

Warren Sutton
3620 Partridge Path Apt.8
Ann Arbor, MI 48108
734-528-3835
wsutton@umich.edu

EDUCATION

University of Michigan, Ann Arbor, MI

Ph.D. in Industrial & Operations Engineering

Expected in 2009

Dissertation: "Performance Measures for Network Design Evaluation"

My dissertation has two desired outcomes: to design a set of principles for robust network design and to develop an approach for assessing different network topologies based on multiple metrics simultaneously. This will provide insight into the relationship between network attributes, performance measures, and topologies.

Advisor: Lawrence M. Seiford

University of Michigan, Ann Arbor, MI

M.S.E. in Industrial & Operations Engineering

December 2004

Area of Concentration: Production, Distribution, & Logistics

University of Pittsburgh, Pittsburgh, PA

B.S. in Industrial Engineering

May 2002

Honors: Summa Cum Laude

TEACHING EXPERIENCE

University of Michigan, Ann Arbor, MI – Graduate Student Instructor

2003 - Present

IOE447: Facilities Planning

Semesters Taught: Fall 2007, Fall 2008

Developed grading policies and graded homework assignments, exams, and course projects, & conducted office hours to help students better understand course material.

IOE551: Benchmarking, Performance Measurement, & Productivity Analysis

Semesters Taught: Winter 2004, Winter 2005, Winter 2006, Winter 2007, Winter 2008

Lectured in absence of the professor, collaborated in the creation of homework assignments and projects, administered grading of all homework assignments, & maintained course website.

IOE441 and IOE 541: Inventory Analysis

Semesters Taught: Fall 2003, Fall 2004, Fall 2005, Fall 2006

Created solutions for homework assignments, administered grading of all homework assignments and case studies, & met regularly with students for assistance with course material.

RELEVANT COURSEWORK

Production/Logistics - Inventory Analysis, Benchmarking/ Performance Measurement/ Productivity Analysis, Scheduling, Plant Flow Systems, Simulation

Optimization - Linear Programming, Non-linear Programming, Integer Programming, Stochastic Processes, Network Flows

Statistics - Statistical Quality Control and Design of Experiments

PUBLICATIONS AND PAPERS

- "Promoting Symmetric Weight Selection in Data Envelopment Analysis: A Penalty Function Approach" (with Stanko Dimitrov) accepted to the *European Journal of Operational Research*, November 2008
 - "Recovering from Delays: An Analysis of Airport Operations Using Data Envelopment Analysis" (with Seungkee Baek) under review at *Applications of Management Science*, October 2008
-

SOFTWARE SKILLS

MS Office Suite, Mathematica, SPSS, Promodel, Arena, DEA Solver, Frontier Analyst, EMS, DEAP, OnFront

RELATED INDUSTRY EXPERIENCE

Plastipak Packaging Inc., Plymouth, MI

Consultant

Jun 2005 to Dec 2007

Conceptualized and developed a simulation model of a large production and warehousing operation with over 1500 products. Leading to equipment and software purchase of \$200K.

PPG Industries Inc., Pittsburgh, PA

Production Analyst

May 2002 to Aug 2002

Monitored and recorded productivity of paint dispensing cells to assist in making decisions about consolation. Resulting in a workload redistribution and cost saving of \$800K in equipment.

FedEx Ground, Pittsburgh, PA

Technology Research Intern

**May 2001 to Aug 2001
Aug 2000 to Dec 2000**

Investigated new and emerging technologies in the scanning industry to evaluate potential business applications. Leading to a companywide upgrades in scanning technology.

Delphi Harrison Thermal, Lockport, NY

Production Engineering Intern

**Jan 2000 to Apr 2000
May 1999 to Aug 1999**

Designed and implemented visual controls and standard work practices for cellular manufacturing operations to improve cycle times, workplace organization and parts presentation.

GRANTS

- Rackham Spring/ Summer Research Grant **2008**
- NSF Award Number: CMMI-0540245
Project Title: Performance Measures for Network Design Evaluation **2006**

CONFERENCES

- *Network Migration Strategies*, INFORMS Annual Meeting 2008 – Washington, DC
- *Embedding Preferences in DEA: A Penalty Function Approach to Restricting Weights*, INFORMS Annual Meeting 2008 – Washington, DC
- *Hub vs. Non-Hub: An Analysis of US Airport Operational Efficiency using DEA*, IIE Doctoral Colloquium 2008 Poster Presentation – Vancouver, British Columbia, Canada
- *An Algorithm for Shortest Path Projections for the Additive Model in DEA*, INFORMS Annual Meeting 2007 – Seattle, WA
- *The Affect of Delays on US Airport Operations*, INFORMS Annual Meeting 2004 Poster Session – Denver, CO

PROFESSIONAL DEVELOPMENT

- University of Michigan: Rackham/ CRLT Seminar on College Teaching 2006
 - GEM's Future Faculty & Professionals Symposium 2006 – Chicago, IL
 - INFORMS Professional Colloquium 2006 – Miami, FL
 - University of Michigan – College of Engineering Graduate Student Mentor 2005-2006
 - Alliance for Graduate Education and the Professoriate (AGEP) Michigan Regional Conference 2005 – Ann Arbor, MI
 - The Compact for Faculty Diversity 2005 & 2003 – Arlington, VA & Miami, FL
 - INFORMS Doctorial Colloquium 2004 – Denver, CO
-

AWARDS AND HONORS

- ScholarPOWER Academic Award **2006**
 - SLOAN Scholar **2002 – Present**
 - Rackham Engineering Fellow **2002 - 2003**
 - Industrial & Operations Engineering Fellow **2002**
-

MEMBERSHIPS

- Institute for Operations Research and the Management Sciences (INFORMS)
- Institute of Industrial Engineers
- National Society of Black Engineers
- Society of Minority Engineers and Scientists – Graduate Component
- Alpha Pi Mu (Industrial Engineering Honor Society)