

## Assoc. Prof. Mert EDALI

### Personal Information

**Fax Phone:** [+90 212 383 2865](tel:+902123832865)

**Email:** [medali@yildiz.edu.tr](mailto:medali@yildiz.edu.tr)

**Web:** <https://avesis.yildiz.edu.tr/medali>

### Education Information

Doctorate, Bogazici University, Institute Of Science, Endüstri Mühendisliği, Turkey 2014 - 2019

Postgraduate, Bogazici University, Institute Of Science, Endüstri Mühendisliği, Turkey 2011 - 2014

Undergraduate, Yildiz Technical University, Department Of Industry Engineering, Industry Engineering, Turkey 2008 - 2011

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Analysis of Agent-Based Simulation Models through Metamodeling, Bogazici University, Institute Of Science, Industrial Engineering, 2019

Postgraduate, Decision Making Implications for a Selected Echelon in the Beer Game, Bogazici University, Institute Of Science, Industrial Engineering, 2014

### Research Areas

Epidemiology, Computer Learning, Industrial Engineering, Simulation, Discrete Simulation, System Dynamics

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Industry Engineering, 2021 - Continues

Researcher, The University of Chicago, Department of Medicine, 2020 - 2021

Research Assistant PhD, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Industry Engineering, 2019 - 2021

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Industry Engineering, 2013 - 2019

### Academic and Administrative Experience

Deputy Head of Department, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Industry

## Courses

Introductory Computer Sciences, Undergraduate, 2019 - 2020

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

- I. **Using linear regression metamodels for evaluating interventions in an individual-based influenza epidemic model**  
EDALI M.  
Simulation Modelling Practice and Theory, vol.126, 2023 (SCI-Expanded)
- II. **Pattern-oriented analysis of system dynamics models via random forests**  
EDALI M.  
SYSTEM DYNAMICS REVIEW, vol.38, no.2, pp.135-166, 2022 (SSCI)
- III. **Projecting the number of new HIV infections to formulate the "Getting to Zero" strategy in Illinois, USA**  
Khanna A. S., Edali M., Ozik J., Collier N., Hotton A., Skwara A., Ardestani B. M., Brewer R., Fujimoto K., Harawa N., et al.  
MATHEMATICAL BIOSCIENCES AND ENGINEERING, vol.18, no.4, pp.3922-3938, 2021 (SCI-Expanded)
- IV. **Analysis of an individual-based influenza epidemic model using random forest metamodels and adaptive sequential sampling**  
Edali M., YÜCEL G.  
SYSTEMS RESEARCH AND BEHAVIORAL SCIENCE, vol.37, no.6, pp.936-958, 2020 (SSCI)
- V. **Exploring the behavior space of agent-based simulation models using random forest metamodels and sequential sampling**  
Edali M., Yucel G.  
SIMULATION MODELLING PRACTICE AND THEORY, vol.92, pp.62-81, 2019 (SCI-Expanded)
- VI. **Classification of generic system dynamics model outputs via supervised time series pattern discovery**  
Edali M., Baydogan M. G., Yucel G.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, no.2, pp.832-846, 2019 (SCI-Expanded)
- VII. **Automated Analysis of Regularities Between Model Parameters and Output Using Support Vector Regression in Conjunction with Decision Trees**  
EDALI M., Yucel G.  
JASSS-THE JOURNAL OF ARTIFICIAL SOCIETIES AND SOCIAL SIMULATION, vol.21, no.4, 2018 (SSCI)
- VIII. **Results of a Beer Game Experiment: Should a Manager Always Behave According to the Book?**  
Edali M., Yasarcan H.  
COMPLEXITY, vol.21, pp.190-199, 2016 (SCI-Expanded)
- IX. **A Mathematical Model of the Beer Game**  
Edali M., Yasarcan H.  
JASSS-THE JOURNAL OF ARTIFICIAL SOCIETIES AND SOCIAL SIMULATION, vol.17, no.4, 2014 (SSCI)

## Articles Published in Other Journals

- I. **Impact of post-incarceration care engagement interventions on HIV transmission among young Black men who have sex with men and their sexual partners: an agent-based network modeling study**

Hotton A. L., Lee F., Sheeler D., Ozik J., Collier N., Edalı M., Ardestani B. M., Brewer R., Schrode K. M., Fujimoto K., et al.

The Lancet Regional Health - Americas, vol.28, 2023 (ESCI)

II. **Comparative solution approach with quadratic and genetic programming to multi-objective healthcare facility location problem**

Gülsün B., Miç P., Edalı M.

Sigma Journal of Engineering and Natural Sciences, vol.4, no.4, pp.63-78, 2022 (ESCI)

III. **Performance analysis of set partitioning formulations on the rule extraction from random forests**  
EDALI M.

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.27, no.4, pp.513-519, 2021 (ESCI)

## Books & Book Chapters

I. **En Yakın k Komşu Sınıflandırma Algoritması**

Edalı M.

in: Makine Öğrenmesinde Sınıflandırma Yöntemleri ve R Uygulamaları, Selçuk Alp, Ersoy Öz, Editor, Nobel Akademik Yayıncılık, Ankara, pp.69-91, 2019

## Refereed Congress / Symposium Publications in Proceedings

I. **Estimating return on investment (ROI) with increased utilisation of HIV pre-exposure prophylaxis (PrEP) among key populations in France**

Ayer T., Gursel E., Edalı M., Idelovici-Marchal C., Benabadji E., Jarrett J., Mezzio D.

HIV Drug Therapy Glasgow, Glasgow, England, 10 - 13 November 2024, pp.233-234

II. **İntermodal Yolcu Taşımacılığının Senkronizasyonu: Türkiye’de Bir Uygulama**

Ferikoğlu A., Özkır V., Edalı M.

5. Uluslararası Mühendislik Araştırmaları Sempozyumu, Düzce, Turkey, 7 - 09 March 2024, pp.95

III. **Finding the Influential Parameters on Different Population-Level Outcomes in Agent-Based Epidemic Models**

EDALI M.

9th International Conference on Engineering and Natural Sciences, Saraybosna, Bosnia And Herzegovina, 17 - 21 May 2023

IV. **Rastsal Orman Sınıflandırma Modellerinden Kural Çıkarmada Küme Kapsama ve Küme Bölüntüleme Formülasyonlarının Karşılaştırmalı Analizi**

EDALI M.

41. Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Denizli, Turkey, 26 - 28 October 2022

V. **Sistem Dinamiği Modellerinin Adaptif Şekilde Eğitilen Rastsal Orman Metamodelleri ile Örüntü Odaklı Analizi**

Edalı M.

40. Yöneylem Araştırması ve Endüstri Mühendisliği Kongresi, İstanbul, Turkey, 5 - 07 July 2021, pp.116

VI. **Sosyal Ağlarda Etki Maksimizasyonu: Karar Değişmeli Tamsayı Programlama Yaklaşımı**

Edalı M., Keskin M. E., Geçici E., Güler M. G.

40. Yöneylem Araştırması ve Endüstri Mühendisliği Kongresi, İstanbul, Turkey, 4 - 07 July 2021, pp.115-116

VII. **Classification of Fundamental System Dynamics Model Outputs**

EDALI M., Baydoğan M. G., Yücel G.

36th International Conference of the System Dynamics Society, Reykjavik, Iceland, 07 August 2018, pp.1

VIII. **A Comparative Analysis of Alternative Designs for Automated Clustering SD Model Output**

Yücel G., EDALI M.

- 36th International Conference of the System Dynamics Society, Reykjavik, Iceland, 07 August 2018, pp.1
- IX. **Efficient Parameter Exploration and Behavior Mapping for System Dynamics Models**  
Görgülü B., Yücel G., EDALI M.  
36th International Conference of the System Dynamics Society, Reykjavik, Iceland, 07 August 2018, pp.1
- X. **An Active Learning-Based Metamodeling Technique for Agent-Based Simulation Models**  
Edalı M., Yücel G.  
13th Balkan Conference on Operational Research, Belgrade, Serbia, 25 - 28 May 2018, pp.54
- XI. **Comparative Analysis Of Metamodeling Techniques Based On An Agent-Based Supply Chain Model**  
Edalı M., Yücel G.  
32nd European Conference on Modelling and Simulation, Oldenburg, Germany, 22 - 25 May 2018, pp.114-120
- XII. **Etmen-Tabanlı Benzetime Yönelik Metamodelleme Tekniklerinin Bir Tedarik Zinciri Modeli Üzerinde Karşılaştırılması**  
Edalı M., Yücel G.  
Yöneylem Araştırması ve Endüstri Mühendisliği (YAEM) 37. Ulusal Kongresi, İstanbul, Turkey, 05 July 2017, pp.70-71
- XIII. **Sistem Dinamiği Model Çıktılarının Sınıflandırılması**  
EDALI M., Baydoğan M. G., Yücel G.  
Yöneylem Araştırması ve Endüstri Mühendisliği (YAEM) 36. Ulusal Kongresi, İzmir, Turkey, 13 July 2016, pp.57-58
- XIV. **Salınım Tipi Davranış İçeren Sistem Dinamiği Model Çıktılarının Otomatikleştirilmiş Öbeklemesi**  
Edalı M., Yücel G.  
Yöneylem Araştırması ve Endüstri Mühendisliği (YAEM) 35. Ulusal Kongresi, Ankara, Turkey, 09 September 2015, pp.131
- XV. **Results of a Beer Game Experiment: Should a Manager Always Behave According to the Book?**  
Edalı M., Yaşarcan H.  
33rd International Conference of the System Dynamics Society, Massachusetts, United States Of America, 19 - 23 July 2015, pp.1
- XVI. **The Effect of Semi-Rational Supply Chain Members on the Decision Parameters Used in Managing the Stock of an Echelon**  
EDALI M., Yasarcan H.  
32nd International Conference of the System Dynamics Society, Delft, Netherlands, 20 July 2014, pp.1-12

## Supported Projects

- Edalı M., Türk S., Özkaya B., Erarslan A., Kütüğ Z., Karamustafa M., Çelebi U. B., Metin M., Demir Ö., Erasmus Project, Empowering Adult Education Centers in The Labour Market Reintegration of Recently Disabled Adults, 2022 - 2024
- Edalı M., Aydın N., Özkaya B., Hacı M., Özgül M. D., Demir Ö., Saraçoğlu A., Bakırman T., Alp S., Şeker Ş., et al., Ministry of Transport, Sürdürülebilir ve Akıllı Hareketlilik Stratejisi ve Eylem Planının Oluşturulması, 2021 - 2023
- Edalı M., Benbow N. D., Schneider J. A., D'aquila R. T., Project Supported by Public Organizations in Other Countries, Next-Generation Phylodynamics-Targeted Partner Service Models for Combined HIV Prevention, 2018 - 2023
- Edalı M., Schneider J. A., Harawa N., Fujimoto K., Other International Funding Programs, HIV Intervention Models for Criminal Justice Involved Substance-Using Black MSM, 2015 - 2022
- Edalı M., Türker Tokan N., Aydın N., Eren Y., Tuzkaya U. R., Acar Vural R., Demir Ö., Erdiç O., Niyaz Ö., Erkmen B., Development Agency, Çerkezköy Organize Sanayi Bölgesi Dijital Dönüşüm Olgunluk Seviyesi Belirleme, Dijital Dönüşüm Yol Haritası Çıkartma, 2021 - 2021
- Edalı M., Hotton A., Khanna A., Ozik J., Pollack H., Macal C., Other International Funding Programs, Modeling the Impact of Social Determinants of Health on COVID-19 Transmission and Mortality to Understand Health Inequities, 2020 - 2021
- Edalı M., Yücel G., Project Supported by Higher Education Institutions, Designing Effective Metamodelling and Input Sampling Techniques for Agent-Based Simulation Models, 2017 - 2018
- Edalı M., Eldemir F., Project Supported by Other Official Institutions, Toplu Taşıma Odaklı İstanbul Trafik Planlaması, 2016 - 2016

## **Metrics**

Publication: 29

Citation (WoS): 14

Citation (Scopus): 64

H-Index (WoS): 3

H-Index (Scopus): 4