobs
Automated, Production Systems, and Computer-Integrated Manufacturing, 2nd Edition, by Mikell Groover, Prentice Hall
Systems Engineering and Analysis, 3rd edition, by Benjamin Blanchard and Wolter Fabrycky
Facilities Design, by Sunderesh Heragu
Facilities Planning and Design, by Alberto Garcia Diaz and J. MacGregor Smith

EDITOR/CO-Editor

- Associate Editor, Computers and Industrial Engineering International Journal.
- Computers and Industrial Engineering International Journal, Special Issue 41st Conference.
- 41st International Conference on Computers and Industrial Engineering Proceedings, Los Angeles, CA.
- Computers and Industrial Engineering International Journal, Special Issue 34th Conference.
- 34th International Conference on Computers and Industrial Engineering Proceedings, San Francisco, CA.
- Computers and Industrial Engineering International Journal, Special Issue 31st Conference.
- 31st International Conference on Computers and Industrial Engineering Proceedings, San Francisco, CA.
- Editorial Board International Journal of Simulation and Process Modelling
- Editorial Board International Journal of Business Performance and Supply Chain Modelling (IJBPSCM)

AWARDS AND HONOR SOCIETIES

SJSU: College of Engineering: Applied Materials Award for Excellence in Teaching, 2015
Don Newnan ISE Teaching Excellence Award, 2008, 2014
Arizona State University Board of Regents Scholarship, 1990-1993
Arizona State University Academic Scholarship, 1986-1987, 1990-1993
Alpha Pi Mu (Industrial Engineering Honor Society)
Dean's List at University of Wisconsin-Madison (4 semesters)

CONFERENCE CHAIR

Conference co-Chair, 41st Conference of Computers and Industrial Engineering 2011, Los Angeles, CA.

Conference co-Chair, 34th Conference of Computers and Industrial Engineering 2004, San Francisco, CA.

Conference co-Chair, 31st Conference of Computers and Industrial Engineering 2003, San Francisco, CA.

Chair International Program Committee, 1998 Object-Oriented Simulation Conference, San Diego, CA.

Program Chair, 1997 Object-Oriented Simulation Conference, Phoenix, AZ.

Program Committee, 1996 Object-Oriented Simulation Conference, La Jolla, CA.

Session Chair, Session #1, 1997 Object-Oriented Simulation Conference, Phoenix, AZ.

Session Chair, Session #4, 1996 Object-Oriented Simulation Conference, La Jolla, CA.

Session Chair, Session #4, 1995 Object-Oriented Simulation Conference, Las Vegas, NV.

UNIVERSITY SERVICE

ISE Program and Department, San Jose State University

Chair of ISE Department Faculty Search Committee, Department of Industrial and Systems Engineering, San Jose State University, 2004-2005, 2013-2014, 2014-2015, 2016-2017, 2018-2019.

ISE Department Faculty Search Committee, Department of Industrial and Systems Engineering, San Jose State University, 2001-2002.

ISE Department Retention, Tenure, and Promotion Committee, Department of Industrial and Systems Engineering, San Jose State University, 2001-Present.

Undergraduate Program Coordinator, Industrial and Systems Engineering Program, San Jose State University, 2000 – Present

Chair of Curriculum Committee, Industrial and Systems Engineering Program, San Jose State University, 2000 - Present

ISE and Business College Task force, 2003-2004.

Faculty Advisor, Student Chapter of Institute of Industrial Engineers, San Jose State University, 1997-2001.

CISE Program and Department, San Jose State University

CISE Department Retention, Tenure, and Promotion Committee, Department of Computer, Information, and Systems Engineering, San Jose State University, 2000- 2001.

Chair of ISE Program Curriculum Committee, Department of Computer, Information, and Systems Engineering, San Jose State University, 1999- 2001.

CISE Department Curriculum Committee, Department of Computer, Information, and Systems Engineering, San Jose State University, 1997- 2001.

Engineering College, San Jose State University

College of Engineering Dean Search Committee, San Jose State University, 2016.

Financial Analyst Search Committee, 2014.

Resource Advisory Board, 2010-2012

Master Faculty Advisor Team, 2008- 2012

Engineering College Sabbatical Committee, 2005, 2008, 2016

Test Engineering Interest Group, 2005

COE ABET Task Force, 2004.

Strategic Planning Task Force, 2004

Manufacturing Task Force, 2002.

Engineering College Undergraduate Curriculum Committee, 2001 - 2015.

Senior Design Committee, Fall 2001.

Engineering Colleges Retention Committee, 1998–1999.

Engineering Graduate Studies and Research Committee, San Jose State University, 1998-1999.

Faculty Representative, SJSU Engineering Outreach Day, 1997-1999

Systems Analysis Department, Miami University

Director, Masters of Systems Analysis Program offered at General Electric Aircraft Division, Miami University, 1997.

Graduate Curriculum Committee, Systems Analysis Department, Miami University, 1994-1997.

Faculty Advisor, Student National Technical Association, a minority student technical association, Miami University, 1995-1997.

Faculty Advisor, Halcyon Consulting, a student consulting group, Miami University, 1994-1996.

Faculty Advisor, Student Summer Orientation, 1995.

School of Applied Science, Miami University

Manufacturing Center Group, Interdisciplinary: School of Applied Science and School of Business, Miami University, 1994-1997.

Faculty Advisory Council, School of Applied Science, Miami University, 1995-1996.

Minority Recruitment and Retention Committee, School of Applied Science, Miami University, 1994-1995.

Engineering Management Committee, Interdisciplinary: School of Applied Science and School of Business, Miami University, 1994-1995.

SELECTED PROFESSIONAL PROJECTS

Simulation Related:

- Task: Developed a simulation model analyze the training process of Flight Controllers

Relevance: Provided instructor capacity levels to reduce training time.

Client/Sponsor: FAA

- Task: Developed a simulation model to analyze current capacity requirements for the test operations for IC units and proposed new capacity requirements to increase throughput. Also, studied factory layout and material handling to improve efficiency of factory operations.

Relevance: The study was used to suggest to management operating strategies to double the throughput of the testing of IC units.

Client/Sponsor: Power Integration

- Task: Developed a simulation model to evaluate and analyze JDS Uniphase operating capacity and policies for the production of fiber optics, which included collecting data, building the model, and analyzing the output.

Relevance: The model was used to suggest to management potential operating strategies to increase production of fiber optics by 20%.

Client/Sponsor: JDS Uniphase

- Task: Developed a simulation model to evaluate and analyze HMT Technology's operating capacity and policies for the production of substrate disks, which included collecting data, building the model, and analyzing the output.

Relevance: The model was used to suggest to management potential operating strategies to increase production of substrate disks.

Client/Sponsor: HMT Technology

- Task: Developed a simulation model to evaluate and analyze Paramount Farms operating capacity and policies for production of pistachios, which included collecting data, building the model, and analyzing the output.

Relevance: The model was used to suggest to management alternatives to increase production by 40% without the need to invest in new capital.

Client/Sponsor: Paramount Farms

- Task: Developed simulation models to determine the system effectiveness of the Midgetman and Peacekeeper/Rail garrison mobile missile systems, which included collecting data, building the

model, and analyzing the output.

Relevance: The models were used to report to military leadership the effectiveness of the United States missile systems against various threats.

Client/Sponsor: TRW Inc.

- Task: Developed simulation models to evaluate and analyze large industrial organizations in particular Ford Motor Company.

Relevance: The simulation models assisted Ford Motor Company on which Vendor to employ in the installation of a new production line.

Client/Sponsor: Ford Motor Company

- Task: Developed a simulation model to determine the scheduling requirements for an emergency room in a large hospital, which included collecting data, building the model, and analyzing the output.

Relevance: The simulation model indicated to hospital management that the beds were causing a bottleneck at the waiting area, and hence increasing the number of beds would reduce the waiting time for the patients.

Client/Sponsor: Desert Samaritan Hospital

Systems Related:

- Task: Assisted in the implementation of Statistical Process Control to monitor and stabilize American Casting Processes

Relevance: Achieved desirable control limits and addressed and removed special causes. Reduced scrap by 50%.

Client/Sponsor: American Casting Company

- Task: Development of a model to evaluate various test strategies for Applied Materials in order to move testing to upstream operations.

Relevance: This is part of a major effort to minimize final testing of the product in order to decrease cycle time.

Client/Sponsor: Applied Materials

- Task**:** Assisted in the enhancement and upgrade of the capacity planning tools for Texas Instruments to predict wafer starts and tool acquisition at a quarterly basis.

Relevance: This is part of a major effort to develop and migrate to an integrated suite of tools to perform manufacturing planning activities.

Client/Sponsor: Texas Instruments Inc.

- Task: Development of recommendations for performance enhancements that addresses layout of jobs, production tools and equipment, and managerial practices.

Relevance: This is part of effort to improve production efficiency by 25%.

Client/Sponsor: Popular ReCare

- Task: Assisted in a company wide effort to improve operations to six sigma. This included designing a database that stores statistical data of plant operations to be used by design engineers and training employees in statistical techniques.

Relevance: This is part of a major initiative to improve quality to six sigma by the year 2000.

Client/Sponsor: General Electric Aircraft Division

- Task: Performed a gap analysis to determine the differences between a legacy bill of material and MRP system and Oracle Manufacturing for a large manufacturer.

Relevance: This is part of an effort to move all legacy systems to client server systems.

Client/Sponsor: General Electric Aircraft Division

- Task: Developed a Microsoft Access database that stores quality data from the production facility of a large manufacturer, which included creating forms, reports, tables, macros, and writing visual basic code.

Relevance: The quality database is used to report scrap by cost center.

Client/Sponsor: Ingersoll-Rand

- Task: Developed a Functional IDEF0 model for an army depot.

Relevance: The IDEFO model was used as a tool to streamline the business functions for this army depot.

Client/Sponsor: United States Army

- Task: Developed software in Quick Basic for forecasting the weekly delivery volume at UPS, which included developing the code for the user interface and the algorithm.

Relevance: The accuracy of the predictions from the forecasting system was within 5% of actual demand.

Client/Sponsor: United Parcel Service

- Task: Developed software in Fortran for scheduling the packaging operations at Kalkan Foods, which included developing the code for the user interface and the algorithm.

Relevance: The scheduling software was used effectively to create schedules.

Client/Sponsor: Kalkan Foods

- Task: Training SPC and DOE techniques to managers and engineers

Relevance: Required for the implementation of quality improvement techniques

Client/Sponsor: Viasystems

- Task: Research and Benchmark Supply Chain Inventory and Distribution Models

Relevance: Required for the implementation of new supply chain consolidation and management of AM Castle Inventory.

Client/Sponsor: Vavni Inc.