

Mericcan Usta

usta@stanford.edu

220 Triphammer Rd., Apt. 9 Ithaca, NY 14850-2541 • (650) 644-6596 • <http://www.stanford.edu/~usta>

PROFILE

Highly motivated Operations Management PhD with excellent academic background and vast experience in optimization, simulation, mathematical modeling and statistics. Looking forward to quantifying business risk, engineering decision models, generating actionable insights, and ultimately improving business operations using data-driven approaches including optimization, statistical analysis, simulation, and machine learning.

EDUCATION

Stanford University, Stanford, CA

Ph.D., Production and Operations Management (GPA: 4.09/4.00), conferral date: June 14th, 2015

“Buyer Strategies to Maintain Suppliers in Development-Intensive Supply Chains”

Committee: Warren H. Hausman (advisor), Feryal Erhun (co-advisor), Hau L. Lee (reader)

Additional Coursework in Econometric Analysis, Statistical Programming, and Contract Theory

Middle East Technical University, Ankara, Turkey

M.S., Operational Research, 2010, with Distinction

B.S., Chemical Engineering, 2009, with High Honors

B.S., Industrial Engineering, 2008, as a Salutatorian (2nd rank among 2,224 students)

SKILLS & TOOLS

Optimization Tools: Mathematica, GAMS, CPLEX: Obtained and verified analytical results of my doctoral research in Mathematica. Optimized order release policies of a medium-sized glass manufacturer and analyzed operational data for its new facility location decision in GAMS/CPLEX

Statistical Tools: R, Stata: Conducted a variety of analysis projects in R using public databases. Built and tested an auto loan take-up model in Stata.

Simulation Tools: Arena, Simulink: Built and optimized on a simulation model representative of the largest California county corrections system. Optimized priority rules of the department's elevator. Reverse engineered the control rules of temperature control equipment in Simulink.

Databases: SQL, MS Access: Built a working prototype of a university's bookstore ordering system

Scripting Languages: Bash, Perl: Translated output from varied biomedical lab instruments into .csv datasheets

Distributed Computing: Sun Grid Engine: Distributed MATLAB implementation of Intel research

General Programming Languages: MATLAB, C, FORTRAN: Extensive experience coding mathematical optimization and statistical estimation models.

Spoken Languages: Turkish, native language; English, excellent written and oral skills

WORK EXPERIENCE

Intel Corporation, Santa Clara, CA

Research Assistant with Karl G. Kempf and Feryal Erhun, 2011-2013

Improving Intel's Supplier Selection Process to Maintain a Healthy Supplier Body

- Introduced and developed mathematical-modeling-based policy suggestions for supplier selection considering Intel's influence on supplier health and rate of R&D
- Rationalized supplier development initiatives of Intel using game theory
- Won a \$50,000 grant from the UPS-Stanford Endowment Fund
- Numerically studied decision suggestions with a parallel computing model

WORK EXPERIENCE (continued)

Stanford University, Stanford, CA

Graduate Research Assistant with Lawrence M. Wein, 2015

- Built, validated, and optimized on a correctional system model representative of the largest California County. This is the first study in the U.S. to have characterized the efficient frontier between public safety and overcrowding subject to pretrial release and sentencing regime decisions.
- Presented counterintuitive results backed by simulation and endorsed by expert opinion.

Graduate Research Assistant with Warren H. Hausman and Feryal Erhun, 2010-present

- Coded the mathematical models stemming from my dissertation work and implemented the code on a distributed computer system across thousands of CPU threads
- Obtained and verified analytical results through a multi-kernel implementation in Mathematica

HONORS & AWARDS

Centennial Teaching Assistant Award, 2015

Gerald J. Lieberman Fellow, 2013-2014

Niles and Mary Lyn Moseley Engineering Fellow, 2009-2010

The Scientific and Technological Research Council of Turkey National MSc Scholar, 2008-2010

Scored 99.96 percentile (643rd/1,700,000+) in the Turkish University Entrance Examination, 2004

ARTICLES & CONFERENCE PRESENTATIONS

Buyer-Induced Supplier Collaboration Through Commitment to Low Prices and Diversified Sourcing (with F. Erhun and W. H. Hausman), 2014. *Working Paper*. Conference Presentations: INFORMS 2014, MSOM 2015 (refereed)

Supply Licensing When the Manufacturer Strategically Commits to Invest in R&D (with F. Erhun and W. H. Hausman). 2014. *Naval Research Logistics*, 61(4), 341-350. *Conference Presentations*: INFORMS 2013, MSOM 2013 (refereed)

Value Allocation to Maintain Suppliers in Development-Intensive Supply Chains (with F. Erhun and W. H. Hausman), 2014. *Working Paper*. *Conference Presentations*: INFORMS 2012 (sponsored), 2013 (sponsored), POMS 2012 (invited), 2014 (invited)

Competition and Collaboration in Service Parts Management Systems (with S. Savasaneril and Y. Serin). *Conference Presentations*: EURO 2009

TEACHING EXPERIENCE

Stanford University, Stanford, CA

Teaching Affiliate, Management Science and Engineering, Summer 2013

- Co-taught an introductory graduate class on Operations Management complete with an extensive case study project done in groups (Personal Evaluation Rating: 4.82/5)

Course Assistant, Management Science and Engineering, 2011-2013, 2014-present

- Assisted with a three-class operations management sequence and a new product development class for graduate students and an accounting class for undergraduate and graduate students

Middle East Technical University, Ankara, Turkey

Student Teaching Assistant, Industrial Engineering, Spring 2008

- Supported students programming discrete event simulations in Arena

SERVICE

Leadership

INFORMS Stanford Student Chapter, Financial Chair, 2012-2013

Stanford Turkish Student Association, President, 2012-2013

METU Creativity and Social Innovation Student Club, President, 2008-2009

SERVICE (continued)

Reviewer for Technical Journals

Production and Operations Management, 2013-2014

European Journal of Operational Research, 2010-2012

Journal of Scheduling, 2009

PROFESSIONAL AFFILIATIONS

INFORMS MSOM Society, 2010-present

POMS SCM College, 2011-present

PERSONAL INTERESTS

Business anthropology, foreign policy, geopolitics, and travel

REFERENCES

Warren H. Hausman

Professor

Management Science and
Engineering

Huang Engineering
Center 323

Stanford University

Stanford, CA 94305

T: (650) 723-9279

E: hausman@stanford.edu

Feryal Erhun

Fellow

Clinical Excellence Research
Center

75 Alta Road

Stanford University

Stanford, CA 94305

T: (650) 804-1630

E: ferhun@stanford.edu

Lawrence M. Wein

Jeffrey S. Skoll Professor of

Management Science

Stanford University Graduate

School of Business

Knight Management Center

E342

Stanford University

Stanford, CA 94305

T: (650) 724-1676

E: lwein@stanford.edu

Haldun Sural

Professor

Industrial Engineering

Middle East Technical

University

1 Dumlupinar Blvd

Ankara, Turkey 06800

T: +90 (312) 2104685

E: hsural@metu.edu.tr