

OSMAN ALP, Ph. D. – CV

Personal Information

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Education

1995 - 2000 *Ph. D. Degree*
Industrial Engineering Department,
Middle East Technical University, Ankara, Turkey.

1993 – 1995 *M.S. Degree*
Industrial Engineering Department,
Middle East Technical University, Ankara, Turkey.

1989 – 1993 *B. S. Degree*
Industrial Engineering Department,
Middle East Technical University, Ankara, Turkey.

Academic Experience

2015 – *Associate Professor*
Operations and Supply Chain Management
Haskayne School of Business,
University of Calgary, Calgary, AB Canada

2013 – 2015 *Associate Professor*
Department of Industrial Engineering,
TED University, Ankara, Turkey.

2012 – 2013 *Visiting Professor*
Accounting, Operations, and Information Systems
Alberta School of Business,
University of Alberta, Edmonton AB, Canada

2003 – 2012 *Assistant Professor.*
Department of Industrial Engineering,
Bilkent University, Ankara, Turkey.

2000 – 2003 *Postdoctoral Research Fellow and Sessional Instructor.*
Department of Finance and Management Science,
School of Business, University of Alberta, Edmonton, Canada.

1994 – 2000 *Research and Teaching Assistant.*
Industrial Engineering Department,
Middle East Technical University, Ankara, Turkey.

Administrative Experience

- 2017 – Area Chair
Operations and Supply Chain Management
Haskayne School of Business, University of Calgary
- 2016 – 2017 Research Chair
Operations and Supply Chain Management and Finance
Haskayne School of Business, University of Calgary
- 2013 – 2015 Chair
Department of Industrial Engineering,
TED University, Ankara Turkey
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Experience in Applied Research Projects

- 2021 – 2022 Co-Applicant Investigator
“Managing Customer Expectations in On-Demand Service Platforms”, sponsored by SSHRC Partnership Engage Grants
- 2019 – 2022 Principle Investigator
“*Analyzing the Potential Bias and Unfairness in Artificial Intelligence Algorithms and Assessing the Impact on Society*”, sponsored by SSHRC Insight Grants
- 2018 – 2021 Researcher
“*Canadian Northern Corridor Program: A research program on the feasibility of multi -modal rights-of-way in Canada’s north and near-north*”, sponsored by SSHRC Partnership Development Grant
- 2011 – 2012 Researcher
“*Production Planning and Scheduling for the Production of Doors in the Body Shell Department of Renault factory*”, sponsored by Ministry of Science, Industry, and Technology and OYAK Renault
- 2009 – 2011 Principle Researcher.
“*Hazardous Waste Transportation and Disposal System Design: Minimization of Environmental and Public Risks*”, sponsored by TUBITAK
- 2008 Researcher.
“*Cycle Time Optimization in Press Department of Renault factory*”, sponsored by OYAK Renault.
- 2008 Researcher.
“*Production Planning based on Available Information*”, sponsored by TOFAS FIAT.

- 2001 - 2003 Researcher.
“*Regional Fiber Optic Telecommunications Network Design*”, sponsored by Bell-West Canada.
- 2001 Principle Researcher.
“*Relocating an Existing Concrete Plant of Inland Cement Industries*”, sponsored by Inland Cement Canada.
- 1999 – 2000 Researcher.
“*Implementation of Oracle ERP Applications Finance and Purchasing Modules for Financial Units of Middle East Technical University*”, sponsored by the university.
- 1996 – 1997 Researcher.
“*A Computer Aided Production Management System Design for Holonic Manufacturing*”, sponsored by TAKSAN A.S. (a leading machine tool manufacturing company) and Technology Development Foundation of Turkey.
- 1995 – 1996 System Analyzer, Designer and Developer.
“*A Software Tool for the Distribution System of a Local Soft Drinks Reseller*”, sponsored by MEGAS (a private soft drinks reseller).
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Publications in Refereed Journals

- O. Alp and A. Sen. 2022. “*Transitioning to Sustainable Freight Transportation by Integrating Fleet Replacement and Charging Infrastructure Decisions*”. OMEGA. To appear.
- O. Alp and A. Sen. 2021. “*Delegation of Stocking Decisions Under Asymmetric Demand Information*”. Manufacturing & Service Operations Management. 23, 55 – 69 (1)
- T. Tan and O. Alp. 2016. “*Optimal sourcing from alternative capacitated suppliers with general cost structures*”. OMEGA. 58, 26 – 32.
- U. Gurler, O. Alp, N.C. Buyukkaramikli. 2014. “*Coordinated Inventory Replenishment and Outsourced Transportation Operations*”. Transportation Research Part E. 70 , 400 – 415
- O. Alp, T. Huh, T. Tan. 2014. “*Inventory Control with Multiple Setup Costs*”. Manufacturing & Service Operations Management. 16(1), 89 – 103
- N.C. Buyukkaramikli, U. Gurler, O. Alp. 2014. “*Coordinated Logistics: Joint Replenishment with Capacitated Transportation for a Supply Chain*”. Production and Operations Management. 23(1), 110 – 126
- M.M. Tanrikulu, A. Sen, and O. Alp. 2010. “*A Joint Replenishment Policy with Individual Control and Constant Size Orders*”. International Journal of Production Research. 48. 4253 – 4271

G. Mincsovicz, T. Tan, and O. Alp. 2009. “*Integrated Capacity and Inventory Management with Capacity Acquisition Lead Times*”. European Journal of Operational Research, 196, 949 – 958

M.F. Pac, O. Alp, and T. Tan. 2009. “*Integrated Workforce Capacity and Inventory Management Under Temporary Labor Supply Uncertainty*”. International Journal of Production Research, 47(15), 4281 – 4304.

T. Tan and O. Alp. 2009. “*An Integrated Approach to Inventory and Flexible Capacity Management Under Non-stationary Stochastic Demand and Set-up Costs*”. OR Spectrum, 31(2), 337 – 360

O. Alp and T. Tan. 2008. “*Tactical Capacity Management under Capacity Flexibility in Make-to-Stock Systems*”. IIE Transactions, 40(3), 221 – 237.

O. Alp, K. Erkoy, B.Y. Kara, and I. Sabuncuoglu. 2007. “*MAN Turkey Improves the Assembly Line Performance by Managing the In-House Parts*”. Interfaces, 37(4), 353-354.

E. Erkut and O. Alp 2007. “*Designing a Road Network for Hazardous Materials Shipments*”, Computers & OR, 34(5), 1389-1405

E. Erkut and O. Alp. 2007. “*Integrated Routing and Scheduling of Hazmat Trucks with Stops En-Route*”. Transportation Science, 41(1), 107-122.

O. Alp, Z. Drezner, and E. Erkut. 2003. “*An Efficient Genetic Algorithm for the p-Median Problem*”, Annals of Operations Research. 122, 21-42.

O. Alp, N. K. Erkip, and R. Gullu. 2003. “*Optimal Lot Sizing/Vehicle Dispatching Policies under Stochastic Lead Times and Stepwise Fixed Costs*”, Operations Research. 53(1). 160-166.

O. Alp, N. K. Erkip, and R. Gullu. 2003. “*Outsourcing Logistics: Design of Contracts Between a Manufacturer and a Transporter*”, Transportation Science, 37(1), 23-39.

Book Chapter

T. Tan, O. Alp. 2016. “*Tales of a Fashion So(u)rcerer: Optimal Sourcing, Quotation, and In-House Production Decisions*”. In Analytical Modeling Research in Fashion Business. T-M. Choi (editor). 129 – 153. Springer Singapore.

Scholarly Work in Progress

O. Alp, T. Tan, M. Udenio. 2020. “*Adoption of Electric Trucks in Freight Transportation*”. Working Paper. <http://hdl.handle.net/1880/111250>

O. Alp, I. Cribben, A. Ingolffson, and M. Samorani. 2014. “*Optimizing and Testing Traffic-Based Staff Schedules for a Retail Chain*”. Working Paper.

P. Elaldi, O. Alp, and B. Kara. 2013. “*Intermodal Transportation of Hazardous Materials with Supplier Selection: Application in Turkey*”. Submitted for publication.

O. Alp, G. Akin. 2013. “*Inventory Management of Medical Supplies*”. Submitted for publication.

E. Uzun, O. Alp. 2009 “*A Heuristic Algorithm for an Integrated Routing and Scheduling Problem with Stops En-Route*”. Working paper.

O. Alp, E. Demirci, N. Erkip, and A. Sen 2009. “*Aggregate Production Planning Revisited: An Industrial Application Bringing in Research Questions*”. Working paper.

B. Karakaya and O. Alp. 2008. “*Shortest Path Problems with Re-routing en-route*”. Working paper.

Other Publications

C. Dalokay, G. Ertürk, İ.S. Kaçar, O. Ünlüönen, G. Yazici, O. Alp. 2005. “*Dahili İmalat Parça Yönetimi: Evinde Üret, Sistemli Yönet*”. Endüstri Muhendisligi Dergisi. (In Turkish)

Alp, O., R. Gullu, S. Kayaligil, O. Kirca, and T. Tufekci. 1997. “*A Tabu Search Algorithm For Cell Formation Problem*”, Remaphos Euroka/Factory 2nd Working Group Meeting Proceedings

Alp, O., R. Gullu, S. Kayaligil, O. Kirca, and T. Tufekci. 1997. “*A Conceptual Model for MPS-MRP-CRP Operation in Holonic Manufacturing*”, Remaphos Euroka/Factory 2nd Working Group Meeting Proceedings.

Books Edited

2005 – 2011 *Endüstri Projeleri (Industry Projects) 2005 – 2011*
Editorial board.
Department of Industrial Engineering, Bilkent University
Ankara.

Services to the Field

2019 – *Meetings Committee Member*
INFORMS – Institute for Operations Research and Management
Science

2005 – *Editorial Advisory Board Member*
Computers & Operations Research, Elsevier

2013 – 2015 *Chair of Course Scheduling Committee*
TED University
Responsible of generating course schedules for the university

2009 – 2012	<i>Member of Board of Directors</i> Bilkent USIM (University Industry Collaboration Center). Founding Member
2009 – 2012	<i>Chair of Summer Training Committee</i> Department of Industrial Engineering, Bilkent University Responsible of improvement and conduct of the summer training courses. Designed new programs.
2007 – 2012	<i>Chair of Student Perception Evaluation Committee</i> Department of Industrial Engineering, Bilkent University Design and conduct surveys to assess the extent that the departmental outcomes are achieved from the students' perspective.
2006 – 2011	<i>Editorial Board Member</i> Endustri Muhendisligi Dergisi (Industrial Engineering Journal), Chamber of Mechanical Engineers
2006 – 2009	<i>Member of Graduate Committee</i> Department of Industrial Engineering, Bilkent University Responsible of design, improvement, conduct of the graduate program.
2003 – 2007	<i>Member of Executive Committee</i> Turkish Operational Research Society

Theses

2000	Ph. D. Thesis. “ <i>Design and Analysis of Contracts Between a Manufacturer and A Transporter</i> ”, supervised by Prof. Dr. Nesim Erkip and Assoc. Prof. Dr. Refik Gullu.
1995	M.S. Thesis. “ <i>Analysis of Production/Inventory Systems Under Multiplicative Form of Forecast Evolution</i> ”, supervised by Assoc. Prof. Dr. Refik Gullu.

Theses Supervised

2012	Nurcan Bozkaya. M.S. Thesis. “ <i>Production Planning and Scheduling for the Production of Doors in the Body Shell Department of Renault Factory</i> ”. Co-supervised with Mehmet Rustu Taner. Thesis sponsored as SANTEZ by Ministry of Science, Industry, and Technology.
2012	Ezel Budak. M.S. Thesis. “ <i>Analysis of Call Center Operations of a Hospital</i> ”.

- 2011 Pelin Elaldi. M.S. Thesis. “*Distribution of Petroleum Products in Turkey by Using Multiple Modes of Transportation*”. Co-supervised by Bahar Yetis Kara.
- 2010 Gokce Akin, M.S. Thesis. “*Inventory Management of Medical Supplies in a Hospital*”
- 2010 Yasar Altunoglu. M.S. Thesis. “*Cash Inventory Management at ATMs*”. Co-supervised with Alper Sen
- 2009 Emre Uzun. M.S. Thesis. “*A Heuristic Algorithm for an Integrated Routing and Scheduling Problem with Stops en-route*”,
- 2008 Banu Karakaya. M.S. Thesis. “*Shortest Path Problems with Re-routing en-route*”
- 2007 Nurdan Ahat. M.S. Thesis. “*Multi-period Inventory Models with Price Protection*”, co-supervised with Alper Sen
- 2006 Mehmet Fazil Pac. M.S. Thesis. “*Integrated Flexible Capacity and Inventory Management under Flexible Capacity Uncertainty*”
- Nasuh Cagdas Buyukkaramikli. M.S. Thesis. “*Joint Replenishment Problem in Two Echelon Inventory Systems with Transportation Capacity*”, co-supervised with Ulku Gurler
- Mehmet Mustafa Tanrikulu. M.S. Thesis. “*Joint Replenishment Problem with Truck Cost Structures*”, co-supervised with Alper Sen
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Courses Taught

At University of Calgary
Operations and Supply Chain Management
Procurement Management for Supply Chains
Logistics Management
Managerial Decision Making (Executive MBA)
Inventory Management (PhD)

At TED University:
Introduction to Information Technologies
Introduction to Multivariable Calculus and Linear Algebra
Introduction to Probability Theory
Lean Process Design
Modeling and Analysis Under Uncertainty (Graduate Level)

At Alberta School of Business, University of Alberta:
Operations Management (Executive MBA)
Business Process Management
Distribution Management
Service Operations Management

At Bilkent University:
Analytical Models for Supply Chain Management (Graduate Level)
A Process Outlook for Industrial Engineers
Inventory Planning Problems
Modeling and Analysis of Production Systems
Operations Analysis and Design
Quality Assurance and Reliability
Production Planning and Control
Stochastic Models
Systems Design – Analysis and Synthesis

Areas of Interest

Inventory Problems / Distribution Systems
Supply Chain Management and Logistics
Sustainable Transportation
Transportation of Hazardous Materials

Training Certificates

1999 *Oracle Applications Finance Module Partner Training*,
including General Ledger, Accounts Receivables, Accounts
Payables, Purchasing, Assets.
Oracle Applications Discrete Manufacturing Partner Training,
including Inventory, WIP, Engineering, Planning, Purchasing,
Order Entry, Supply Chain, and Cost Management.

Congress and Symposiums

- October 2019 INFORMS Annual Meeting. Seattle, WA. “Adoption of Electric Trucks in Freight Transportation”
- October 2018 INFORMS Annual Meeting. Phoenix, AZ. “Adoption of Electric Trucks in Freight Transportation”
- October 2017 INFORMS Annual Meeting. Houston, TX. “Optimal Adoption Strategies of Electric Vehicles in Commercial Fleets”
- October 2017 INFORMS Annual Meeting. Nashville, TN. “Scheduling of Regular and On-Call Staff in Retailers when Sales are Correlated with Store Traffic and Staffing”
- June 2017 MSOM Conference. Chapel Hill, NC. “Store Incentives and Retailer Inventory Performance under Asymmetric Demand Information and Unobservable Lost Sales”
- May 2016 CORS Annual Conference. Banff, AB. “Incentive Alignment in an Inventory System under Asymmetric Information and Unobservable Shortages”
- May 2016 POMS Annual Conference. Orlando, FL. “Inventory Management for a Lost Sales Environment Under Asymmetric Information”
- November 2014 INFORMS Annual Meeting. San Francisco. “Coordinated Inventory Replenishment and Outsourced Transportation Operations”.
- June 2014 MSOM Conference. Seattle. “Optimal Sourcing Decisions under Alternative Capacitated Suppliers and General Cost Structures”.
- June 2011 INFORMS Health Care Conference. Montreal. “Analysis and Design of Call Center Operations of a Hospital”.
- October 2010 INFORMS Annual Meeting, Austin. “Improved Inventory Control in Supply Chains Under Lost Sales and Incomplete Information”
- October 2010 INFORMS Annual Meeting, Austin. “A Hybrid Policy for the Inventory Control of Medical Supplies in Hospitals”
- October 2009 INFORMS Annual Meeting, San Diego. “Inventory Control with Partial Batch Ordering”
- October 2009 INFORMS Annual Meeting, San Diego. “Tales of a So(u)rcerer: Optimal Sourcing Decisions Under Alternative Capacitated Suppliers”

August 2008	10 th International Symposium on Inventories, presented “Tactical Capacity Management under Capacity Flexibility in Make-to-Stock Systems”, Budapest, Hungary
July 2007	INFORMS Annual Meeting, Seattle, “Multi-period Inventory Models with Price Protection”
July 2006	INFORMS International, Hong Kong, “Workforce Capacity Management in Make-to-Stock Systems with Uncertain Supply of Contingent Labor”
July 2005	National Congress on IE/OR, presented “ <i>Rassal Talep ve Sabit Sipariş Giderleri Altında Envanter ve Esnek Kapasite Yönetimine Bütünleşik Bir Yaklaşım</i> ”, İstanbul, Turkey..
July 2004	M&SOM 2004, presented “ <i>Analysis of Lot Sizing / Vehicle Dispatching Problems with Stochastic Transit Times and Step-Wise Costs</i> ”, Eindhoven, the Netherlands.
August 1999	4 th ISIR Summer School on Inventory Modeling, presented “ <i>Integrated Vehicle Dispatching and Inventory Control Problem Under Transportation Contracts</i> ”, Exeter, UK.
August 1998	10 th International Symposium on Inventories, presented “ <i>Design of Contracts Between a Manufacturer and a Transporter</i> ”, Budapest, Hungary.
March 1997	REMAPHOS EUROKA/FACTORY 2 nd Working Group Meeting, presented “ <i>A Tabu Search Algorithm For Cell Formation Problem</i> ”, Moscow, Russia.
June 1995	National Congress on IE/OR, presented “ <i>Analysis of Production/Inventory Systems Under Multiplicative Form of Forecast Evolution</i> ”, Ankara, Turkey.
June 1993	National Congress on IE/OR, presented “ <i>Modeling a Solid Waste Management System as an Inventory Problem</i> ”, İstanbul, Turkey.

Computer Skills

Programming Languages	Pascal, C++, Visual Basic.
Application Software	<i>Optimization Packages:</i> GAMS, OPL, AMPL, LINDO, LINGO, GUROBI <i>Statistical Packages:</i> SPSS, Minitab, R <i>Simulation Packages:</i> SLAM, ARENA <i>ERP Applications:</i> Oracle Manufacturing, Finance, Purchasing, Order Entry <i>GIS Packages:</i> ESRI ArcView GIS <i>Database Packages:</i> MS Access, Borland Dbase, Paradox

Languages

English, Turkish
