

Assoc. Prof. Mert EDALI

Personal Information

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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.

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

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

Edalı M.

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

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

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

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

III. **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

IV. **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

V. **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

VI. **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

VII. **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

VIII. **Etmen-Tabanlı Benzetime Yönelik Metamodelleme Tekniklerinin Bir Tedarik Zinciri Modeli Üzerinde Karşılaştırılması**

Edalı M., Yücel G.

Yöneyem Araştırması ve Endüstri Mühendisliği (YAEM) 37. Ulusal Kongresi, İstanbul, Turkey, 05 July 2017, pp.70-71

IX. **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

X. **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

XI. **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

XII. **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., Yücel G., Project Supported by Higher Education Institutions, Designing Effective Metamodeling and Input Sampling Techniques for Agent-Based Simulation Models, 2017 - 2018

Edalı M., Eldemir F., Technopark, Toplu Taşıma Odaklı İstanbul Trafik Planlaması, 2016 - 2016

Metrics

Publication: 25

Citation (WoS): 14

Citation (Scopus): 63

H-Index (WoS): 3

H-Index (Scopus): 4