

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

2023 – *Professor*
Operations and Supply Chain Management
Haskayne School of Business,
University of Calgary, Calgary, AB Canada

2015 – 2023 *Associate Professor*
Operations and Supply Chain Management
Haskayne School of Business,
University of Calgary, Calgary, AB Canada

2012 – 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

2021 – Co-Director
Digitization for Innovative Supply Chains (DISC) Consortium
Haskayne School of Business, University of Calgary
<http://haskayne.ucalgary.ca/disc>

2017 – Area Chair
Operations and Supply Chain Management
Haskayne School of Business, University of Calgary

2016 – 2017 Research Director
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

Awards and Recognitions

2021 Big Idea Research Grant Recipient
Haskayne School of Business, University of Calgary

2020 Dean’s Research Scholar
Haskayne School of Business, University of Calgary

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 Principal Investigator
“*Analyzing the Potential Bias and Unfairness in Artificial Intelligence
Algorithms and Assessing the Impact on Society*”, sponsored by
SSHRC Insight Grants

2018 – 2021 Collaborator
“*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 Grants

2011 – 2012 Co-Applicant Investigator
“*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	Principal Researcher. “ <i>Hazardous Waste Transportation and Disposal System Design: Minimization of Environmental and Public Risks</i> ”, sponsored by TUBITAK
2008	Researcher. “ <i>Cycle Time Optimization in Press Department of Renault factory</i> ”, sponsored by OYAK Renault.
2008	Researcher. “ <i>Production Planning based on Available Information</i> ”, sponsored by TOFAS FIAT.
2001 - 2003	Researcher. “ <i>Regional Fiber Optic Telecommunications Network Design</i> ”, sponsored by Bell-West Canada.
2001	Principle Researcher. “ <i>Relocating an Existing Concrete Plant of Inland Cement Industries</i> ”, sponsored by Inland Cement Canada.
1999 – 2000	Researcher. “ <i>Implementation of Oracle ERP Applications Finance and Purchasing Modules for Financial Units of Middle East Technical University</i> ”, sponsored by the university.
1996 – 1997	Researcher. “ <i>A Computer Aided Production Management System Design for Holonic Manufacturing</i> ”, sponsored by TAKSAN A.S. (a leading machine tool manufacturing company) and Technology Development Foundation of Turkey.
1995 – 1996	System Analyzer, Designer and Developer. “ <i>A Software Tool for the Distribution System of a Local Soft Drinks Reseller</i> ”, sponsored by MEGAS (a private soft drinks reseller).

Working Papers

[W5] A. Aslani and O. Alp. 2023. “*Scope Contracts to Coordinate Assortment Planning in Omni-Channel Retail Supply Chains*”.

[W4] Y. He, X. Tang, and O. Alp. 2023. “*Cooperation or Encroachment in Industrial Symbiosis*”.

[W3] A. Aslani and O. Alp. 2022. “*Assortment Planning for Omni-Channel Retailers under Product Returns*”. Available at <https://ssrn.com/abstract=4190704>

[W2] O. Alp and M. Ajam. 2022. “*An Approach to Plan Infrastructural Investments to Facilitate Domestic Trade*”. Available at <https://ssrn.com/abstract=4218501>

[W1] O. Alp, T. Tan, and M. Udenio. 2022. “*Retreat, Defend, or Attack? Optimal Investment Decisions in Green Technology*”. Available at <https://ssrn.com/abstract=4207037>

Publications in Refereed Journals

- [P17] O. Alp, T. Tan, and M. Udenio. 2022. “*Transitioning to Sustainable Freight Transportation by Integrating Fleet Replacement and Charging Infrastructure Decisions*”. OMEGA. 109, 102595. <https://doi.org/10.1016/j.omega.2022.102595>
- [P16] O. Alp and A. Sen. 2021. “*Delegation of Stocking Decisions Under Asymmetric Demand Information*”. Manufacturing & Service Operations Management. 23, 55 – 69 (1). <https://doi.org/10.1287/msom.2019.0810>
- [P15] T. Tan and O. Alp. 2016. “*Optimal sourcing from alternative capacitated suppliers with general cost structures*”. OMEGA. 58, 26 – 32. <https://doi.org/10.1016/j.omega.2015.03.011>
- [P14] U. Gurler, O. Alp, N.C. Buyukkaramikli. 2014. “*Coordinated Inventory Replenishment and Outsourced Transportation Operations*”. Transportation Research Part E. 70, 400 – 415. <https://doi.org/10.1016/j.tre.2014.08.004>
- [P13] O. Alp, T. Huh, T. Tan. 2014. “*Inventory Control with Multiple Setup Costs*”. Manufacturing & Service Operations Management. 16(1), 89 – 103. <https://doi.org/10.1287/msom.2013.0450>
- [P12] 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. <https://doi.org/10.1111/poms.12041>
- [P11] 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. <https://doi.org/10.1080/00207540802662904>
- [P10] G. Mincsovcz, T. Tan, and O. Alp. 2009. “*Integrated Capacity and Inventory Management with Capacity Acquisition Lead Times*”. European Journal of Operational Research. 196, 949 – 958. <https://doi.org/10.1016/j.ejor.2008.04.016>
- [P9] 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. <https://doi.org/10.1080/00207540801930237>
- [P8] 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. <https://doi.org/10.1007/s00291-008-0122-y>
- [P7] O. Alp and T. Tan. 2008. “*Tactical Capacity Management under Capacity Flexibility in Make-to-Stock Systems*”. IIE Transactions, 40(3), 221 – 237. <https://doi.org/10.1080/07408170701488052>
- [P6] 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. Practice Abstract.

- [P5] E. Erkut and O. Alp 2007. “*Designing a Road Network for Hazardous Materials Shipments*”, *Computers & OR*, 34(5), 1389-1405.
<https://doi.org/10.1016/j.cor.2005.06.007>
- [P4] E. Erkut and O. Alp. 2007. “*Integrated Routing and Scheduling of Hazmat Trucks with Stops En-Route*”. *Transportation Science*, 41(1), 107-122.
<https://doi.org/10.1287/trsc.1060.0176>
- [P3] O. Alp, Z. Drezner, and E. Erkut. 2003. “*An Efficient Genetic Algorithm for the p-Median Problem*”, *Annals of Operations Research*. 122, 21-42.
<https://doi.org/10.1023/A:1026130003508>
- [P2] 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.
<https://doi.org/10.1287/opre.51.1.160.12799>
- [P1] 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.
<https://doi.org/10.1287/trsc.37.1.23.12818>
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Book Chapter

- [C1] 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. http://doi.org/10.1007/978-981-10-1014-9_8
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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*.
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Books Edited

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

- 2022 “*Broken Links: From 'just in time' to 'just in case'*”
The Logic, National Post. <https://bit.ly/3RkCkEg>

- 2022 *“It’s time for corporations to invest in electric trucks”*
 UToday University of Calgary <https://news.ucalgary.ca/news/its-time-corporations-invest-electric-trucks>
- 2020 *“Better customer service linked to improved local input”*
 UToday University of Calgary
<https://haskayne.ucalgary.ca/news/better-customer-service-linked-improved-local-input>
- 2020 *“Calgary’s Overlooked Transportation and Logistics Sector”*
 Business in Calgary, <https://businessincalgary.com/top-news/calgarys-overlooked-transportation-and-logistics-sector/>
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Services to the Field

- 2019 – *Meetings Committee Member*
 INFORMS – Institute for Operations Research and Management Science
- 2019 – *PhD Program Committee*
 Haskayne School of Business, University of Calgary
- 2018 – *Faculty Representative*
 General Faculties Council, University of Calgary
- 2018 – *Faculty Representative*
 Data Science and Analytics Graduate Program Working Group
- 2018 – *Member*
 SUPPORT NSERC CREATE Committee
 University of Calgary
- 2017 – *External Advisory Board Member*
 Canadian Center for Advanced Supply Chain and Logistics
 Haskayne School of Business, University of Calgary
- 2017 – *Academic Advisory Board Member*
 Canadian Center for Advanced Leadership in Business
 Haskayne School of Business, University of Calgary
- 2005 – *Editorial Advisory Board Member*
 Computers & Operations Research, Elsevier
- 2020 *Conference Co-Chair*
 MSOM 2020 Conference, Banff AB (Canceled due to Covid)
- 2016 *Program Co-Chair*
 CORS 2016 Annual Conference, Banff AB
- 2013 – 2015 *Chair of Course Scheduling Committee*
 TED University
 Responsible of generating course schedules for the university
- 2009 – 2012 *Member of Board of Directors*
 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

Referee for Scholarly Work

2003 –	<i>Refereeing for Journal Articles</i> Applied Mathematical Modeling, Computers & OR, European Journal of Operational Research, Flexible Services and Manufacturing, IISE Transactions, INFOR, International Journal of Production Economics, International Journal of Production Research, Management Science, Manufacturing & Service Operations Management, Naval Research Logistics, Omega, OR Spectrum, Transportation Research Part B, Transportation Research Part E, Transportation Science
2015 –	<i>Refereeing for Grant Proposals</i> NSERC, SSHRC, MITACS

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.

Graduate Student Supervision

2021 –	Saman TeymoorianMotlagh. PhD Thesis. “Community Solar Model for Adoption of Solar Energy”. Co-supervising with Serasu Duran
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2021	Nouran Habib. MSc Thesis. “Dynamic Shared Autonomous Vehicle Fleet Operations with Consideration of Fairness”. Co-supervised with Lina Kattan
2020 –	Mohammadreza Shahsahebi. PhD Thesis. “Fairness and Bias in Machine Learning and Artificial Intelligence”. Co-supervising with Alireza Sabouri
2018 –	Amin Aslani. Ph.D. Thesis. “Omni Channel Retailing with Returns”
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. “ <i>Distribution of Petroleum Products in Turkey by Using Multiple Modes of Transportation</i> ”. Co-supervised by Bahar Yetis Kara.
2010	Gokce Akin, M.S. Thesis. “ <i>Inventory Management of Medical Supplies in a Hospital</i> ”
2010	Yasar Altunoglu. M.S. Thesis. “ <i>Cash Inventory Management at ATMs</i> ”. Co-supervised with Alper Sen
2009	Emre Uzun. M.S. Thesis. “ <i>A Heuristic Algorithm for an Integrated Routing and Scheduling Problem with Stops en-route</i> ”,
2008	Banu Karakaya. M.S. Thesis. “ <i>Shortest Path Problems with Re-routing en-route</i> ”
2007	Nurdan Ahat. M.S. Thesis. “ <i>Multi-period Inventory Models with Price Protection</i> ”, co-supervised with Alper Sen
2006	Mehmet Fazil Pac. M.S. Thesis. “ <i>Integrated Flexible Capacity and Inventory Management under Flexible Capacity Uncertainty</i> ”
	Nasuh Cagdas Buyukkaramikli. M.S. Thesis. “ <i>Joint Replenishment Problem in Two Echelon Inventory Systems with Transportation Capacity</i> ”, co-supervised with Ulku Gurler
	Mehmet Mustafa Tanrikulu. M.S. Thesis. “ <i>Joint Replenishment Problem with Truck Cost Structures</i> ”, co-supervised with Alper Sen

Postdoctoral Research Fellow Supervision

2019 – 2021	Meraj Ajam. “A Trade-Cost Based Framework to Plan Infrastructure Projects to Facilitate Access to Northern Territories of Canada”
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Courses Taught

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

At TED University:
Introduction to Information Technologies
Introduction to Multivariable Calculus and Linear Algebra
Introduction to Probability Theory
Lean Process Design
Manufacturing and Service Operations Planning II
Mathematical Modeling and Optimization III
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
Bias in Machine Learning and Artificial Intelligence
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.
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Congress and Symposiums

- October 2021 INFORMS Annual Meeting. Anaheim, CA. “A Framework for Planning Access Corridors to Northern Territories of Canada”
- June 2021 M&SOM Annual Conference. Indiana, OH. “Retreat, Defend, or Encroach? Optimal Investment Decisions in Green Technology under Competition”
- October 2020 INFORMS Annual Meeting. Washington, DC. “Renewable Generation Capacity Planning For Municipalities”
- 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.

Languages Spoken

English, Turkish
