

## Assoc. Prof. Yasin GÖÇGÜN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: IQW-5808-2023

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### Education Information

Doctorate, University of Washington, United States Of America 2005 - 2010

Postgraduate, Ihsan Dogramaci Bilkent University, Mühendislik Ve Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (YI) (Tezli), Turkey 2003 - 2005

Undergraduate, Ihsan Dogramaci Bilkent University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1999 - 2003

### Dissertations

Doctorate, Approximate Dynamic Programming for Dynamic Stochastic Resource Allocation with Applications to Healthcare, University of Washington, 2010

Postgraduate, Beam search algorithms for the mixed-model assembly line sequencing, Ihsan Dogramaci Bilkent University, Mühendislik Ve Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (YI) (Tezli), 2005

### Academic Titles / Tasks

Associate Professor, Istanbul Medipol University, Mühendislik Ve Doğa Bilimleri Fakültesi, Endüstri Mühendisliği Bölümü, 2022 - Continues

Assistant Professor, Istinye University, Faculty Of Engineering, Department Of Industrial And Systems Engineering, 2020 - 2022

Assistant Professor, Altinbas University, Faculty Of Engineering And Natural Sciences, Department Of Industrial Engineering, 2014 - 2020

### Courses

Stochastic Modeller, Undergraduate, 2021 - 2022

Yöneylem Araştırması Modelleme Uygulamaları, Undergraduate, 2021 - 2022, 2020 - 2021

Modelleme ve Optimizasyon 2, Undergraduate, 2021 - 2022

Modelleme ve Optimizasyon 1, Undergraduate, 2021 - 2022

İmalat Süreçleri ve İşlem Analizi, Undergraduate, 2021 - 2022

Optimizasyona Giriş, Undergraduate, 2020 - 2021

Dinamik Optimizasyona Giriş, Undergraduate, 2020 - 2021

ÜRETİM SİSTEMLERİ YÖNETİMİ, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Yöneylem Araştırması Modelleme Uygulamaları, Undergraduate, 2019 - 2020, 2016 - 2017, 2014 - 2015  
İŞLEM ANALİZİ VE TASARIMI, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Tamsayılı ve Dinamik Programlama, Undergraduate, 2019 - 2020, 2017 - 2018  
Kalite Planlama ve Denetimi, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015  
Mühendislik Ekonomisi Finansı, Undergraduate, 2019 - 2020  
Dinamik Programlama, Postgraduate, 2018 - 2019  
Endüstri Mühendisliğine Giriş, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Yöneylem Araştırması 2, Undergraduate, 2017 - 2018  
Çizelgeleme, Undergraduate, 2015 - 2016

## Advising Theses

Yasin G., Direct search based approximate dynamic programming technique for dynamic stochastic advanced scheduling, Postgraduate, A.HASSAN(Student), 2019

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Simulation-based approximate policy iteration for dynamic patient scheduling for radiation therapy**  
Gocgun Y.  
Health Care Management Science, vol.21, no.3, pp.317-325, 2018 (SSCI)
- II. **Approximate policy iteration for dynamic resource-constrained project scheduling**  
Salemi Parizi M., Gocgun Y., Ghate A.  
Operations Research Letters, vol.45, no.5, pp.442-447, 2017 (SCI-Expanded)
- III. **Cost-effectiveness of breast cancer screening policies using simulation**  
Gocgun Y., Banjevic D., Taghipour S., Montgomery N., Harvey B., Jardine A., Miller A.  
Breast, vol.24, no.4, pp.440-448, 2015 (SCI-Expanded)
- IV. **Technical note-trading off quick versus slow actions in optimal search**  
Shechter S. M., Ghassemi F., Gocgun Y., Puterman M. L.  
Operations Research, vol.63, no.2, pp.353-362, 2015 (SCI-Expanded)
- V. **Dynamic scheduling with due dates and time windows: An application to chemotherapy patient appointment booking**  
Gocgun Y., Puterman M. L.  
Health Care Management Science, vol.17, no.1, pp.60-76, 2014 (SSCI)
- VI. **Lagrangian relaxation and constraint generation for allocation and advanced scheduling**  
Gocgun Y., Ghate A.  
Computers and Operations Research, vol.39, no.10, pp.2323-2336, 2012 (SCI-Expanded)
- VII. **A Markov decision process approach to multi-category patient scheduling in a diagnostic facility**  
Gocgun Y., Bresnahan B. W., Ghate A., Gunn M. L.  
Artificial Intelligence in Medicine, vol.53, no.2, pp.73-81, 2011 (SCI-Expanded)
- VIII. **Backtracking and exchange of information: Methods to enhance a beam search algorithm for assembly line scheduling**  
Sabuncuoğlu I., Gocgun Y., Erel E.  
European Journal of Operational Research, vol.186, no.3, pp.915-930, 2008 (SCI-Expanded)
- IX. **Mixed-model assembly line sequencing using beam search**  
Erel E., Gocgun Y., Sabuncuoğlu I.  
International Journal of Production Research, vol.45, no.22, pp.5265-5284, 2007 (SCI-Expanded)

- X. **Analysis of serial production lines: Characterisation study and a new heuristic procedure for optimal buffer allocation**  
Sabuncuoğlu I., Erel E., Gocgun Y.  
International Journal of Production Research, vol.44, no.13, pp.2499-2523, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Optimal Matchday Schedule for Turkish Professional Soccer League using Nonlinear Binary Integer Programming**  
GÖÇGÜN Y., BAKIR N. O.  
AN INTERNATIONAL JOURNAL OF OPTIMIZATION AND CONTROL: THEORIES & APPLICATIONS (IJOCTA), vol.12, pp.113-127, 2022 (Scopus)
- II. **Performance comparison of approximate dynamic programming techniques for dynamic stochastic scheduling**  
GÖÇGÜN Y.  
International Journal of Optimization and Control: Theories and Applications, vol.11, no.2, pp.178-185, 2021 (Scopus)
- III. **A Markov Decision Process Approach for Mental Health**  
GÖÇGÜN Y.  
Konya mühendislik bilimleri dergisi (Online), vol.8, pp.258-268, 2020 (Peer-Reviewed Journal)
- IV. **Approximate Dynamic Programming for Optimal Search with an Obstacle**  
GÖÇGÜN Y.  
SELÇUK UNIVERSITY JOURNAL OF ENGINEERING, SCIENCE AND TECHNOLOGY, vol.7, pp.89-104, 2019 (Peer-Reviewed Journal)
- V. **Dynamic Scheduling with Cancellations: An Application to Chemotherapy Appointment Booking**  
GÖÇGÜN Y.  
An International Journal of Optimization and Control: Theories and Applications, vol.8, pp.161-169, 2018 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Fair Assignment of Matchdays in Turkish Super League under a Rest Mismatch Minimization Objective**  
Göçgün Y., Bakır N. O.  
Proceedings of the 6th Industrial Engineering and Operations Management Bangladesh Conference, 26 - 28 December 2023, pp.228-239
- II. **A novel integer programming model for the fixture schedule of Turkish professional soccer league**  
Göçgün Y.  
Proceedings of the 6th European Conference on Industrial Engineering and Operations Management, Lisbon, Portugal, 18 - 20 July 2023, pp.1-9
- III. **Stochastic Dynamic Optimization for Dynamic Scheduling**  
Göçgün Y.  
Proceedings of the 3rd South American International IEOM Conference, Asuncion, Paraguay, 19 - 21 July 2022, pp.327-335
- IV. **Factors Impacting Enrollment Rates of Foundation Universities: A Multiple Regression Analysis**  
Göçgün Y.  
Proceedings of the 3rd South American International IEOM Conference, Asuncion, Paraguay, 19 - 21 July 2022, pp.373-378
- V. **Determining the Matchdays for the Turkish Super League using Non-Linear Binary Integer Programming**

Göçgün Y., Bakır N. O., Saleh B. A.

12th Annual International Conference on Industrial Engineering and Operations Management, 7 - 10 March 2022, pp.4745-4756

- VI. **İptal İçeren Dinamik Çizelgeleme: Kemoterapi Randevu Çizelgelemesine bir Uygulama**  
GÖÇGÜN Y.  
Yoneylem Arastirmasi ve Endustri Muhendisligi (YAEM), İstanbul, Turkey, 5 - 07 July 2017
- VII. **Simulation-based Approximate Dynamic Programming for Stochastic Resource-constrained Project Scheduling**  
GÖÇGÜN Y., Parizi M., Ghatte A.  
INFORMS Annual Meeting, Philadelphia, United States Of America, 1 - 04 November 2015
- VIII. **Dinamik, Stokastik ve Kaynak Kısıtlı Proje Çizelgeleme Problemleri için Yaklaşık Dinamik Programlama**  
GÖÇGÜN Y., Parizi M., Ghatte A.  
Yoneylem Arastirmasi ve Endustri Muhendisligi (YAEM), Ankara, Turkey, 9 - 11 September 2015
- IX. **Cost-effectiveness Analysis of Breast Cancer Screening Policies for The Canadian Population**  
GÖÇGÜN Y., Banjevic D., Tahgipour S., Montgomery N., Miller A., Harvey B., Jardine A.  
INFORMS Annual Meeting, Minneapolis, United States Of America, 8 - 10 October 2013
- X. **Dynamic Patient Scheduling for Chemotherapy**  
GÖÇGÜN Y., Puterman M.  
INFORMS Annual Meeting, Phoenix, United States Of America, 14 - 17 October 2012
- XI. **Approximate Dynamic Programming in Optimal Search with Application to Minimally Invasive Surgery**  
GÖÇGÜN Y., Shechter S.  
INFORMS Annual Meeting, Charlottetown, Canada, 13 - 16 November 2011
- XII. **Hybrid Lagrangian Relaxation-Column Generation for Advanced Scheduling in Healthcare**  
GÖÇGÜN Y., Ghatte A.  
INFORMS Annual Meeting, Austin, United States Of America, 7 November - 07 December 2010
- XIII. **A Lagrangian Approach to Dynamic Resource Allocation**  
GÖÇGÜN Y., Ghatte A.  
Proceedings of the 2010 Winter Simulation Conference, Baltimore, United States Of America, 05 December 2010
- XIV. **Approximate Dynamic Programming for Advanced Scheduling in Healthcare**  
GÖÇGÜN Y., Ghatte A.  
Canadian Mathematical Society, Vancouver, Canada, 04 December 2010
- XV. **Weakly Coupled MDP Models for Allocation Scheduling in Healthcare**  
GÖÇGÜN Y., Ghatte A.  
INFORMS Annual Meeting, Austin, United States Of America, 07 November 2010
- XVI. **Approximate Dynamic Programming for Dynamic Stochastic Project Scheduling**  
GÖÇGÜN Y., Ghatte A.  
INFORMS Annual Meeting, San Diego, United States Of America, 11 - 14 October 2009
- XVII. **Multiclass Scheduling Problems with Applications to Healthcare**  
GÖÇGÜN Y., Ghatte A.  
IIE Annual Conference, Miami, United States Of America, 30 May 2009
- XVIII. **Dynamic Programming Approach to Multiclass Scheduling Problems**  
GÖÇGÜN Y., Ghatte A.  
INFORMS Annual Meeting, Washington, Kiribati, 12 October 2008