

Prof. ABDURRAHMAN KARAMANCIOĞLU

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: W-3087-2017
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Education Information

Doctorate, The University of Texas at Arlington, School Of Electrical Engineering, United States Of America 1987 - 1991
Undergraduate, Hacettepe University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1980 - 1984

Foreign Languages

English, C1 Advanced

Research Areas

Electrical and Electronics Engineering

Academic Titles / Tasks

Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği Bölümü, 2001 - Continues
Associate Professor, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği Bölümü, 1995 - 2001

Academic and Administrative Experience

Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, 2017 - Continues
Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1996 - Continues
Eskisehir Osmangazi University, Rektörlük, Yabancı Diller Bölümü, 2009 - 2017
Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, 2005 - 2008
Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1995 - 1996

Courses

- Advanced Calculus, Undergraduate, 2016 - 2017
Expository Writing, Undergraduate, 2016 - 2017
Nonlinear Systems Entry, Postgraduate, 2016 - 2017

Advising Theses

- KARAMANCIÖĞLU A., Tam Yönlü Mecanum Robot İçin İki Uyarlamalı Kontrol Yöntemi, Postgraduate, Y.CANBAZ(Student), 2020
KARAMANCIÖĞLU A., Demiryolu araçları için bir titreşim ölçüm uygulaması, Postgraduate, S.ERDEM(Student), 2019
KARAMANCIÖĞLU A., Extreme values computation for the frequency response using ant colony algorithm, Postgraduate, S.TABANLI(Student), 2019
KARAMANCIÖĞLU A., 27.5 KV AC KATENER SİSTEM TASARIMI, Postgraduate, S.SERTUĞRUL(Student), 2018
KARAMANCIÖĞLU A., Bir konvansiyonel raylı sistemin elektrifikasiyon süreci, Postgraduate, B.KADRIJA(Student), 2018
KARAMANCIÖĞLU A., Quadrotor konum kontrolü, Postgraduate, B.AŞKIN(Student), 2018
KARAMANCIÖĞLU A., Tren dinamiğinin enerji-optimal denetimi, Doctorate, K.KESKİN(Student), 2016
KARAMANCIÖĞLU A., Bir ters sarkaç denetimi gerçekleme, Postgraduate, G.ELİBOL(Student), 2015
KARAMANCIÖĞLU A., Dikine iniş kalkış yapabilen dört rotorlu hava aracının (Quadrotor) uçuş kontrolü, Doctorate, M.KEMAL(Student), 2013
KARAMANCIÖĞLU A., Nicemli kontrol girişi ile ters sarkaç yukarı kaldırma benzetimi, Postgraduate, Z.SHAKOR(Student), 2012
KARAMANCIÖĞLU A., Bir güç sistemi için geçici kararlılık çalışması, Postgraduate, Z.AMER(Student), 2012
KARAMANCIÖĞLU A., Delta paralel robot ileri ve ters kinematik hesaplamaları, Postgraduate, E.DOĞAN(Student), 2010
KARAMANCIÖĞLU A., Elektromekanik sistemler için yeni altopimal denetim yöntemleri, Doctorate, S.KAHVECİÖĞLU(Student), 2010
KARAMANCIÖĞLU A., Çelik tel düzeltme sistemi, Postgraduate, B.ATILGAN(Student), 2010
KARAMANCIÖĞLU A., Model öngörülü denetimin bir sistemde ARM ile gerçeklenmesi, Postgraduate, E.KELLECİ(Student), 2009
KARAMANCIÖĞLU A., Model öngörülü denetimin bir sistemde DSP ile gerçeklenmesi, Postgraduate, S.ERGEN(Student), 2009
KARAMANCIÖĞLU A., Yetersiz uyarımı bir elektromekanik sistem gerçeklenmesi ve denetimi, Doctorate, A.GÜN(Student), 2007
KARAMANCIÖĞLU A., Acrobot donanımı gerçekleme, Postgraduate, M.KASAP(Student), 2005
KARAMANCIÖĞLU A., Doğrusal olmayan programlama yöntemlerinin sistem denetiminde kullanımı, Doctorate, A.YAZICI(Student), 2005
KARAMANCIÖĞLU A., İki noktalı sınır değer problemlerinin çözümünde kullanılan nümerik analiz metodlarının incelemesi, Postgraduate, S.KAHVECİÖĞLU(Student), 2004
KARAMANCIÖĞLU A., Petri ağlarının modellenmesi, Postgraduate, V.ÇALIŞKAN(Student), 2003
KARAMANCIÖĞLU A., Aviyonik sistem donanım entegrasyonu, Postgraduate, S.MANAV(Student), 2003
KARAMANCIÖĞLU A., Darbe genlik modülasyon tekniği ile asenkron motor hız kontrolü, Postgraduate, H.SOLMAZ(Student), 2003
KARAMANCIÖĞLU A., Belirsizlik içeren sistemlerin frekans tepkileri, Postgraduate, Ö.YILDIZ(Student), 2002
KARAMANCIÖĞLU A., Kayma kipli kontrol yaklaşımlarının ters sarkaç sistemine uygulanması, Postgraduate, A.YAZICI(Student), 2000
KARAMANCIÖĞLU A., Diyotlu rezistif devrelerin bilgisayar çözümlemesi, Postgraduate, İ.PEHLİVAN(Student), 1998
KARAMANCIÖĞLU A., Rasyonel alanda sıfır hatalı matris cebri yazılımı, Postgraduate, N.KÖSEER(Student), 1997
KARAMANCIÖĞLU A., Yapay sinir ağları ile kişilerin ses örneklerinden kimliklerinin tanınması, Postgraduate, M.CANSIZ(Student), 1997
KARAMANCIÖĞLU A., Lineer devre analiz yazılımı, Postgraduate, A.KÖSEER(Student), 1997
KARAMANCIÖĞLU A., Belirsiz sistemlerin frekans tepkisinin analizi, Postgraduate, G.DURMAZ(Student), 1996

KARAMANCIÖĞLU A., Aralik sistemlerinin frekans tepkisinin hesaplanması, Doctorate, C.ÖZDEMİR(Student), 1995
KARAMANCIÖĞLU A., Zamanla değişen ortamlardan gelen verilerin stokastik analizi, Postgraduate, Ü.ANALI(Student), 1994

Published journal articles indexed by SCI, SSCI, and AHCI

- I. An edge determination algorithm for exact computation of the frequency response of linear interval systems
Dindis G., KARAMANCIÖĞLU A.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.40, no.3, pp.987-994, 2018 (SCI-Expanded)
- II. Energy-Efficient Train Operation Using Nature-Inspired Algorithms
KESKİN K., KARAMANCIÖĞLU A.
JOURNAL OF ADVANCED TRANSPORTATION, pp.1-12, 2017 (SCI-Expanded)
- III. A nonlinear programming technique to compute a tight lower bound for the real structured singular value
YAZICI A., KARAMANCIÖĞLU A., Kasimbeyli R.
OPTIMIZATION AND ENGINEERING, vol.12, no.3, pp.445-458, 2011 (SCI-Expanded)
- IV. A linear-programming-based sliding-mode control design for stabilization of a double-inverted pendulum
YAZICI A., KARAMANCIÖĞLU A.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING, vol.220, pp.315-321, 2006 (SCI-Expanded)
- V. Nonlinear programming-based sliding mode control with an application in the stabilization of an Acrobot
YAZICI A., KARAMANCIÖĞLU A., Gasimov R.
ENGINEERING OPTIMIZATION, vol.38, no.1, pp.113-127, 2006 (SCI-Expanded)
- VI. A nonlinear programming approach for the sliding mode control design
Gasimov R., KARAMANCIÖĞLU A., YAZICI A.
APPLIED MATHEMATICAL MODELLING, vol.29, no.11, pp.1135-1148, 2005 (SCI-Expanded)
- VII. A nonlinear programming technique to compute the real structured singular value
YAZICI A., KARAMANCIÖĞLU A., GASIMOV R.
Applied And Computational Mathematics, vol.4, no.1, 2005 (SCI-Expanded)
- VIII. A sectoring algorithm for exact computation of the frequency response of linear interval systems
KARAMANCIÖĞLU A., Dzhafarov V.
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.17, no.4, pp.483-493, 1998 (SCI-Expanded)
- IX. Frequency response of PID-controlled linear interval systems
KARAMANCIÖĞLU A., Dzhafarov V., Ozemir C.
CIRCUITS SYSTEMS AND SIGNAL PROCESSING, vol.15, no.6, pp.735-748, 1996 (SCI-Expanded)

Articles Published in Other Journals

- I. Effects of environmental conditions on catenary system
Ela C. G., Karamancioğlu A.
Demiryolu Mühendisliği, vol.0, no.17, pp.26-37, 2023 (Peer-Reviewed Journal)
- II. Precise phase portrait construction for an inverted pendulum using cubic Bezier curves
DINDİŞ G., KARAMANCIÖĞLU A.
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, vol.28, no.2, pp.210-218, 2020 (Peer-Reviewed Journal)

- III. **A Meta Heuristic Approach for Optimal Train Control**
KESKİN K., KARAMANCIÖĞLU A.
Girne American University Journal of Social and Applied Sciences, vol.7, no.11, pp.51-56, 2015 (Peer-Reviewed Journal)
- IV. **Nonlinear Model Predictive Swing-Up and Stabilizing Sliding Mode Controllers**
KAHVECİOĞLU S., KARAMANCIÖĞLU A., YAZICI A.
World Academy of Science Engineering and Technology, vol.3, no.9, pp.1041-1046, 2009 (Peer-Reviewed Journal)
- V. **A Nonlinear Programming Approach For The Swing Up Control Problem**
YAZICI A., KARAMANCIÖĞLU A.
Journal of Engineering and Architectural Faculty of Eskişehir Osmangazi University, vol.21, no.2, pp.109-124, 2008 (Peer-Reviewed Journal)
- VI. **Doğrusal kuadratik control altındaki ters sarkaç sisteminin gürbüzlük incelenmesi**
YAZICI A., KARAMANCIÖĞLU A.
Dumlupınar Üniversitesi Fen Bilimleri Enstitüsü Dergisi, no.10, pp.75-86, 2006 (Peer-Reviewed Journal)
- VII. **Structured robust stability analysis of an inverted pendulum system with a fixed feedback**
YAZICI A., KARAMANCIÖĞLU A.
ESOGÜ Mühendislik-Mimarlık Fakültesi Dergisi, vol.18, no.2, pp.55-70, 2005 (Peer-Reviewed Journal)
- VIII. **Minimax optimal control for one class of uncertain systems**
DZHAFAROV V., KARAMANCIÖĞLU A., ÇETİNTAŞ S.
Mathematical Applications, vol.2, no.1, pp.21-29, 1997 (Peer-Reviewed Journal)
- IX. **A tutorial on the singular value decomposition**
KARAMANCIÖĞLU A., ÖZDEMİR C.
OGÜ - Mühendislik-Mimarlık Fakültesi Dergisi, vol.9, no.1, pp.1-12, 1996 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Octave ile Mühendislik Hesaplamaları**
KARAMANCIÖĞLU A.
Eskişehir Osmangazi Üniversitesi Yayınları, 2019
- II. **Kuaterniyonlara Giriş**
KARAMANCIÖĞLU A.
Eskişehir Osmangazi Üniversitesi Yayınları, Eskişehir, 2019
- III. **Karmaşık Sayılar 201**
KARAMANCIÖĞLU A.
Eskişehir Osmangazi Üniversitesi Yayınları, 2018
- IV. **Sayısal Sinyal İşleme 101**
KARAMANCIÖĞLU A.
Nobel, Ankara, 2012

Refereed Congress / Symposium Publications in Proceedings

- I. **A testbench for directivity and attenuation patterns of ultrasonic sensor arrays**
DINDİŞ G., KARAMANCIÖĞLU A.
ISPEC 7th International Conference on Engineering and Natural Sciences, 8 - 10 May 2020
- II. **A comparison of fatline widths**
DINDİŞ G., KARAMANCIÖĞLU A.
International congress on engineering and life science, Kastamonu, Turkey, 26 - 29 April 2018
- III. **A test bench for electrical motor and a propeller components of a lightweight quadcopter**
DINDİŞ G., KARAMANCIÖĞLU A.

- International congress on engineering and life science, Kastamonu, Turkey, 26 - 29 April 2018
- IV. **An integer programming model for an energy optimal train operation**
KESKİN K., KARAMANCIÖĞLU A.
International Conference on Engineering Technologies, Konya, Turkey, 7 - 09 December 2017, vol.1, pp.288-291
- V. **A Preliminary Study for a Non-Stop Cargo Transportation Concept for the Railroads**
DINDİŞ G., KARAMANCIÖĞLU A.
International Symposium on Electrical Railway Transportation Systems, Eskişehir, Turkey, 27 - 28 October 2017, vol.1, pp.64-67
- VI. **Train Motion Dynamic Model Choices**
KESKİN K., KARAMANCIÖĞLU A.
International Symposium on Electrical Railway Transportation Systems, Eskişehir, Turkey, 27 - 28 October 2017, vol.1, pp.27-29
- VII. **Energy Optimal Quadrotor Stabilization Using PD control obtained by BB-BC Algorithm**
AŞKIN B., KESKİN K., DINDİŞ G., KARAMANCIÖĞLU A.
, International Conference of Applied Sciences, Engineering and Mathematics, Struga-Ohrid, Macedonia, 5 - 07 May 2017, vol.1, pp.91
- VIII. **An accurate line detection by a novel line follower sensor output processing method**
DINDİŞ G., KARAMANCIÖĞLU A.
4-th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 03 November 2016, pp.1145-1154
- IX. **A tighter fatline formula for cubic Bezier curves**
DINDİŞ G., KARAMANCIÖĞLU A.
1st International Conference on Engineering Technology and Applied Sciences, Afyonkarahisar, Turkey, 21 - 22 April 2016
- X. **A Metaheuristic Approach for Optimal Train Control**
KESKİN K., KARAMANCIÖĞLU A.
2nd International Symposium on Engineering, Artificial Intelligence and Applications, İstanbul, Turkey, 5 - 07 November 2014
- XI. **A cost based approach for exact computation of the frequency response of linear interval systems**
Dindiş G., Karamancioğlu A.
1st International Conference on Engineering Technology and Applied Sciences, Afyonkarahisar, Turkey, 21 - 22 April 2016
- XII. **Energy Efficient Motion Control for a Light Rail Vehicle Using The Big Bang Big Crunch Algorithm**
KESKİN K., KARAMANCIÖĞLU A.
14th IFAC Symposium on Control in Transportation Systems (CTS), İstanbul, Turkey, 18 - 20 May 2016, vol.49, pp.442-446
- XIII. **Application of Firefly Algorithm to Train Operation**
KESKİN K., KARAMANCIÖĞLU A.
8th IEEE International Conference on Intelligent Systems (IS), Sofija, Bulgaria, 4 - 06 September 2016, pp.692-697
- XIV. **Dijkstra Algoritması ile Enerji Verimli Tren İşletimi**
KESKİN K., KARAMANCIÖĞLU A., BOZKURT KESER S.
Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı (TOK2015), Denizli, Turkey, 10 - 12 September 2015, pp.999-1004
- XV. **Dijkstra Algoritması ile Enerji Verimli Tren İşletmesi**
KESKİN K., KARAMANCIÖĞLU A., BOZKURT KESER S.
TOK 2015, Turkey, 10 - 12 September 2015
- XVI. **Optimal Rail Vehicle Operation With Multiple Speed Constraints**
KESKİN K., KARAMANCIÖĞLU A.
International Congress on Advanced Railway Engineering (IC-ARE'15), İstanbul, Turkey, 2 - 04 March 2015, pp.381-385
- XVII. **A Hybrid Optimization Algorithm for Energy Efficient Train Operation**

- KESKİN K., KARAMANCIÖĞLU A.
International Symposium on Innovations in Intelligent SysTems and Applications (INISTA 2015), Madrid, Spain, 2 - 04 September 2015, pp.93-98
- XVIII. **HIL simulation setup for attitude control of a quadrotor**
bayrakçekeen m. k., YALÇIN M. K., ARISOY A., KARAMANCIÖĞLU A.
IEEE International conference on mechatronics, 13 - 15 April 2011, pp.354-357
- XIX. **Robust stabilization of acrobot by using its real structured uncertainty model**
YAZICI A., KARAMANCIÖĞLU A.
2nd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 9 - 11 June 2005, pp.265-270
- XX. **A GEOMETRIC APPROACH TO 2-D IMPLICIT SYSTEMS**
KARAMANCIÖĞLU A., LEWIS F.
29th IEEE Conference on Decision and Control, Hawaii, United States Of America, 5 - 07 December 1990, pp.470-475

Metrics

Publication: 43
Citation (WoS): 72
Citation (Scopus): 87
H-Index (WoS): 5
H-Index (Scopus): 6

Non Academic Experience

Construcciones Aeronauticas S. A.
Automation and Robotics Research Institute