Eman Almehdawe

3737 Wascana Parkway Regina, SK, S4S 0A2 Phone: (306) 585 4728

Email: Eman.Almehdawe@uregina.ca

RESEARCH INTERESTS

- Healthcare Operations Management
- Supply Chain Management
- Applied Operations Research
- Advanced Queueing Analysis and Stochastic Processes

EDUCATION AND PROFESSIONAL DEVELOPMENT

PhD. in Operations Research, University of Waterloo	2008 – 2012
Certificate in University Teaching, University of Waterloo	2009 – 2011
Canadian Operational Research Diploma in Operations Research, CORS	2008
Master of Applied Science in Management Sciences, University of Waterloo	2005 – 2007
Bachelor of Industrial Engineering, University of Jordan	1995 – 2000

AWARDS

- Doctoral thesis completion award, UW, 2012
- Department of Management Sciences Teaching Assistant Award, UW, July 2012
- Fraser Award for Graduate Student Research, Department of Management Sciences, UW, July 2011
- Department of Management Sciences Teaching Assistant Award, UW, July 2010
- Department of Management Sciences Graduate Merit Scholarship, UW, April 2009
- University of Waterloo Graduate Entrance Scholarship, 2008 2009
- Provost's Doctoral Entrance Award for Women, UW, 2008 2009

RESEARCH EXPERIENCE

Research Assistant, University of Waterloo, Waterloo, ON

2008 - 2012

- Applied game theory to investigate the effect of moving leadership from the supplier to the retailer in a Vendor Managed Inventory (VMI) supply chain by developing a Mixed Integer Nonlinear Program (MINLP)
- Developed three queueing models for the Ambulance Offload Delay Problem for the Region of Waterloo Emergency Medical Services.

- Utilized the developed queueing models to identify the impact of policy changes on the Region of Waterloo Emergency Medical Services performance and the regional emergency departments congestion
- Developed an optimization model to decide on the optimal routing decisions for the regional hospitals to minimize total offload delays experienced by the Emergency Medical Services

Research Assistant, University of Waterloo, Waterloo, ON

2006 - 2007

• Developed a queueing model for hybrid manufacturing systems under a batch ordering policy to explore the effect of batching customer orders on manufacturers and customer delays

TEACHING EXPERIENCE

Assistant Professor, University of Regina, Regina, SK

September 2013 – Now

Lecturer, University of Waterloo, Waterloo, ON

September 2012 – August 2013

I have taught a number of courses at both the undergraduate and graduate levels. For each course I have designed the course outline, developed lecture material and designed course evaluation. The courses I taught are on the following topics:

- Production and Operations Management
- Quantitative Data Analysis
- Deterministic Optimization
- Probability and Statistics
- Advanced Calculus

REFEREED JOURNAL PUBLICATIONS

Published:

- E. Almehdawe, and B. Mantin, (2010), "Vendor Managed Inventory with a Capacitated Manufacturer and Multiple Retailers: Retailer Versus Manufacturer leadership", *International Journal of Production Economics.* **128(1)** 292-302.
- E. Almehdawe, E. Jewkes, and Q. He (2013), "A Markovian Queueing Model for Ambulance Offload Delays". *European Journal of Operational Research.* **226(3)** 602-614.
- E. Almehdawe, and E. Jewkes (2013), "Performance Analysis and Optimization of Hybrid Manufacturing Systems under a Batch Ordering Policy", *International Journal of Production Economics*. **144(1)** 200-208.

Working papers:

- E. Almehdawe, E. Jewkes, and Q. He, "A Nonpreemptive Queueing Network with Blocking Model for the Ambulance Offload Delay Problem".
- E. Almehdawe, E. Jewkes, and Q. He, "Modeling Emergency Department Patients' Delays Using Simulation".

INDUSTRY EXPERIENCE

Accreditation Engineer

2002 - 2003

- Evaluated the quality management systems for Testing and Calibration Labs in compliance with ISO 17025 standards
- Maintained the accreditation quality management system according to ISO 9001 standards

Quality Assurance Engineer

2000 - 2002

- Maintained the compliance of the quality management system according to ISO 9002:1994
 Standards
- Launched a computer aided program to trace the production order until it gives an end product using Oracle database programming language
- Lead and implemented a Human Productivity Improvement Program, HAPPI, to improve labor productivity

CONFERENCE PRESENTATIONS

- E. Almehdawe, E. Jewkes and Q. He, "An optimization model for the ambulance re-allocation problem", CanQueue, London, Canada (August 2012).
- E. Almehdawe, E. Jewkes and Q. He, "A Markovian Queueing Network of Ambulance Offload Delays", Informs Healthcare, Montreal, Canada (June 2011).
- E. Almehdawe, and E. Jewkes, "Ambulance off-load Delay Problem: A Queueing Network Perspective", CanQueue Conference, Winnipeg, Canada (August 2010).
- E. Almehdawe, and E. Jewkes, "Ambulance off-load Delay Problem: A Matrix Analytical Approach", CORS-MITACS Joint meeting, Edmonton, Canada (July 2010).
- E. Almehdawe, and E. Jewkes, "Queueing Networks with Blocking Approximation Algorithm", CanQueue Conference, Windsor, Canada (August 2009).
- E. Almehdawe, "Retailer Leadership Versus Manufacturer Leadership for a Vendor Managed Inventory Supply Chain", CORS-INFORMS International Conference, Toronto, Canada (June 2009).
- E. Almehdawe, and E. Jewkes, "A Queueing Model of Ambulance Off-load Delays", CORS-INFORMS International Conference, Toronto, Canada (June 2009).
- E. Almehdawe, and E. Jewkes, "Ambulance Off-load Delay Problem: A Queueing Network Perspective", MITACS Conference, Fredericton, Canada (May 2009).
- E. Almehdawe, and E. Jewkes, "Batch Ordering Policies for MTS-MTO Manufacturing Systems", South Western Ontario Operational Research Day SWORD, Waterloo, Canada (September 2007).
- E. Almehdawe, and E. Jewkes, "Batching Policies for a MTS-MTO Production System", CanQueue Conference, Halifax, Canada (August 2007).

PROFESSIONAL SERVICES

• Referee Services: International Journal of Production Economics (IJPE), Journal of the Operational Research Society (JORS), European Journal of Operational Research (EJOR).

- Session Chair: INFORMS Healthcare 2011 Conference, Montreal, Canada.
- Session Chair: CORS/MOPGP' 2012, Niagara Falls, Canada.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- INFORMS (Institute for Operations Research and the Management Sciences)
- CORS (Canadian Operational Research Society)
- MSOM (The Manufacturing and Service Operations Management Society)
- PEO (Professional Engineers Ontario), in progress