



College of Engineering and Applied Sciences

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Full Papers Accepted for Conference Presentation and Inclusion in the Proceedings

- 1) I. Sarvestani, **A. Houshyar**, Decision Making For Players in Robocup Contest: Proceedings of the 10th Annual International Conference on Industrial Engineering – Theory, Applications and Practice; Clearwater, Florida, Dec 4-7, 2005.
- 2) I. Sarvestani, **A. Houshyar**, Six Efficient Polynomial: Proceedings of the 10th Annual International Conference on Industrial Engineering –Theory, Applications and Practice; Clearwater, Florida, Dec 4-7, 2005.
- 3) **A. Houshyar**, B. White, D. Meade and Y. Al-Alawi, “A Case Study: Impact of Simulation on Cutting Operational Cost,” 8th International Conference on Industrial Engineering Theory, Applications & Practices (*IJIE*), Las Vegas, Nevada, Nov 10-12, 2003.
- 4) **A. Houshyar**, T. Krueger, S. Patil and R. Schaffer, “Throughput Improvement in a Service Industry,” 8th International Conference on Industrial Engineering Theory, Applications & Practices (*IJIE*), Las Vegas, Nevada, Nov 10-12, 2003.
- 5) D. Meade, B. White and **A. Houshyar**, “Survey of the Impact of Financial Accounting on the Implementation of Lean Manufacturing,” 8th International Conference on Industrial Engineering Theory, Applications & Practices (*IJIE*), Las Vegas, Nevada, Nov 10-12, 2003.
- 6) B. White, **A. Houshyar**, Y. Al-Alawi and D. Meade, “Impact of Monte Carlo Simulation in Project Selection,” 8th International Conference on Industrial Engineering Theory, Applications & Practices (*IJIE*), Las Vegas, Nevada, Nov 10-12, 2003.
- 7) **A. Houshyar** and G. Peters, “Impact of One Piece Flow on Economic Data Quality and Shop Floor Data Collection,” *IABE-2003 Annual Conference*, Las Vegas, Nevada, Oct 19-22, 2003.
- 8) **A. Houshyar**, A. Jafri, and V. Naikasatam “Comparison of Different maintenance Policies using Simulation,” *IASTED Conference on Modelling, Simulation, and Optimization*, Banff, Canada, July 2-4, 2003.
- 9) S. Choi, R. Mulgund, A. Kapoor, A. Kumar and **A. Houshyar**, “A Simulation Study of an Automotive Foundry Plant Manufacturing Engine Heads,” *The Advanced Simulation Technologies Conference*, Orlando, Florida, March 30-April 3, 2003.
- 10) S. Choi, A. Kumar and **A. Houshyar**, “A Simulation Study of an Automotive Foundry Plant Manufacturing Engine Blocks,” *The 2002 Winter Simulation Conference*, San Diego, California, Dec. 8-11, 2002.
- 11) **A. Houshyar**, “Application of Simulation to a Material Handling Problem,” 12th *International Flexible Automation and Intelligent Manufacturing (FAIM) Conference*, Dresden, Germany, July 15-17, 2002.

- 12) **A. Houshyar**, "Optimizing Space Allocation in a Maintenance Facility," 30th *International Conference on Computer and Industrial Engineering*, Tinos Island, Greece, June 29-July 2, 2002.
- 13) **A. Houshyar**, "Using Simulation to Model a Complex Fuel Transfer System," 6th *Annual International Industrial Engineering Theory, Applications and Practice Conference*, San Francisco, California, November 18-20, 2001.
- 14) B. White and **A. Houshyar**, "Economical Analysis of Scheduling and Lot Sizing problem," 6th *Annual International Industrial Engineering Theory, Applications and Practice Conference*, San Francisco, California, November 18-20, 2001
- 15) **A. Houshyar**, "Human Factors Consideration in Design of a Material Handling System," *International Conference of the Production and Operations Management POMS 2001*, Sao Palo, Brazil, August 11-14, 2001.
- 16) **A. Houshyar**, "Effect of Collaborative Work and Information Sharing in Machine Tool Industry," *International Conference on Modern Industrial Engineering and Engineering Management in New Century*, Tianjin, China, August 10-12, 2001.
- 17) **A. Houshyar**, "Benchmarking Best Practices in Machine Tool Industry," 17 *International Maintenance Conference IMC 2001, New Orleans, LA*, August 6-8, 2001.
- 18) **A. Houshyar**, "Using Simulation to Solve Complex Manufacturing Problems," *International Conference on Production Research ICPR-16*, Praha, Czech Republic, July 29-August 3, 2001.
- 19) **A. Houshyar** and B. White "Role of R&M in Determination of Optimum Replacement Time," *Hawaii Conference on Business (HCB'01)*, Honolulu, Hawaii, June 14-17, 2001.
- 20) **A. Houshyar** and B. White "Reliability Centered Maintenance and Total Productive Maintenance," *International Conference on Industry, Engineering & Management Systems (IEMS'01)*, pp 717-722, Cocoa Beach, FL, March 5-7, 2001.
- 21) B. White and **A. Houshyar** "Predicting Profitability using Simulation and Engineering Economy," *International Conference on Industry, Engineering & Management Systems (IEMS'01)*, Cocoa Beach, FL, March 5-7, 2001.
- 22) **A. Houshyar** and B. White, "Application of Stochastic Simulation to a Scheduling and Lot Sizing Problem," 7th *International Conference on Industrial Engineering and Engineering Management (IE&EM'2000)*, Guangzhou, China, November 28-30, 2000.
- 23) B. White and **A. Houshyar**, "Impact of Reliability and Maintainability on Optimal Equipment Replacement Time," 7th *International Conference on Industrial Engineering and Engineering Management (IE&EM'2000)*, Guangzhou, China, November 28-30, 2000.
- 24) **A. Houshyar**, "Human factors and Accessibility in Design," 7th *International Conference on Human Aspects of Advanced Manufacturing Agility & Hybrid Automation*, Krakow, Poland, August 27-30, 2000.
- 25) **A. Houshyar**, "An Interactive Multi-Goal Approach to Computer Aided facility layout," 15th *International Conference on Multiple Criteria Decision Making*, Ankara, Turkey, July 10-14, 2000.
- 26) **A. Houshyar**, "Application of simulation to a Material Handling Problem," *Int. Conference on Flexible Automation & Intelligent Manufacturing*, University of Maryland, College park, MD, June 26-28, 2000.
- 27) **A. Houshyar**, "The Role of reliability & Maintainability in Life Cycle Cost reduction," *First IEEE Electro/Information Technology Conference*, Chicago, IL, June 8-11, 2000.
- 28) **A. Houshyar** and B. White, "Reliability and Maintainability Issues in the Machine Tool Industry," *Solution 2000 Conference*, Cleveland, Ohio, May 22-24, 2000.

- 29) **A. Houshyar** and B. White, "An Efficient Assessment Plan for Entering a Graduate Program," *ASEE-NCS 2000. Conference*, East Lansing, Michigan, March 31-April 1, 2000.
- 30) B. White, **A. Houshyar** and Yang Yong, "Current State of Knowledge on Deterministic Life Cycle Costing Models," *International Conference on Industry, Engineering & Management Systems (IEMS'00)*, pp 299-304, Cocoa Beach, FL, March 13-15, 2000.
- 31) **A. Houshyar** and B. White and Yang Yong "A Probabilistic Approach to Life Cycle Costing," *International Conference on Industry, Engineering & Management Systems (IEMS'00)*, Cocoa Beach, FL, March 13-15, 2000.
- 32) T. Wegacheid, and **A. Houshyar**, "Maintenance FMEA: A Systematic Tool for Improving Maintenance," *4th Annual Int. Conference on Industrial Engineering Theories, Applications and practice*, San Antonio, Texas, November 17-20, 1999.
- 33) **A. Houshyar**, "We Should Pay Attention to Life Cycle Cost," *8th Annual Industrial Engineering Conference*, Phoenix, Arizona, May 23-25, 1999.
- 34) **A. Houshyar**, "Guidelines For Benchmarking A Machine Tool Manufacturer's Past Performance," *8th International Conference on Management of Technology (IAMOT'99)*, Cairo, Egypt, March 15-17, 1999.
- 35) **A. Houshyar**, "Ignoring Scheduled Maintenance: A Recipe for Disaster," *3rd International Conference on Industrial Engineering theories, Applications, and Practice*, Hong Kong, Dec 28-31, 1998.
- 36) **A. Houshyar**, "Identification and Integration of Accessibility and Maintainability in Design and Development," *Second International Conference on Engineering Design and Automation*, Maui, Hawaii, August 9-12, 1998.
- 37) **A. Houshyar**, "benchmarking a Machine Tool Manufacturer's Past Performance," *1st Middle East International G.I.S. Conference*, Manama, Bahrain, October 26-28, 1998.
- 38) B. White, and **A. Houshyar**, " Benchmarking Machine Tool Builders," *International Conference on Industry, Engineering & Management Systems (IEMS'98)*, Cocoa Beach, FL, March 9-11, 1998.
- 39) **A. Houshyar**, "Computer Model for the Best Distribution for Reliability Data," *2nd Annual International Conference on Industrial Engineering Applications and Practice*, San Diego, California, Nov 12-15, 1997.
- 40) **A. Houshyar**, "Cost Effectiveness of Predictive Maintenance," *14th International Maintenance Conference (IMC)*, Atlanta, Georgia, August 3-7, 1997.
- 41) **A. Houshyar**, "Cost Effectiveness of Reliability-Centered Maintenance," *Flexible Automation & Intelligent manufacturing (FAIM' 97) Conference*, Middlesborough, U.K., June 25-27, 1997.
- 42) A. Alvi and **A. Houshyar**, "A Heuristic for Best Weibull Fit Using Failure rate and Hazard Function," *Sixth Industrial Engineering Research Conference*, Miami, Florida, May 17-18, 1997.
- 43) **A. Houshyar**, B. White and J. Garcia "Effectiveness of Japanese Transplants: One-Piece Production," *Int. Conference on Industry, Engineering & Management Systems (IEMS'95)*, Cocoa Beach, FL, March 10-12, 1997.
- 44) **A. Houshyar**, and J. Garcia "Reliability Growth Analysis," *Int. Conference on Industry, Engineering & Management Systems (IEMS'95)*, Cocoa Beach, Florida, March 10-12, 1997.
- 45) A. Alvi and **A. Houshyar**, "A Heuristic for Estimating Weibull Parameters," *Int. Conference on Industry, Engineering & Management Systems (IEMS'95)*, Cocoa Beach, Florida, March 10-12, 1997.

- 46) **A. Houshyar**, "Software Development for Life Cycle Cost," *First Engineering Design & Automation Conference*, Bangkok, Thailand, March 18-21, 1997.
- 47) **A. Houshyar**, and B. Ghahramani, "A Practical Reliability and Maintainability Data Collection and Processing Software," *21st Int. Conference for Computer & Industrial Engineering*, San Juan, Puerto Rico, Mar 10-12, 1997.
- 48) **A. Houshyar**, "A Report on the Development of a Reliability & Maintainability Database Software," *20th International Conference on Computers & Industrial Engineering*, Kyongju, Korea, Oct 6-9, 1996.
- 49) **A. Houshyar**, "Application of Supervisory Control in Interactive Simulation," *Fifth International Conference on Human Aspects of Advanced Manufacturing Agility & Hybrid Automation*, Maui, Hawaii, August 6-9, 1996.
- 50) B. Ghahramani and **A. Houshyar**, "Bench marking the Application of QFD in Rapid Prototyping," *12th International Conference on Computer-Aided Production Engineering*, Cookeville, Tenn, August 5-7, 1996.
- 51) P. Jula, **A. Houshyar**, F. Severance and A. Sawhney, "Application of Artificial Neural Networks in Interactive Simulation," *19th International Conference on Computer and Industrial Engineering*, Miami, Fl, Mar 3-6, 1996.
- 52) **A. Houshyar** and B. White, "Effectiveness of Japanese Transplants: One-Piece Production," *19th International Conference on Computer and Industrial Engineering*, Miami, Florida, March 3-6, 1996.
- 53) H. Garcia, **A. Houshyar** and G. Imel, "Planning and Supervision of Reactor Defueling Using Discrete Event," *INRIA/IEEE Conference on Emerging Technologies & Factory Automation*, Paris, Oct 10-13, 1995.
- 54) T. Faricy and **A. Houshyar**, "Data Collection and Reliability & Maintainability," *Center for manufacturing Systems Engineering (CSME) 9th Conference*, Bethlehem, Penn, May 25-26, 1995.
- 55) **A. Houshyar**, "Role of Simulation in Solving Manufacturing Problems," *1995 Midwest Business and Health Administration Association Meeting*, Chicago, March 29-31, 1995.
- 56) **A. Houshyar** and B. White, "A Solution to a Special Facility Location Problem," *International Conference on Industry, Engineering & Management Systems (IEMS'95)*, Cocoa Beach, Florida, March 13-15, 1995.
- 57) G. Imel, **A. Houshyar**, P. Planchon and D. Cutforth, "System Modelling to Support Accelerated Fuel Transfer Rate at EBR-II," *International Conference on Fuel Management and Handling*, Edinburgh, UK, Mar 20-22, 1995.
- 58) G. Imel and **A. Houshyar**, "System Modelling of Spent Fuel Transfer at EBR-II," *Department of Energy spent Nuclear Fuel, Challenges & Initiatives*, Salt Lake City, Utah, Dec 13-16, 1994.
- 59) **A. Houshyar**, "Report on Efforts to Standardize Terminology in Machine Tools," *4th International Conference on Human Aspects of Advanced Manufacturing & Hybrid Automation (HAAMHA'94)*, Manchester, UK, July 6-8, 1994.
- 60) R. Munsterman and **A. Houshyar**, "A New Look at a Program in Engineering Management," *ASEE'94 Conference on Opportunities in Engineering Education*, Edmonton, Canada, June 26-29, 1994.
- 61) **A. Houshyar**, "Selecting a Robotic Device: A Priority-Based Approach," *Industrial Engineering Research Conference*, May 18-19, 1994, Atlanta, Georgia.
- 62) **A. Houshyar** and B. White, "Generating an Optimal Layout using Rectangular Blocks," *International Conference on Industry, Engineering & Management Systems (IEMS'94)*, Cocoa Beach, Florida, March 14-16, 1994.

- 63) **A. Houshyar** and D. Lyth, "Assessment of a Plan to Improve Medicaid Delivery," *MidWest Business Administration Meeting*, Chicago, Illinois, March 16-18, 1994.
- 64) **A. Houshyar**, "Application of Reliability & Maintainability Methodology to Manufacturing Machinery and Equipment," *International Symposium on Robotics & Mfg (ISRAM'94)*, Wailea, Hawaii, Aug 14-18, 94.
- 65) **A. Houshyar**, B. Setlur and S. DeviReddy, "Optimal Inspection Schedules & Their Locations," *4th International Conference on Management of Technology*, Miami, Florida, Feb 28-March 4, 1994.
- 66) **A. Houshyar** and V. Nuila, "Does Simulation Usage Facilitate Prosperity?" *ISCA International Conference for Computer Application in Industry and Engineering*, Honolulu, Hawaii, December 15-17, 1993.
- 67) **A. Houshyar**, "Application of Ergonomics to a Material Handling Problem," *International Ergonomics Association World Conference on Ergonomics & Material Handling*, pp 135-138, Warsaw, Poland, June 14-17, 1993.
- 68) B. Suseelan and **A. Houshyar**, "A Simulation Program for Tracking HIV Positive Individuals," *1993 Second Industrial Engineering Research Conference (IERC)*, Los Angeles, May 26-27, 1993.
- 69) **A. Houshyar**, L. Lamberson, P. Clark, and T. Faricy, "Common Reliability & Maintainability Guideline: One Step Closer to User-Supplier Partnership," *Center for manufacturing Systems Engineering (CSME) 7th Conference*, pp 131-138, Bethlehem, Penn, May 25-26, 1993.
- 70) **A. Houshyar** and J. Ra, "A Case Study: Design of an Appointment Scheduling System," *1993 Midwest Business and Health Administration Association Meeting*, pp 115-125, Chicago, March 24-26, 1993.
- 71) B. Suseelan and **A. Houshyar**, "Using Simulation to Track the Spread of HIV Virus," *1993 Midwest Business and Health Administration Association Meeting*, pp 122-125, Chicago, March 24-26, 1993.
- 72) **Houshyar** and V. Nuila, "Required Steps for Successful Design and Implementation of Simulation," *15th Conference for Computer & Industrial Engineering*, Cocoa Beach, Florida, March 8-10, 1993. *Published: Journal of Computers & Industrial Engineering*, Vol 25, No 1-4, pp 53-56, 1993.
- 73) **A. Houshyar**, "Human and Interactive Decision Making Process: A Computerized Facility Planning," *International Conference on Human Aspects of Advanced Manufacturing and Hybrid Automation*, pp 331-336, Gelsenkirchen, Germany, August 26-28, 1992.
- 74) S. Edelen, and **A. Houshyar**, "Improved Development Process for Complex Automotive Systems," *2nd International Conference on Flexible Auto. & Info. Management, FAIM'92*, Falls Church, VA, June 30-July 2, 92.
- 75) **A. Houshyar**, "A Mathematical Model for Screening Non-contagious Progressive Diseases," *1992 Midwest Business and Health Administration Association Meeting*, pp 74-78, Chicago, March 25-27, 1992.
- 76) **Houshyar** and B. White, "Exact Optimal Solution for Facility Layout," *14th Conference for Computer & Industrial Engineering*, Cocoa Beach, Florida, March 9-11, 1992. *Published: Journal of Computer & Industrial Engineering*, Vol 23, No 1-4, pp 287-290, 1992.
- 77) **Houshyar** and D. Lyth, "A Systematic Supplier Selection Procedure," *14th Conference for Computer & Industrial Engineering*, Cocoa Beach, Florida, March 9-11, 1992. *Published: Journal Computer & Industrial Engineering*, Vol 23, No 1-4, pp 173-176, 1992.
- 78) **A. Houshyar**, "Simulation Methodology," *Int. Simulation Forum: Whirlpool*, Benton Harbor, MI, Jan. 29-31, 1992.

- 79) **A. Houshyar**, and B. White, "A Program to Increase Minority Enrollment in Engineering Schools," *ASEE Annual Convention*, pp 1156-1160, New Orleans, June 15-18, 1991.
- 80) **A. Houshyar**, "Determination of Optimal Intermediate Storage Capacity," *1991 International Industrial Engineering Conference*, pp 139-148, Detroit, Michigan, May 19-22, 1991.
- 81) **A. Houshyar**, "Ergonomic Consideration in Facility Layout Process," *Ergonomic Society 1991 Annual Conference*, pp 295-299, University of Leeds, England, April 2-6, 1991.
- 82) **A. Houshyar** and Chung, "Using Simulation to Compare Different Automated Storage/Retrieval System Design," *13th Conference for Computer & Industrial Engineering*, Orlando, Florida, March 11-14, 1991. *Published: Journal of Computer & Industrial Engineering*, Vol 21, No 1-4, PP 629-634, Nov 1991.
- 81) **Houshyar**, "A Heuristic for Determination of Optimal Capacity of Central Buffer," *13th Conference for Computer & Industrial Engineering*, Orlando, Florida, March 11-14, 1991. *Published: Journal of Computer & Industrial Engineering*, Vol 21, No 1-4, pp 447-451, Nov 1991.
- 82) **Houshyar**, "Role of Health Care Industry in Controlling AIDS Epidemic," *1991 Midwest Business Administration Association Meeting*, pp 54-57, Chicago, April 3-5, 1991.
- 83) **Houshyar**, "Economic Analysis of A General Production and Storage Model," *1991 Midwest Business Administration Association Meeting*, pp 15-24, Chicago, April 3-5, 1991.
- 84) **Houshyar**, "Cost-Benefit Analysis of a Purchase/Storage System," *1991 Midwest Business Administration Association Meeting*, pp 1-8, Chicago, April 3-5, 1991.
- 85) **Houshyar**, "A Solution to a Loading/Scheduling Problem," *1991 Design Productivity International Conference*, Honolulu, Hawaii, Feb. 3-9, 1991.
- 86) **Houshyar**, "Systematic Approach to the Layout of a Flexible Manufacturing System," *1991 Design Productivity International Conference*, Honolulu, Hawaii, Feb. 3-9, 1991.
- 87) **Houshyar**, "A Simulation Model of The Dynamics of HIV/AIDS," *12th Annual International Conference IEEE Engineering in Medicine and Biology*, pp 1188-1189, Philadelphia, Penn, Nov 1-4, 1990.
- 88) J. D'Mello, and **A. Houshyar**, "Economic Consideration for Foreign Graduate Students," *Facing East/Facing West Conference*, pp 421-424, WMU, Kalamazoo, Michigan, September 13-15, 1990.
- 89) **Houshyar**, "Modeling Effect of Screening on Breast Cancer," *IASTED International Conference on Computers & Advanced Technology in Medicine*, pp 21-24, Honolulu, Hawaii, August 15-17, 1990.
- 90) **Houshyar**, "Transient Prevalence in Screening Programs," *IASTED International Conference on Computers & Advanced Technology in Medicine*, pp 25-27, Honolulu, Hawaii, August 15-17, 1990.
- 91) **Houshyar**, "Social Resistance to Technological Change," *2nd International Conference on Human Aspects of Advanced Manufacturing & Hybrid Automation*, pp 19-26, Honolulu, Hawaii, Aug 12-16, 1990.
- 92) **Houshyar**, "Production Lot Sizing with Quality and Material-Handling Cost Consideration," *1990 APICS Conference*, pp 112-114, Baltimore, Maryland, June 11-13, 1990.
- 93) **Houshyar**, "Computer Usage: Basics Versus Applications," *1990 ASEE North Central Section Conference on Engineering Technology, Engineering, and Industry*, Akron, Ohio, April 5-7, 1990.

- 94) Genaidy, and **A. Houshyar**, "An Ergonomic Study of Manual Arm Tasks," *Ergonomic Society 1990 Annual Conference*, pp 187-192, University of Leeds, England, April 2-6, 1990.
- 95) Genaidy, Agrawal, **A. Houshyar**, et. Al., "An Ergonomic Training Program for Industrial Manual Handling Tasks," *Ergonomic Society Annual Conference*, pp 210-215, University of Leeds, England, April 2-6, 1990.
- 96) **Houshyar**, "A Procedure for Measuring the Performance of Robots within the CIMS," *Manufacturing International' 90*, Vol 1, pp 33-38, Atlanta, Georgia, March 25-28, 1990.
- 97) **Houshyar** and B. Fischer, "The Role of Industry-University Corporation in Innovation," *1990 Midwest Business Administration Association Meeting*, pp 113-118, Chicago, Illinois, March 14-16, 1990.
- 98) T. Gupta and **A. Houshyar**, "Consideration of In-stage and Central Buffers in Two-stage Production System," *12th Conference for Computers & Industrial Engineers*, Orlando, Florida, March 14-16, 1990. *Published: Journal of Computers & Industrial Engineering*, Vol 19, No 1-4, pp 427-431, 1990.
- 99) **Houshyar** and R. Dawood, "Development of an Educational Facilities Layout Software," *12th Conference for Computers & Industrial Engineers*, Orlando, Florida, March 14-16, 1990. *Published: Journal of Computers & Industrial Engineering*, Vol 19, No 1-4, pp 175-179, 1990.
- 100) **Houshyar**, "Role of Multinational Corporations in a National Reconstruction Program," *Second International Conference on Management of Technology*, pp 451-458, Miami, FL, Feb 28- March 2, 1990.
- 101) **Houshyar** and T. Gupta, "Optimum Lot Sizing and Utilization of Material Handler," *1989 IIE Integrated Systems Conference*, pp 495-500, Atlanta, Georgia, November 12-15, 1989.
- 102) **Houshyar**, and A. Genaidy, "Applications of Optimization Techniques to Medicine: Diabetes and Screening," *11th Annual International Conference IEEE Engineering in Medicine and Biology Society*, Vol 11, Part 1, pp 267-268, Seattle, Washington, November 9-12, 1989.
- 103) Genaidy, and **A. Houshyar**, "Biomechanical Tolerance Limits for Manual Lifting Tasks: A Tool to Control Back Injuries," *11th Annual International Conference IEEE Engineering in Medicine and Biology Society*, Vol 11, Part 3, pp 803-805, Seattle, Washington, November 9-12, 1989.
- 104) Genaidy and **A. Houshyar**, "Optimization Techniques in Occupational Biomechanics," *Annual Human Factor Society 33rd Annual Meeting*, Vol 1, pp 672-676, Denver, Colorado, October 16-18, 1989.