

# Prof. TARIK ÇAKAR

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, Istanbul Technical University, İşletme Fakültesi, İşletme Mühendisliği Bölümü, Turkey 1991 - 1997

Postgraduate, Istanbul Technical University, İşletme Fakültesi, İşletme Mühendisliği Bölümü, Turkey 1989 - 1991

Undergraduate, Istanbul Technical University, İşletme Fakültesi, İşletme Mühendisliği Bölümü, Turkey 1984 - 1988

## Foreign Languages

English, B2 Upper Intermediate

## Research Areas

Engineering and Technology

## Academic Titles / Tasks

Professor, Istanbul Gelisim University, Mühendislik-Mimarlık Fakültesi, Endüstri Mühendisliği Bölümü, 2018 - Continues

Professor, Istanbul Technical University, İşletme Fakültesi, İşletme Mühendisliği Bölümü, 2017 - 2017

Associate Professor, Sakarya University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2010 - 2016

Sakarya University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 1998 - 2011

Research Assistant, Sakarya University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 1989 - 1998

## Courses

SIMULATION, Undergraduate, 2023 - 2024

MULTI CRITERIA DECISION MAKING, Postgraduate, 2023 - 2024

## Advising Theses

TARIK Ç., Eşit olmayan hazırlama süreli tek makine toplam ağırlıklı gecikme problemlerinin parçacık sürü optimizasyonu ile çözümü, Postgraduate, S.ÖZER(Student), 2017

TARIK Ç., İnsan faktör mühendisliğinde örnek olay uygulamaları, Postgraduate, Y.KARDAŞ(Student), 2011

TARIK Ç., İnanç fonksiyonlarına getirilen bir ayırım ve senaryo değerlendirmesinde uygulanması, Doctorate,

M.NEBİOĞLU(Student), 2011

TARIK Ç., Türk imalat sanayinin örgütsel stres faktörlerinin ölçülmesi, Doctorate, M.SERDAR(Student), 2010

TARIK Ç., Otomotiv sektöründe yapay sinir ağı kullanılarak maliyet tahmini, Postgraduate, S.BUCAK(Student), 2007

TARIK Ç., Genetik algoritmalarla öncelik kısıtları altında paralel makine çizelgeleme, Postgraduate, M.ZÜLFİKAR(Student), 2005

TARIK Ç., Tek makine gecikme problemi için yeni bir nöro-baskın kural, Postgraduate, Ö.CANAY(Student), 2005

TARIK Ç., ISO 9001:2000, toplam kalite yönetimi, EFQM ve ISO 9001:2000'in bir firmaya uygulanması, Postgraduate, M.SERDAR(Student), 2002

TARIK Ç., Esneklik imalat sistemlerinde makina sayılarının ve teslim tarihinin belirlenmesinde yapay sinir ağlarının kullanılması, Doctorate, U.DOĞUÇ(Student), 2001

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

- I. **Green Supplier Selection Using Fuzzy Multiple-Criteria Decision-Making Methods and Artificial Neural Networks**  
Gegovska T., Koker R., Cakar T.  
Computational Intelligence and Neuroscience, vol.2020, 2020 (SCI-Expanded)
- II. **A neuro-genetic-simulated annealing approach to the inverse kinematics solution of robots: a simulation based study**  
Köker R., Çakar T.  
Engineering with Computers, vol.32, no.4, pp.553-565, 2016 (SCI-Expanded)
- III. **A new neuro-dominance rule for single-machine tardiness problem with double due date**  
Cakar T., Köker R., Canay O.  
Neural Computing and Applications, vol.26, no.6, pp.1439-1450, 2015 (SCI-Expanded)
- IV. **Optimization of heat treatment process parameters using neural networks and Nelder-Mead algorithm**  
Cakar T., Keskinilic F., Koker R.  
Journal of Optoelectronics and Advanced Materials, vol.17, no.3-4, pp.421-425, 2015 (SCI-Expanded)
- V. **Solving single machine total weighted tardiness problem with unequal release date using neurohybrid particle swarm optimization approach**  
Cakar T., Koker R.  
Computational Intelligence and Neuroscience, vol.2015, 2015 (SCI-Expanded)
- VI. **A neural-network committee machine approach to the inverse kinematics problem solution of robotic manipulators**  
Köker R., Çakar T., Sari Y.  
Engineering with Computers, vol.30, no.4, pp.641-649, 2014 (SCI-Expanded)
- VII. **Parallel robot scheduling to minimize mean tardiness with unequal release date and precedence constraints using a hybrid intelligent system**  
Cakar T., Köker R., Sari Y.  
International Journal of Advanced Robotic Systems, vol.9, 2012 (SCI-Expanded)
- VIII. **Single machine scheduling with unequal release date using neuro-dominance rule**  
Çakar T.  
Journal of Intelligent Manufacturing, vol.22, no.4, pp.481-490, 2011 (SCI-Expanded)
- IX. **Parallel robot scheduling to minimize mean tardiness with precedence constraints using a genetic algorithm**  
Çakar T., Köker R., Demir H. I.  
Advances in Engineering Software, vol.39, no.1, pp.47-54, 2008 (SCI-Expanded)
- X. **Machine number, priority rule, and due date determination in flexible manufacturing systems using artificial neural networks**  
Yildirim M. B., Cakar T., Doguc U., Meza J. C.

- Computers and Industrial Engineering, vol.50, no.1-2, pp.185-194, 2006 (SCI-Expanded)
- XI. **Using web based influence allocation processes based on experts' opinion immediately after natural catastrophe**  
Cil I., Cakar T.  
International Journal of Industrial Engineering : Theory Applications and Practice, vol.12, no.4, pp.407-418, 2005 (SCI-Expanded)
- XII. **A study of neural network based inverse kinematics solution for a three-joint robot**  
Köker R., Öz C., Çakar T., Ekiz H.  
Robotics and Autonomous Systems, vol.49, no.3-4, pp.227-234, 2004 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Supplier selection process in dairy industry using fuzzy topsis method**  
Cakar T., Çavuş B.  
Operational Research in Engineering Sciences: Theory and Applications, vol.4, no.1, pp.82-98, 2021 (Scopus)
- II. **Neurotic Fuzzy-Data-Envelopment Analysis to Forecast Efficiency of Bank Branches**  
Cakar T., Koker R., Narin M. A.  
TEM Journal, vol.10, no.4, pp.1751-1760, 2021 (ESCI)
- III. **Otomotiv Endüstrisinde Yapay Sinir Ağı Kullanarak Maliyet Tahmin Modeli Geliştirme**  
ÇAKAR T.  
Karaelmas Fen ve Mühendislik Dergisi, vol.7, no.1, pp.237-249, 2017 (Peer-Reviewed Journal)
- IV. **Evaluation of Organizational Stress Factors in Turkish Manufacturing Industry**  
ÇAKAR T.  
Fırat Üniversitesi Mühendislik Bilimleri Dergisi, vol.28, no.2, pp.109-118, 2016 (Peer-Reviewed Journal)
- V. **A proposal for a distinction in belief functions i**  
NEBİOĞLU M., ÇAKAR T., Köker R.  
Mathematical and Computational Applications, vol.19, no.1, pp.12-20, 2014 (Scopus)
- VI. **UZMAN SİSTEMLERİN TASARIMI GELİŞTİRİLMESİ VE BİLGİ MÜHENDİSLİĞİNİN ROLÜ**  
ÇAKAR T., ÇİL İ., KURT A.  
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.1, no.1, pp.33-40, 1997 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **BULANIK ÇOK ÖLÇÜTLÜ KARAR VERME YÖNTEMLERİ**  
ÇAKAR T.  
İSTANBUL GELİŞİM ÜNİVERSİTESİ YAYINLARI, İstanbul, 2019
- II. **PERSONNEL SELECTION USING FUZZY MULTI CRITERIA DECISION MAKING METHODS**  
ÇAKAR T., SHABANI I.  
LAP LAMBERT ACADEMIC PUBLISHING, Saarbrücken, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **SOLVING SINGLE ROBOT TARDINESS PROBLEM USING SIMULATED ANNEALING**  
ÇAKAR T., KÖKER R.  
9th INTERNATIONAL CONFERENCE INFORMATION TECHNOLOGIES AND MANAGEMENT, Riga, Latvia, 14 - 15 April 2011
- II. **Design and Implementation of an Image Processing System towards detection and correction of red eye effect**

CETINER R., YILMAZ A., KÖKER R., ÇAKAR T.

9th Intern. Conf. Information Tech. and Management, Riga, Latvia, 14 - 15 April 2011, pp.70-75

- III. **OBTAINING DOMINANCE RULE FOR SINGLE MACHINE TARDINESS PROBLEM USING RULES-3 INDUCTIVE LEARNING SYSTEM**  
ÇAKAR T., KÖKER R.  
ELECTRONICS, COMMUNICATIONS, AUTOMATICS, INFORMATICS CONFERENCE, Ohrid, Macedonia, 19 - 21 September 2007
- IV. **A new neuro-dominance rule for single machine tardiness problem with unequal release dates**  
Çakar T.  
16th International Conference on Artificial Neural Networks, ICANN 2006, Athens, Greece, 10 - 14 September 2006, vol.4132 LNCS - II, pp.963-973
- V. **INTEGRATED PROCESS PLANNING, SCHEDULING AND DUE DATE ASSIGNMENT**  
DEMİR H. İ., TAŞKIN H., ÇAKAR T.  
4rd INTERNATIONAL SYMPOSIUM ON INTELLIGENT MANUFACTURING, Sakarya, Turkey, 6 - 08 September 2004, pp.1165-1175
- VI. **THE USE OF ARTIFICIAL NEURAL NETWORKS AND RULES3 INDUCTIVE LEARNING ALGORITHM IN LIGHTING AND CHOICE OF ELECTRICAL LAMPS**  
ÇAKAR T., KÖKER R., YALCIN B.  
IMS 2001, Sakarya, Turkey, 30 - 31 August 2001, pp.378-386
- VII. **A STUDY OF NEURAL NETWORK BASED INVERSE KINEMATICS SOLUTION FOR A 3-JOINT ROBOT**  
KÖKER R., ÖZ C., ÇAKAR T.  
3rd INTERNATIONAL SYMPOSIUM ON INTELLIGENT MANUFACTURING SYSTEMS, Sakarya, Turkey, 30 - 31 August 2001, pp.717-724
- VIII. **DECISION MAKING IN MANUFACTURING : A CONCURRENT ENGINEERING APPROACH**  
OZKUL A. S., ÇAKAR T., ÇİL İ.  
2nd INTERNATIONAL CONFERENCE ON INTELLIGENT MANUFACTURING SYSTEMS, Sakarya, Turkey, 6 - 07 August 1998, pp.481-490
- IX. **İMALAT STRATEJİLERİNİN REKABET GÜCÜNE KATKISI**  
ÇİL İ., ÇAKAR T.  
3. VERİMLİLİK KONGRESİ, Ankara, Turkey, 14 - 16 May 1997, pp.225-235
- X. **UZMAN SİSTEMLERİN DİĞER YAZILIMLARLA İLİŞKİSİ**  
ÇAKAR T., ÇİL İ.  
ENDÜSTRİYEL OTOMASYON TEKNOLOJİLERİ SEMPOZYUMU TOK 97, İstanbul, Turkey, 20 - 21 February 1997, pp.147-154
- XI. **İMALAT SİSTEMLERİ TASARLANMASINDA YAPAY SİNİR AĞLARININ KULLANILMASI**  
ÇAKAR T., TÜRKER A. K., TORAMAN A.  
BİRİNCİ ULUSAL ZEKİ İMALAT SİSTEMLERİ SEMPOZYUMU, SAKARYA / SAPANCA, Turkey, 30 - 31 May 1996, pp.75-84