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EDUCATION

- 2008 – 2009
Université Libre de Bruxelles, Brussels, Belgium
**Researcher – Graphs and Mathematical Optimization Group –
Computer Engineering Department**
- 2007 – 2008
Université Catholique de Louvain, Louvain-la-Neuve, Belgium
Researcher – TOTEM project
- 2002 – 2007
Bilkent University, Ankara, Turkey
Ph.D. in Industrial Engineering
Thesis: Robust Network Design under Polyhedral Traffic Uncertainty
Supervisor: Prof Mustafa Ç. Pınar
Partially supported by TUBITAK (Turkey) and CNR (Italy)
- 2001 – 2002
Warwick Business School, Coventry, UK
MSc. In Management Science & Operational Research
Thesis: Non-Ratio Data in DEA
Supervisor: Dr. Estelle Shale
Supported by The British Council and Turkish Education Foundation
- 1997 – 2001
Marmara University, Istanbul, Turkey
B.S. in Industrial Engineering

PROFESSIONAL EXPERIENCE

- May 2014--
TOBB University of Economics and Technology, Ankara, Turkey
Management Committee member of the Science Institute
- Aug. 2013--
COST ICT-TD1207 Action
Management Committee member representing Turkey
- Feb. 2010 –
TOBB University of Economics and Technology, Ankara, Turkey
Vice chairman of the Industrial Engineering Department
- Dec. 2008--
TOBB University of Economics and Technology, Ankara, Turkey
Asst. Prof. in Industrial Engineering Department
- Feb. 2008 – Dec. 2008
Université Libre de Bruxelles, Brussels, Belgium
FNRS Postdoc researcher in Graphs and Optimization Group of
Computer Science Department
- Nov. 2007 – Feb. 2008
Université Catholique de Louvain, Belgium
Research Assistant in the TOTEM project.
- 2002 – 2007
Bilkent University, Ankara, Turkey
Research Assistant and Teaching Assistant for (undergraduate)
Introduction to Modeling and Optimization, Modeling and Methods
in Optimization, Operations Research in Finance, Engineering
Economy, and (graduate) Applied Linear Algebra, Convex Analysis.

AWARDS

- Awarded with a one-year postdoc scholarship from FNRS (Belgium).
- Awarded with Fellowship of Honor for graduate education by Bilkent University.
- Awarded with the full grant by ADONET/CIM for the doctoral summer school on Integer Programming in Lisbon.
- Graduated with Distinction from Warwick Business School. The master's thesis is concluded to be outstanding by the 3 markers and got 90%.
- Granted by The British Council and The Turkish Education Foundation with full scholarship for the MSc in Warwick Business School.
- Graduated with High Honor degree (GPA 3.85/4.00) from Marmara University and awarded as the best graduate of the Engineering Faculty in year 2001.
- Awarded as the best graduate of the Tekirdağ Anatolian High School in 1997 with GPA 5.00/5.00.

RESEARCH INTERESTS

- Mathematical Programming
- Network Design Under Traffic Uncertainty
- Routing in Telecommunication Networks
- Wireless Sensor Networks
- Robust Optimization
- Data Envelopment Analysis

RESEARCH PROJECTS

- Design of Energy Efficient WSN through topology control and partial redundancy.
Funded by TUBITAK (Turkey) – COST (ICT – TD1207)
Duration: August 2013 – February 2016
- Budget Control for the Ministry of National Education and Budget Based Performance Monitoring of Schools
Funded by TUBITAK (Turkey) within the KAMAG-1007 program
Principal Investigator: Dr. M. Umur Tosun
Duration: January 2009 - January 2012
- TOTEM (Toolbox for Traffic Engineering Methods)
Funded by Direction Générale des Technologies, de la Recherche et de l'Energie (Walloon Government - Belgium)
Principal Investigators: Prof Bernard Fortz (POMS / Université Catholique de Louvain)
Prof Olivier Bonaventure (CSE / Université Catholique de Louvain)
Prof Guy Leduc (RUN / Université de Liège)
- Telecommunications, Location, and Combinatorial Optimization
Funded by TUBITAK (Turkey) and CNRS (France)
Principal investigators: Prof A. Ridha Mahjoub (LAMSADE / Paris Dauphine)
Prof Hande Yaman (IE / Bilkent University)
Duration : April 2006 – April 2008.
- MISAG-CNR-1, Robust Provisioning of Virtual Private Networks
Funded by TUBITAK (Turkey) and CNR (Italy)
Principal investigators: Prof Francesco Maffioli (DEI / Politecnico di Milano)
Prof Mustafa Ç. Pinar (IE / Bilkent University)
Duration : March 2003 – May 2005.

PUBLICATIONS

- A. Altın-Kayhan and M. Şendil, **Optimal Path Selection under Different Data Redundancy Policies for More Secure Wireless Sensor Networks**, *INFOR*, 54(2),121-146, 2016.
- M. Ekmen and A. Altın-Kayhan, **A Conditional Multi-copy Strategy with Multiple Central Nodes for More Secure Wireless Sensor Networks**, *Electronic Notes in Discrete Mathematics*, 52, 261-268, June 2016.
- S. Babacoğlu, İ. Akgün, and A. Altın-Kayhan, **Sistem Geliştirme Projelerinde Kullanılan Olgunluk Değerlendirme Araçları Üzerine Bir Literatür Araştırması**, *Savunma Bilimleri Dergisi*, 13(1), 1-36, 2014.
- D. Altınbacak, B. Tavlı, K. Bıçakçı, and A. Altın-Kayhan, **Optimal number of routing paths in multi-path routing to minimize energy consumption in wireless sensor networks**, *EURASIP Journal on Wireless Communications and Networking*, 2013:252, 2013.
- A. Altın, B. Fortz, M. Thorup, and H. Ümit, **Intra-Domain Traffic Engineering with Shortest Path Routing Protocols**, *Annals of Operations Research*, 2004, 65-95, 2013.
- A. Altın, B. Fortz, and H. Umit, **Oblivious OSPF Routing with Weight Optimization under Polyhedral Demand Uncertainty**, *Networks*, 60(2),132-139, 2012.
- H. Ö. Ünver, M.U. Uluer, A. Altın, Y. Taşçıoğlu, and S.E. Kılıç, **An Eco-Improvement Methodology for Reduction of Product Embodied Energy in Discrete Manufacturing**, *Leveraging Technology for a Sustainable World*, Proceedings of the 19th CIRP Conference on Life Cycle Engineering, University of California at Berkeley, Berkeley, USA, May 23 - 25, 405-410, 2012.
- M. Aydoğan, M. Durak, M. Özyılmaz, G. Sakarya, B.S. Sertbarut, Y.K. Uğur, H. Gültekin, ve A. Altın, **Ana Modeller için Boya Sonrası Montaj Hattında Karar Destek Sistemi Tasarımı**, *Endüstri Mühendisliği*, 23(3), 59-79, 2012.
- A. Altın, H. Yaman, and M. Ç. Pınar, **A Hybrid Polyhedral Uncertainty Model for The Robust Network Loading Problem**, *Performance Models and Risk Management in Communication Systems*, Gulpınar, Harrison and Rustem (Eds.), Springer Optimization and Its Applications, 46, 157-172, 2011.
- A. Taşkınca, E. Bayrakçı, O. Babat, S. Yüksel, Ö. O. Dalgıç, A. Altın, and H. Gültekin, **Atatürk Havalimanı Dış Hatlar Terminalinde Kontuar Atamaları için Karar Destek Sistemi Geliştirilmesi**, *Endüstri Mühendisliği*, 22(3), 2-21, 2011.
- A. Altın, H. Yaman, and M. Ç. Pınar, **The Robust Network Loading Problem under Polyhedral Demand Uncertainty: Formulation, Polyhedral Analysis and Computations**, *INFORMS Journal on Computing*, 23(1), 75-89, 2010.
- A. Altın, P. Belotti, and M. Ç. Pınar, **OSPF Routing with Optimal Oblivious Performance Ratio under Polyhedral Demand Uncertainty**, *Optimization and Engineering*, 11(3), 395-422, 2010.
- A. Altın, B. Fortz, M. Thorup, and H. Ümit, **Intra-Domain Traffic Engineering with Shortest Path Routing Protocols**, *4OR*, Vol. 7, No. 4, December 2009, pp. 301-336.
- A. Altın, E. Amaldi, P. Belotti and M. Ç. Pınar, **Provisioning Virtual Private Networks under Traffic Uncertainty**, *Networks*, Vol. 20, No. 1, January 2007, pp. 100-115.
- A. Altın , E. Amaldi, P. Belotti and M. Ç. Pınar, **Provisioning Virtual Private Networks under Traffic Uncertainty**, CTW 04, June 2004, Menaggio, Italy. *Electronic Notes in Discrete Mathematics* 17(C) pp. 19-22, 2004.
- A. Altın and E. Shale, **On the Use of Non-Ratio Data in DEA**, *working paper*.

THESIS SUPERVISED

- Lucia Arena, M.S., New Separation Algorithms for the b-Coloring of a Graph, June 2009.
- Melek Şendil, M.S., Robust Wireless Sensor Network Design, *December 2013*.
- Sinan Babacoğlu, PhD, Technical Risk Analysis in System Development Projects, *January 2015*.

- Merve Ekmen, M.S., A Conditional Multi-Copy Strategy with Multiple Central Nodes for More Reliable Wireless Sensor Networks, *December 2015*.
- Tuğçe Yücel, M.S., Energy Efficient Network Design via Redundancy Based Reliability Strategy for Wireless Sensor Networks, *December 2015*.
- Muhammed Osman Koç, Y.L., Coverage Focused Reliable Wireless Sensor Network Design, *in progress*.

ACTIVITIES

2014 June 25-27	YAEM 2014, Bursa Title of presentation: Improving Wireless Sensor Network Reliability by Topology Control
2013 Sept 30- Oct 2	CWMINLP 13, Paris – Invited Speaker Title of presentation: Improving Wireless Sensor Network Reliability by Topology Control
2010 July 11-14	EURO 2010, Lisbon. Title of presentation: A New Demand Uncertainty Set Definition and The Robust Network Loading Problem.
2010 June 30 – July 2	YAEM 2010, İstanbul. Title of presentation: A New Demand Uncertainty Set Definition and The Robust Network Loading Problem.
2009 June 22-24	YAEM 2009, Ankara. Title of presentation: Robust OSPF Routing Problem under Demand Uncertainty.
2009 March 1-4	DIMAP and Warwick Business School – Invited Speaker.
2008 March 20-21	14 th Mathematical Programming Meeting, Han-sur-Lesse Title of presentation: The Network Loading Problem under Hose Demand Uncertainty: Formulation, Polyhedral Analysis, and Computations
2007 April 26	Université Libre de Bruxelles – Invited Speaker. Title of the talk: Network Loading Problem for a Polyhedral Demand Uncertainty Definition
2007 April 22-25	INOC 2007, Spa Title of presentation: Open Shortest Path First Routing with Optimal Oblivious Performance Ratio under Polyhedral Demand Uncertainty
2006 December 11-24	Visited Université Blaise-Pascal Clermont II (ISIMA) to work with Prof Ali Ridha Mahjoub
2006 October 23-24	Attended the “Workshop on Network Optimization”, Lambrecht Title of presentation: Open Shortest Path First Routing with Optimal Oblivious Performance Ratio Under Polyhedral Demand Uncertainty
2006 October 6	Seminer in Bilkent University Department of Industrial Engineering Title of presentation: Open Shortest Path First Routing with Optimal Oblivious Performance Ratio Under Polyhedral Demand Uncertainty

2005 July Attended the “ADONET/CIM Doctoral Summer School on Geometric and Algebraic Approaches to Integer Programming”, Lisbon

2005 July YAEM 2005, Istanbul
Title of presentation: Open Shortest Path First Routing with Optimal Oblivious Performance Ratio in Telecommunications Networks

2004 October 1 Seminar in Bilkent University Department of Industrial Engineering
Title of presentation: VPN Design under Traffic Uncertainty

2004 July 26-28 Optimization 2004, Lisbon
Title of presentation: VPN Design under Traffic Uncertainty

2003 December &
2004 November Visited Politecnico di Milano to work with Prof Francesco Maffioli, Prof Edoardo Amaldi, and Dr Pietro Belotti.

REFEREED JOURNALS:

Management Science
OMEGA-International Journal Of Management Science
European Journal of Operations Research
INFORMS Journal on Computing.
Computers & Operations Research
IIE Transactions
Journal of Operations Research Society
Discrete Applied Mathematics.
Networks.
Computer Networks
Naval Research Logistics
International Journal of Communication Systems
Computational Optimization and Applications
Turkish Journal Of Electrical Engineering & Computer Sciences