

# Tülay Flamand

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<b>CONTACT INFORMATION</b>	Division of Economics & Business Colorado School of Mines 816 15th Street Golden, CO 80401	Phone: (303) 273-3757 Fax: (303) 273-3416 tflamand@mines.edu <a href="http://www.tulayflamand.net/">http://www.tulayflamand.net/</a>
<b>RESEARCH INTERESTS</b>	Retail Analytics Store-wide Shelf Space Allocation Airport Retailing Enhanced Optimization Methodologies Branch-and-Price Algorithm Decomposition Techniques Optimization-based Heuristic Approaches Dynamic Programming	
<b>TEACHING INTERESTS</b>	Business Analytics Manufacturing & Service Operations Management Supply Chain Management Business Process Optimization Management Science / Decision Sciences Linear & Integer Programming	
<b>ACADEMIC POSITIONS</b>	<b>Assistant Professor</b> Division of Economics & Business Colorado School of Mines Golden, CO	<b>2016 – Present</b>
<b>EDUCATION</b>	<b>Ph.D., Management Science</b> University of Massachusetts Amherst Isenberg School of Management Department of Operations & Information Management Dissertation: “Retail Analytics and Optimization for Store-wide Shelf-Space Management.” Advisor: Dr. Ahmed Ghoniem	<b>2011 – 2016</b>
	<b>M.S., Industrial Engineering</b> Istanbul Technical University, Istanbul, Turkey Thesis: “Sequential Decision Making: A Partially Observable Markov Decision Process (POMDP) Implementation For an Inventory Management Problem”	<b>2007 – 2010</b>
	<b>B.S., Mathematical Engineering (High Honors Degree)</b> Yildiz Technical University, Istanbul, Turkey	<b>2003 – 2007</b>
<b>ACADEMIC EXPERIENCE</b>	<b>Instructor</b> <ul style="list-style-type: none"><li>• EBGN 559A Supply Chain Management, Colorado School of Mines, Spring 2017 - 2018.</li><li>• EBGN 525A Business Analytics, Colorado School of Mines, Fall 2016 - 2018.</li><li>• OIM 301 Introduction to Operations Management, UMass Amherst, Fall 2013, Spring 2014.</li></ul>	

- OIM 301 Introduction to Operations Management, *Online*, UMass Amherst, Fall 2014, Summer 2015.
- OIM 240 Business Data Analysis, *Online*, UMass Amherst, Spring 2015, 2016.

#### Teaching Assistant

- OIM 301 Introduction to Operations Management, UMass Amherst, Fall 2014.
- OIM 310 Manufacturing & Service Operations Methods, UMass Amherst, Spring 2013, 2014.
- OIM 410 Business Process Optimization, UMass Amherst, Fall 2014.
- OIM 412 Supply Chain Management, UMass Amherst, Fall 2013.
- SCH-MGMT 825X Integer Programming (Graduate level), UMass Amherst, Spring 2015.

#### Research Assistant

2011 – 2016

University of Massachusetts Amherst  
Isenberg School of Management  
Department of Operations & Information Management

#### PUBLICATIONS

Flamand T., Ghoniem A., Haouari M., Maddah B. (2017). Integrated assortment planning and store-wide shelf space allocation: An optimization-based approach, *Omega*, 81: 134–149.

Flamand T., Ghoniem A., Maddah B. (2016). Promoting impulse buying by allocating retail shelf space to grouped product categories, *Journal of the Operational Research Society*, 67(7): 953–969.

Ghoniem A., Flamand T., Haouari M. (2016). Exact solution methods for a generalized assignment problem with location/allocation considerations, *INFORMS Journal on Computing*, 28(3): 589–602.

Ghoniem A., Flamand T., Haouari M. (2016). Optimization-based very large-scale neighborhood search for generalized assignment problems with location/allocation considerations, *INFORMS Journal on Computing*, 28(3): 575–588.

#### UNDER REVIEW/REVISION MANUSCRIPTS

Flamand T., Ghoniem A., Maddah B., Analytics for store-wide shelf space management, *under revision*.

Flamand T., Haouari M., Rabadi G., Column generation approaches for the optimal deployment problem, *under review*.

#### WORKING PAPERS

Flamand T., Ghoniem A., Maddah B., Hierarchical retail store layout optimization.

Flamand T., Haouari M., Rabadi G., A branch-and-price algorithm for the Hitchcock-Koopmans problem with reusable assets.

Flamand T., Chen H., Optimal gate assignment under the consideration of airport retailing.

Golbasi O., Flamand T., Simulation-optimization of spare part inventory policy for the maintenance of a mining equipment.

#### PRESENTATIONS

A Branch-and-Price Algorithm for the Hitchcock-Koopmans Problem with Reusable Transportation Assets, INFORMS Annual Meeting, Phoenix, AZ, November 7, 2018.

Analytics for Store-Wide Shelf-Space Management, INFORMS Annual Meeting, Phoenix, AZ, November 5, 2018.

Optimal Gate Assignment Under the Consideration of Airport Retailing, INFORMS Annual Meeting, Phoenix, AZ, November 4, 2018.

Column Generation Approaches for the Optimal Deployment Problem, INFORMS Optimization Society Conference, Denver, CO, March 24, 2018.

Retail Analytics on Store-Wide Shelf-Space Allocation, Seminar for Rocky Mountain Chapter of INFORMS, Golden, CO, March 15, 2018.

Retail Analytics on Store-Wide Shelf-Space Allocation, INFORMS Annual Meeting, Houston, TX, October 24, 2017.

Retail Analytics for Store-Wide Shelf-Space Management, POMS Conference, Seattle, WA, May 7, 2017.

Store-wide Shelf Space Analytics to Optimize Impulse Buying, INFORMS Annual Meeting, Nashville, TN, November 16, 2016.

Optimization Approaches For Generalized Assignment Problems with Location/Allocation Considerations, INFORMS Annual Meeting, Philadelphia, PA, November 4, 2015.

Very Large-Scale Neighborhood Search for Generalized Assignment Problems with Location/Allocation Considerations, INFORMS Computing Society Conference, Richmond, VA, January 12, 2015.

Optimizing a Class of Generalized Assignment Problems with Location/Allocation Considerations, INFORMS Annual Meeting, San Francisco, CA, November 12, 2014.

Invited Panelist at the UMass Amherst Student Chapter of INFORMS panel discussion: "The Process of Building a Teaching Portfolio", March 2014.

Store-wide Shelf Space Optimization to Maximize Impulse Buying, INFORMS Annual Meeting, Minneapolis, MN, October 8, 2013.

Impulse Purchase Maximization via Layout-based Shelf Space Allocation, POMS Conference, Denver, CO, May 3, 2013.

**PROFESSIONAL  
SERVICE**

- Core Faculty, Operations Research with Engineering PhD Program, Colorado School of Mines.
- Faculty Fellow, Payne Institute, Colorado School of Mines.
- INFORMS Student Affairs Committee (SAC) Member, 2017-2019.
- Chaired INFORMS session: Revenue Management, Pricing, 2017.
- Chaired INFORMS session: Military Applications, 2017.
- Chaired INFORMS session: Retail Analytics & Optimization session, 2016.
- Chaired INFORMS session: Retail Analytics & Optimization session, 2015.
- Referee for journals: Omega, Advances in Operations Research, Annals of Operations Research, ISERC conference proceedings, INFORMS TSL Conference, Management Decision, Letters in Spatial and Resource Sciences, JORS, EJOR, OR, POMS, IIE Transactions.
- Coordinator, AACSB Assurance of Learning Assessment Module: OIM 301 sections, Fall 2013, Spring 2014.

- UMass Student Chapter of INFORMS: Event Coordinator, 2013-2016.
- UMass Student Chapter of INFORMS: Secretary, 2012-2013.
- UMass Student Chapter of INFORMS: Vice President, 2011-2012.

**DOCTORAL  
COMMITTEES**

- Patrick O'Reilly, Mineral and Energy Economics, PhD, Colorado School of Mines, Committee Member (in progress).
- Henri van den Bulk, Computer Science, PhD, Colorado School of Mines, Committee Member (in progress).
- Joshua Betz, Mechanical Engineering, PhD, Colorado School of Mines, Committee Member (in progress).
- William Hamilton, Mechanical Engineering with a minor in Operations Research with Engineering, PhD, Colorado School of Mines, Committee Member (in progress).
- Peter Nesbitt, Operations Research with Engineering, PhD, Colorado School of Mines, Committee Member (in progress).

**DEPARTMENT AND  
UNIVERSITY  
COMMITTEES**

- Faculty Search Committee Member, Division of Economics and Business, Fall 2017.

**PROFESSIONAL  
MEMBERSHIPS**

- The Institute for Operations Research and the Management Sciences (INFORMS).
- Production and Operations Management Society (POMS).
- INFORMS Computing Society (ICS).

**AWARDS &  
HONORS**

- Excellence in Teaching Award, Division of Economics and Business, Colorado School of Mines (May 2018).
- Outstanding Researcher Award, Isenberg School of Management, UMass Amherst (April 2016).
- UMass Amherst INFORMS Student Chapter Outstanding Service Award (April 2016).
- Doctoral Consortium, POMS Annual Meeting, Orlando (April, 2016).
- Summer Dissertation Research Fellowship, UMass Amherst (February 2016).
- Dissertation Research Award, Isenberg School of Management, UMass Amherst (June 2015).
- Doctoral Student Colloquium, INFORMS Annual Meeting, San Francisco (2014).
- INFORMS Cum Laude Student Chapter Annual Award (2014).
- INFORMS Magna Cum Laude Student Chapter Annual Award (2011-2013).
- Scientific and Technological Research Council of Turkey (TUBITAK) fellowship (2007-2009).
- Distinctive Graduate, Yildiz Technical University (2007).
- Turkish American Women Scholarship Fund (2006).

**PHD ADVISEES**

- Joshua Pearson, ORWE PhD Program, (Co-advisor: Dr. Alexandra Newman), Spring 2017-Present.
- Lee Vorthman, ORWE PhD Program, (Co-advisor: Dr. Dinesh Mehta), Spring 2019-Present.