

Canan Uçkun

CONTACT INFORMATION	5209 S. Kenwood Avenue Chicago, IL 60615	<i>Mobile:</i> (773) 574-3734 canan.uckun@gmail.com
RESEARCH INTERESTS	Energy systems and markets Sustainability and renewable energy Optimization of large-scale systems	
EMPLOYMENT	Argonne National Laboratory , Energy Systems, Argonne, IL. Center for Energy, Environmental, and Economic Systems Analysis (CEEESA) STA - Engineering Systems Modeling, June 2015 - present Postdoctoral Appointee, April 2012 - June 2015 Research projects: Environmental impact assessment, hydroelectric systems modeling, demand response through electric vehicles, stochastic unit commitment modeling with wind power uncertainty, grid-level energy storage, financial transactions for buildings, agent-based modeling of global helium markets	
EDUCATION	The University of Chicago , Booth School of Business, Chicago, IL. Ph.D. in Management Science/Operations Management, 2012. Master of Business Administration, 2011. Koç University , İstanbul, Turkey. M.S. in Industrial Engineering, 2006. Marmara University , İstanbul, Turkey. B.S. in Industrial Engineering, 2003.	
HONORS AND AWARDS	Eugene F. Fama Ph.D. Fellowship (2010 - 2011) TA Award for Exceptional Service to the EMBA Program (Singapore, London), 2010 Katherine Dusak Miller Fellowship (2009 - 2010) University of Chicago Doctoral Fellowship (2006 - 2009) The Scientific and Technological Council of Turkey (TÜBİTAK) Scholarship to support M.S. Thesis (2005 - 2006) Vehbi Koç Scholarship for graduate study, Koç University, covering tuition and monthly stipend (2004 - 2006)	
JOURNAL PUBLICATIONS	“Investment in Improved Inventory Accuracy in a Decentralized Supply Chain,” with F. Karaesmen, and S. Savaş. <i>International Journal of Production Economics</i> , 113(2) 546-566, 2008. “An Improved Stochastic Unit Commitment Formulation to Accommodate Wind Uncertainty,” with A. Botterud and J. Birge. in print at <i>IEEE Transactions on Power Systems</i> , 2015. “Flexible Operation of Batteries in Power System Scheduling with Renewable Energy,” with Nan Li, Emil Constantinescu, J. Birge, K. W. Hedman and A. Botterud. accepted at <i>IEEE Transactions on Sustainable Energy</i> , 2015.	
WORKING PAPERS	“Smart Homes with Price-Responsive Thermostats,” with D. Adelman. Under revision for second round review at <i>Operations Research</i> .	

MANUSCRIPTS IN PREPARATION	<p>“Storage Arbitrage Maximization under Day-Ahead and Real-Time Market Price Uncertainty,” with D. Krishnamurthy, Z. Zhou, P. Thimmapuram and A. Botterud.</p> <p>“An Enhanced Representation of Electrochemical Batteries in Electric Power Systems Models,” with N. A. Sepulveda, C. Vergara, A. Sakti, K. G. Gallagher, F. J. S. Jimenez and A. Botterud.</p> <p>“Nonlinearly Parameterized Basis Functions for Revenue Management,” with D. Adelman and C. Barz.</p>
CONFERENCE PROCEEDINGS	<p>“Patterns of Electric Vehicle Charging with Time of Use Rates: Case studies in California and Portland,” with M. Biviji, G. Bassett, J. Wang, and D. Ton. <i>IEEE Power and Energy Society, Innovative Smart Grid Technologies Conference 2014</i>.</p> <p>“Improving Electricity Markets to Accommodate a Large-Scale Expansion of Renewable Energy,” with A. Botterud and J. Birge. <i>International IIE Conference 2013</i>, İstanbul, Turkey, June 26-28, 2013.</p> <p>“Dynamic Electricity Pricing for Smart Homes,” with D. Adelman. <i>MSOM Annual Conference 2011</i>, Ann Arbor, Michigan, June 26-28, 2011.</p> <p>“Investment in Improved Inventory Accuracy in a Two-stage Supply Chain,” with F. Karaesmen, and S. Savaş. <i>International Conference on Information Systems, Logistics and Supply Chain, ILS2006</i>, Lyon, France, 2006.</p>
FUNDING	<p>Collaborator of the “Grid-Level Energy Storage for Integration of Renewable Energy” LDRD Award, Argonne National Laboratory, \$850K, Awarded, 2013-2016</p>
MEDIA MENTIONS	<p>“Next generation thermostats: Cool air, cooler savings”, <i>Capital Ideas</i>, Fall 2013 issue.</p>
PRESENTATIONS & INVITED SEMINARS	<p>“<i>Improving Electricity Markets to Accommodate a Large-Scale Expansion of Renewable Energy</i>”</p> <ul style="list-style-type: none"> - INFORMS Annual Meeting, San Francisco, CA, 2014 - 20th Conference of IFORS, Barcelona, Spain, 2014 - FERC’s Technical Conference on Increasing Real-Time and Day-Ahead Market Efficiency through Improved Software, Washington, D.C., 2014 - INFORMS Annual Meeting, Minneapolis, MN, 2013 - International IIE Conference, İstanbul, Turkey, 2013 <p>“<i>Dynamic Pricing of Electricity for Smart Homes with Price Responsive Appliances</i>”</p> <ul style="list-style-type: none"> - University of Illinois at Chicago, Department of Information and Decision Sciences, Chicago, IL, 2014 - Annual POMS Conference, Chicago, IL, 2012 - Northwestern University, Kellogg School of Management, Chicago, IL, 2012 - Guest speaker at the Ph.D. course “Emerging Areas in Operations Management” - IIT Stuart School of Business, Chicago, IL, 2011 - INFORMS Annual Meeting, Charlotte, NC, 2011 - Argonne National Laboratory, Argonne, IL, 2011 - MSOM Annual Conference, Ann Arbor, Michigan, 2011 - INFORMS Revenue Management and Pricing Section, Columbia University, NY, 2011 - INFORMS Annual Meeting, Austin, TX, 2010 <p>“<i>Nonlinearly Parameterized Basis Functions for Revenue Management</i>”</p> <ul style="list-style-type: none"> - INFORMS Annual Meeting, San Diego, CA, 2009 - INFORMS Revenue Management and Pricing Section, Evanston, IL, 2009 - INFORMS Annual Meeting, Washington, DC, 2008

TEACHING
EXPERIENCE

The University of Chicago, Booth School of Business, Chicago, IL.
- Teaching Assistant for regular and part-time MBA students, 2006 - 2012.
Courses: Operations Management, Revenue Management, Managerial Decision Modeling
- Teaching Assistant for Executive MBA program, 2010.
Course: Operations Management, TA evaluations: 4.4/5.0 (Singapore) and 4.7/5.0 (London).

Koç University, İstanbul, Turkey.
Teaching Assistant, 2004 - 2006.
- Operations Management (undergraduate level)

OTHER
EMPLOYMENT

Temsa Automotive, İstanbul.
Human Resources Specialist, 2003 - 2004.
- Worked on performance management and job appraisal projects.
- Prepared position descriptions and updated organization charts.
- Assisted management of compensation and benefits.

TÜSSİDE (Turkish Institute for Industrial Management), Gebze.
Assistant, 2002.
- Organized training activities, prepared reports on training results.

Eczacıbaşı Vitra, İstanbul.
Intern, 2001.
- Performed the routine controls of warehouse by using SAP.
- Prepared a facilities layout project in Quality Control part of the factory.

SERVICE

- Reviewer: *Operations Research*, *INFORMS Journal on Computing*, *IIE Transactions*, *IEEE Transactions on Power Systems*, *IEEE Transactions on Smart Grid*, *Wind Energy*.
- Dissertation Committee Member: Ferdi Eruysal, "Business Intelligence and Smart Pricing in Uncertain Competitive Environment," Information and Decisions Sciences, University of Illinois at Chicago, 2014.

COMPUTER
SKILLS

Programming Languages: Python, Visual Basic
Optimization: AMPL, Pyomo (Python Optimization Modeling Objects)
Operating Systems: Mac OS X, MS Windows
Tools: Matlab, Mathematica

SELECTED
COURSES

Optimization	Economics
- Convex Optimization	- Price Theory I, II
- Dynamic Programming	- Empirical Analysis
- Integer Programming	- Numerical Methods in Economics
- Stochastic Programming	- Economics of Information
Operations Management	- Advanced Micro Analysis
- Operational Pricing	MBA courses
- Warehousing/Distribution	- Operations Management
Mathematics and Statistics	- Financial Accounting
- Analysis I, II	- Macroeconomics
- Stochastic Processes I, II	- Managing the Workplace
	- Marketing Strategy

PERSONAL

U.S. permanent resident. Married.