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Learning Knowledge

Doctorate 1998 - 2004	Bogazici University, Faculty Of Engineering, Department Of Industrıal Engıneerıng, Turkey
Postgraduate 1996 - 1998	Bogazici University, Faculty Of Engineering, Department Of Industrıal Engıneerıng, Turkey

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, On unidirectional cyclic layouts, hamiltonian circuits, capacitated vehicle routes and minimal spanning trees, Boğaziçi Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2004
Postgraduate, The Comparison of two recent traweling salesman problem formulations, Boğaziçi Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 1998

Academic Titles / Tasks

Professor 2016 - Continues	Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği
Associate Professor 2009 - 2015	Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği
Assistant Professor 2006 - 2009	Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Endüstri Mühendisliği

Supported Projects

1. Öncan T., TUBITAK Project, Çatışmalı Enbüyük Ağırlıklı Tam Eşleme Problemi: Gösterimler Ve Çözüm Yöntemleri, 2018 - 2020

2. ÖNCAN T., Project Supported by Higher Education Institutions, ÇATIŞMALI EN BÜYÜK AĞIRLIKLI TAM EŞLEME PROBLEMLERİ İÇİN ÇÖZÜM YÖNTEMLERİ, 2018 - 2019
3. ÖNCAN T., Project Supported by Higher Education Institutions, ÇELİŞKİ KISITLI KUSURSUZ EŞLEŞTİRME PROBLEMİ İÇİN ÇÖZÜM YÖNTEMLERİ, 2016 - 2018
4. ÖNCAN T., Project Supported by Higher Education Institutions, SINIRLI DERECELİ KAPSARAĞAÇ PROBLEMLERİ, 2014 - 2015
5. ÖNCAN T., Project Supported by Higher Education Institutions, PARALEL KORİDORLU DEPOLARDA YERLEŞİM VE SİPARİŞ KÜMELEME PROBLEMLERİ, 2013 - 2014
6. ÖNCAN T., Project Supported by Higher Education Institutions, TEK KAYNAKLI ÇOK TESİSLİ SIĞA SINIRLI YERLEŞİM ATAMA PROBLEMİ İÇİN DİZGİ İŞLEMLER, 2011 - 2012
7. Öncan T., TUBITAK Project, Deniz Taşımacılığında Dağıtım Ağı Tasarımı, 2010 - 2012
8. ÖNCAN T., Project Supported by Higher Education Institutions, BİR YERLEŞTİRME ATAMA PROBLEMİ İÇİN KESİN ÇÖZÜM DİZGİ İŞLEMLERİ, 2010 - 2011
9. ÖNCAN T., Project Supported by Higher Education Institutions, TOPLAMA DAĞITIMLI GEZGİN SATICI PROBLEMİ İÇİN ÇÖZÜM YÖNTEMLERİ, 2010 - 2011
10. ÖNCAN T., Project Supported by Higher Education Institutions, KARESEL ENKÜÇÜK KAPSARAĞAÇ PROBLEMİ İÇİN ÇÖZÜM YÖNTEMLERİ, 2009 - 2010
11. Öncan T., TUBITAK Project, Sınırlı Sığalı Çok Mallı Yerleştirme ve Atama Problemini Çözmek İçin Yöntemler Geliştirilmesi, 2008 - 2010
12. ÖNCAN T., Project Supported by Higher Education Institutions, SINIRLI SIĞALI ÇOK MALLI YERLEŞTİRME VE ATAMA PROBLEMİ İÇİN ÇÖZÜM YÖNTEMLERİ, 2008 - 2010

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Maximum weight perfect matching problem with additional disjunctive conflict constraints**
   Akyüz M. H., Altınel İ. K., ÖNCAN T.
   Networks, vol.81, no.4, pp.465-489, 2023 (SCI-Expanded)
2. **Solving a minisum single facility location problem in three regions with different norms**
   Altay G., Akyuz M. H., ÖNCAN T.
   ANNALS OF OPERATIONS RESEARCH, vol.321, no.1-2, pp.1-37, 2023 (SCI-Expanded)
3. **An evaluation of several combinations of routing and storage location assignment policies for the order batching problem**
   BAHÇECİ U., ÖNCAN T.
   INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.60, no.19, pp.5892-5911, 2022 (SCI-Expanded)
4. **Order batching and picker scheduling in warehouse order picking**
   Muter I., ÖNCAN T.
   IISE TRANSACTIONS, vol.54, no.5, pp.435-447, 2022 (SCI-Expanded)
5. **Assignment problem with conflicts**
   ÖNCAN T., Suyak Z., AKYÜZ M. H., Altinel I. K.
   COMPUTERS & OPERATIONS RESEARCH, vol.111, pp.214-229, 2019 (SCI-Expanded)
6. **Branch and bound algorithms for solving the multi-commodity capacitated multi-facility Weber problem**
   AKYÜZ M. H., ÖNCAN T., Altinel I. K.
   ANNALS OF OPERATIONS RESEARCH, vol.279, pp.1-42, 2019 (SCI-Expanded)
7. **An exact solution approach for the order batching problem**
   Muter I., ÖNCAN T.
   IIE TRANSACTIONS, vol.47, no.7, pp.728-738, 2015 (SCI-Expanded)
8. **MILP formulations and an Iterated Local Search Algorithm with Tabu Thresholding for the Order Batching Problem**
   Oncan T.

EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.243, no.1, pp.142-155, 2015 (SCI-Expanded)

9. **Location and allocation based branch and bound algorithms for the capacitated multi-facility Weber problem**
AKYÜZ M. H., ALTINEL İ. K., ÖNCAN T.
ANNALS OF OPERATIONS RESEARCH, vol.222, no.1, pp.45-71, 2014 (SCI-Expanded)

10. **Beam search heuristics for the single and multi-commodity capacitated Multi-facility Weber Problems**
AKYÜZ M. H., ÖNCAN T., ALTINEL İ. K.
COMPUTERS & OPERATIONS RESEARCH, vol.40, no.12, pp.3056-3068, 2013 (SCI-Expanded)

11. **Heuristics for the single source capacitated multi-facility Weber problem**
Oncan T.
COMPUTERS & INDUSTRIAL ENGINEERING, vol.64, no.4, pp.959-971, 2013 (SCI-Expanded)

12. **The minimum cost perfect matching problem with conflict pair constraints**
ÖNCAN T., Zhang R., Punnen A. P.
COMPUTERS & OPERATIONS RESEARCH, vol.40, no.4, pp.920-930, 2013 (SCI-Expanded)

13. **An efficient heuristic for the Multi-vehicle One-to-one Pickup and Delivery Problem with Split Loads**
Sahin M., Cavuslar G., ÖNCAN T., ŞAHİN G., TÜZÜN AKSU D.
TRANSPORTATION RESEARCH PART C-EMERGING TECHNOLOGIES, vol.27, pp.169-188, 2013 (SCI-Expanded)

14. **Solving the multi-commodity capacitated multi-facility Weber problem using Lagrangean relaxation and a subgradient-like algorithm**
Akyuz M. H., ÖNCAN T., ALTINEL İ. K.
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.63, no.6, pp.771-789, 2012 (SCI-Expanded)

15. **An evolutionary approach for tuning parametric Esau and Williams heuristics**
Battarra M., ÖNCAN T., ALTINEL İ. K., Golden B., Vigo D., Phillips E.
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.63, no.3, pp.368-378, 2012 (SCI-Expanded)

16. **Efficient approximate solution methods for the multi-commodity capacitated multi-facility Weber problem**
AKYÜZ M. H., ÖNCAN T., ALTINEL İ. K.
COMPUTERS & OPERATIONS RESEARCH, vol.39, no.2, pp.225-237, 2012 (SCI-Expanded)

17. **The quadratic minimum spanning tree problem: A lower bounding procedure and an efficient search algorithm**
ÖNCAN T., Punnen A. P.
COMPUTERS & OPERATIONS RESEARCH, vol.37, no.10, pp.1762-1773, 2010 (SCI-Expanded)

18. **The multi-commodity capacitated multi-facility Weber problem: heuristics and confidence intervals**
AKYÜZ M. H., ÖNCAN T., ALTINEL İ. K.
IIE TRANSACTIONS, vol.42, no.11, pp.825-841, 2010 (SCI-Expanded)

19. **A comparative analysis of several asymmetric traveling salesman problem formulations**
ÖNCAN T., ALTINEL İ. K., Laporte G.
COMPUTERS & OPERATIONS RESEARCH, vol.36, no.3, pp.637-654, 2009 (SCI-Expanded)

20. **Parametric enhancements of the Esau-Williams heuristic for the capacitated minimum spanning tree problem**
Oencan T., ALTINEL İ. K.
Journal of the Operational Research Society, vol.60, no.2, pp.259-267, 2009 (SCI-Expanded)

21. **A tabu search heuristic for the generalized minimum spanning tree problem**
ÖNCAN T., Cordeau J., Laporte G.
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.191, no.2, pp.306-319, 2008 (SCI-Expanded)

22. **Exact solution procedures for the balanced unidirectional cyclic layout problem**
ÖNCAN T., ALTINEL İ. K.
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.189, no.3, pp.609-623, 2008 (SCI-Expanded)

23. **VLSN search algorithms for partitioning problems using matching neighbourhoods**
ÖNCAN T., Kabadi S. N., Nair K. P. K., Punnen A. P.

JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.59, no.3, pp.388-398, 2008 (SCI-Expanded)

24. **Design of capacitated minimum spanning tree with uncertain cost and demand parameters**
Oencan T.
Information Sciences, vol.177, no.20, pp.4354-4367, 2007 (SCI-Expanded)

25. **A survey of the generalized assignment problem and its applications**
Oncan T.
INFOR, vol.45, no.3, pp.123-141, 2007 (SCI-Expanded)

26. **Determining key capabilities in technology management using fuzzy analytic hierarchy process: A case study of Turkey**
Erensal Y. C., Oencan T., Demircan M. L.
Information Sciences, vol.176, no.18, pp.2755-2770, 2006 (SCI-Expanded)

27. **Design of unidirectional cyclic layouts**
Altinel I., Oncan T.
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.43, no.19, pp.3983-4008, 2005 (SCI-Expanded)

28. **A new enhancement of the Clarke and Wright savings heuristic for the capacitated vehicle routing problem**
Altinel I., Oncan T.
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.56, no.8, pp.954-961, 2005 (SCI-Expanded)

Articles Published in Other Journals

1. **A Branch-and-Bound Algorithm for the Minimum Cost Bipartite Perfect Matching Problem with Conflict Pair Constraints**
ÖNCAN T., Kuban Altınel İ.
Electronic Notes in Discrete Mathematics, vol.64, pp.5-14, 2018 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

1. **An exact algorithm for the maximum weight perfect matching problem with conflicts**
ÖNCAN T., AKYÜZ M. H., Altınel I. K.
17th Cologne-Twente Workshop on Graphs and Combinatorial Optimization, CTW 2019, Enschede, Netherlands, 1 - 03 July 2019, pp.111-114

2. **An MILP Model for the Internal Audit Scheduling Problem**
Yildirim V., Angün M. E., Öncan T.
IEEE International Conference on Industrial Engineering and Engineering Management (IEEE IEEM), Bangkok, Thailand, 16 - 19 December 2018, pp.442-446

3. **Iterated exact and heuristic algorithms for the minimum cost bipartite perfect matching problem with conflict constraints**
ÖNCAN T., Altinel I.
2017 IEEE International Conference on Industrial Engineering and Engineering Management, IEEM 2017, Singapore, Singapore, 10 - 13 December 2017, pp.1032-1036

4. **A Tabu Search Based Heuristic Approach for the Dynamic Container Relocation Problem**
Karpuzoglu O., AKYÜZ M. H., ÖNCAN T.
Operations Research Conference (OR), Vienna, Austria, 1 - 04 September 2015, pp.165-171

5. **Tabu Search Heuristics for Two Bounded Degree Spanning Tree Problems**
ÖNCAN T.
15th IFAC Symposium on Information Control Problems in Manufacturing, Ottawa, Canada, 11 - 13 May 2015, vol.48, pp.1167-1172

6. **New formulations for the minimum branch vertices problem**

ÖNCAN T.

World Congress on Engineering and Computer Science 2014, WCECS 2014, California, United States Of America, 22 - 24 October 2014, vol.2, pp.1101-1106

7. **A fuzzy multi-attribute decision making approach for the dealers' selection problem of an automotive company**

Aladağ E., ALBAYRAK Y. E., ÖNCAN T.

Joint International Symposium on "The Social Impacts of Developments in Information, Manufacturing and Service Systems" 44th International Conference on Computers and Industrial Engineering, CIE 2014 and 9th International Symposium on Intelligent Manufacturing and Service Systems, IMSS 2014, İstanbul, Turkey, 14 - 16 October 2014, pp.1039-1044

8. **MILP formulations for the order batching problem in low-level picker-to-part warehouse systems**

ÖNCAN T., Cağirici M.

7th IFAC Conference on Manufacturing Modelling, Management, and Control, MIM 2013, Saint Petersburg, Russia, 19 - 21 June 2013, vol.46, pp.471-476

9. **A Genetic Algorithm for the Order Batching Problem in low-level picker-to-part warehouse systems**

ÖNCAN T.

International MultiConference of Engineers and Computer Scientists 2013, IMECS 2013, Kowloon, Hong Kong, 13 - 15 March 2013, vol.2202, pp.19-24

10. **A Beam Search Heuristic for the Multi-commodity Capacitated Multi-facility Weber Problem**

ÖNCAN T., AKYÜZ M. H., ALTINEL İ. K.

International MultiConference of Engineers and Computer Scientists (IMECS 2012), Hong Kong, PEOPLES R CHINA, 14 - 16 March 2012, pp.1617-1622

11. **A Branch and Cut Algorithm for the Multi-Vehicle One-to-One Pickup and Delivery Problem with Split Loads**

ÖNCAN T., TÜZÜN AKSU D., ŞAHİN G., Sahin M.

IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore, Singapore, 6 - 09 December 2011, pp.1864-1868

12. **A Genetic Algorithm for the Traveling Salesman Problem with Pickup and Delivery Using Depot Removal and Insertion Moves**

Cinar V., ÖNCAN T., SÜRAL H.

Evo Applications 2010 Conference, İstanbul, Turkey, 7 - 09 April 2010, vol.6025, pp.431-433

13. **The Multi-commodity Capacitated Multi-facility Weber Problem: Heuristics and Confidence Intervals**

AKYÜZ M. H., ÖNCAN T., ALTINEL İ. K.

International Multi-Conference of Engineers and Computer Scientists, Kowloon, Hong Kong, 18 - 20 March 2009, pp.2042-2043

14. **An Application of Responsive Manufacturing Control**

ÖNCAN T., FEYZİOĞLU O.

2nd International Conference on Responsive Manufacturing, 26 - 28 June 2002, pp.812-817

Academic and Administrative Experience

2012 - Continues	**University Executive Board Member**	Galatasaray Üniversitesi, Sürekli Eğitim Uygulama Ve Araştırma Merkezi

Advising Theses

Öncan T., Green liner ship routing and scheduling optimization with time windows under added resistance effects of several weather conditions, Postgraduate, M.CAN(Student), 2022

ÖNCAN T., A Mixed Integer Linear Programming (MILP) Model for the Combined Audit Scheduling Problem (CASP), Postgraduate, V.YILDIRIM(Student), 2018

ÖNCAN T., Bazı kısa yol problemlerinin algoritmalarının hesaplamalı karşılaştırmaları, Postgraduate, Y.HALUK(Student), 2018

ALBAYRAK Y. E., ÖNCAN T., Fuzzy linmap method for supplier selection problem, Postgraduate, E.NAZ(Student), 2015

ÖNCAN T., Milp formulations for the order batching problem in low-level picker-to-part warehouse systems, Postgraduate, M.ÇAĞIRICI(Student), 2014

ÖNCAN T., Solution procedures for the rectilinear distance single source capacitated multi-facility Weber problem, Postgraduate, M.EMRE(Student), 2012

ÖNCAN T., An integrated multi-criteria decision making approach for the vendor performance evaluation in a retail company, Postgraduate, N.NEŞE(Student), 2011

ÖNCAN T., An evolutionary approach to the traveling salesman problem with pickup and delivery based on depot insertion and removal moves, Postgraduate, V.ÇINAR(Student), 2010

Metrics

Publication: 44
Citation (WoS): 540
Citation (Scopus): 754
H-Index (WoS): 11
H-Index (Scopus): 13

Research Areas

Engineering and Technology

Non Academic Experience

University of Montreal
GALATASARAY ÜNİVERSİTESİ
University of New Brunswick
Columbia University