

## Assoc. Prof. ZEYNEP MÜGE AVŞAR

### Personal Information

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### Education Information

Doctorate, Rutgers, The State University Of New Jersey, Endüstri Ve Sistem Mühendisliği, United States Of America 1993 - 1998

Post Graduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Endüstri Mühendisliği (YI) (Tezli), Turkey 1990 - 1992

Under Graduate, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, Turkey 1985 - 1990

### Dissertations

Doctorate, Algorithms for Stochastic Games and a Stochastic Game Application: Inventory Control under Substitutable Demand , Rutgers, The State University Of New Jersey, New Brunswick Campus, School Of Graduate Studies, Industrial And Systems Engineering Department Endüstri Ve Sistem Mühendisliği Bölümü, 1998

Post Graduate, Markov Decision Processes with Restricted Observations , Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 1992

### Research Areas

Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2011 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, 2002 - 2011

Research Assistant, Middle East Technical University, Faculty of Engineering, Endüstr Mühendisliği Bölümü, 1990 - 1993

### Advising Theses

AVŞAR Z. M. , Mathematical Modeling and Solution Approaches for Balancing Turkish Electricity Day Ahead Market, Post Graduate, S.Yörükoğlu(Student), 2015

AVŞAR Z. M. , Revenue Management for Airline Industry (Havayolları Sektöründe Gelir Yönetimi), Doctorate, A.Melih(Student), 2014

AVŞAR Z. M. , Service Models for Airline Revenue Management Problems, Post Graduate, F.Esra(Student), 2011

AVŞAR Z. M. , Alternative Mathematical Models for Revenue Management Problems, Post Graduate, E.Terciyanlı(Student), 2009  
AVŞAR Z. M. , Periodic-Review Inventory Systems with Exogenous and Endogenous Replenishment Lead Times, Post Graduate, M.Aşçı(Student), 2007  
AVŞAR Z. M. , A Risk-Sensitive Approach for Airline Network Revenue Management Problems, Post Graduate, D.Çetiner(Student), 2007  
AVŞAR Z. M. , An Approximate Model for Kanban Controlled Assembly Systems, Post Graduate, E.Topan(Student), 2005  
AVŞAR Z. M. , On the Service Models for Dynamic Scheduling of Multi-Class Base-Stock Controlled Systems, Post Graduate, B.Kat(Student), 2005  
AVŞAR Z. M. , An Approximate Model for Performance Measurement in Base-Stock Controlled Assembly Systems, Post Graduate, U.Rodoplu(Student), 2004

## Designed Lessons

Avşar Z. M. , Revenue Management, Under Graduate, 2009 - 2010

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Dynamic pricing in airline revenue management**  
Selcuk A. M. , AVŞAR Z. M.  
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.478, pp.1191-1217, 2019 (Journal Indexed in SCI)
- **Alternative risk-averse approaches for airline network revenue management**  
Terciyanlı E., AVŞAR Z. M.  
TRANSPORTATION RESEARCH PART E-LOGISTICS AND TRANSPORTATION REVIEW, vol.125, pp.27-46, 2019 (Journal Indexed in SCI)
- **An integrated day-ahead market clearing model: Incorporating paradoxically rejected/accepted orders and a case study**  
YORUKOĞLU S., AVŞAR Z. M. , Kat B.  
ELECTRIC POWER SYSTEMS RESEARCH, vol.163, pp.513-522, 2018 (Journal Indexed in SCI)
- **Approximate queueing models for capacitated multi-stage inventory systems under base-stock control**  
AVŞAR Z. M. , ZİJM H.  
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.236, pp.135-146, 2014 (Journal Indexed in SCI)
- **Using aggregate fill rate for dynamic scheduling of multi-class systems**  
Kat B., AVŞAR Z. M.  
ANNALS OF OPERATIONS RESEARCH, vol.182, pp.87-117, 2011 (Journal Indexed in SCI)
- **An approximation for kanban controlled assembly systems**  
TOPAN E., AVŞAR Z. M.  
ANNALS OF OPERATIONS RESEARCH, vol.182, pp.133-162, 2011 (Journal Indexed in SCI)
- **An approximate model for base-stock-controlled assembly systems**  
AVŞAR Z. M. , ZİJM H., RODOPLU U.  
IIE TRANSACTIONS, vol.41, pp.260-274, 2009 (Journal Indexed in SCI)
- **A note on two-person zero-sum communicating stochastic games**  
AVŞAR Z. M. , Baykal-Gursoy M.  
OPERATIONS RESEARCH LETTERS, vol.34, pp.412-420, 2006 (Journal Indexed in SCI)
- **Capacitated Two-Indenture Models for Repairable Item Systems**  
ZİJM H., AVŞAR Z. M.  
International Journal Of Production Economics, vol.81, pp.573-588, 2003 (Journal Indexed in SCI Expanded)

- **Inventory control under substitutable demand: A stochastic game application**  
AVŞAR Z. M. , Baykal-Gursoy M.  
NAVAL RESEARCH LOGISTICS, vol.49, pp.359-375, 2002 (Journal Indexed in SCI)
- **A decomposition approach for undiscounted two-person zero-sum stochastic games**  
AVŞAR Z. M. , Baykal-Gursoy M.  
MATHEMATICAL METHODS OF OPERATIONS RESEARCH, vol.49, pp.483-500, 1999 (Journal Indexed in SCI)
- **Markov decision processes with restricted observations: Finite horizon case**  
Serin Y. Y. , AVSAR Z. M.  
NAVAL RESEARCH LOGISTICS, vol.44, pp.439-456, 1997 (Journal Indexed in SCI)

## Books & Book Chapters

- **Capacitated Two-Echelon Inventory Models for Repairable Item Systems**  
AVŞAR Z. M. , ZIJM H.  
in: Analysis and Modeling of Manufacturing Systems, S.B. Gershwin, Y. Dallery, C.T. Papadopoulos, J. MacGregor Smith, Editor, Kluwer Academic Publishers, New York, pp.1-36, 2003

## Citations

Total Citations (WOS):96

h-index (WOS):5