Prof. ALPER ODABAŞ

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Education Information

Doctorate, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, Turkey 2004 - 2009
Postgraduate, Dumlupınar Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 2002 - 2004
Undergraduate, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 1998 - 2002

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, GAP (GROUP, ALGORITHM AND PROGRAMMING) İLE CEBİRLER ÜZERİNDE ÇAPRAZLANMIŞ MODÜLLER, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, 2009
Postgraduate, GAP (GROUP, ALGORITHM AND PROGRAMMING) İLE CEBİR VE SAYILAR TEORİSİ, Dumlupınar Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2004

Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Mathematics, Computer Science, Group Theory and Generalizations, Classification Theory and Homological Algebra

Academic Titles / Tasks

Professor, Eskisehir Osmangazi University, Fen Fakültesi, Matematik-Bilgisayar Bölümü, 2022 - Continues
Associate Professor, Eskisehir Osmangazi University, Fen Fakültesi, Matematik-Bilgisayar Bölümü, 2017 - 2022
Assistant Professor, Eskisehir Osmangazi University, Fen Fakültesi, Matematik-Bilgisayar Bölümü, 2009 - 2017
Research Assistant, Eskisehir Osmangazi University, Fen Fakültesi, Matematik-Bilgisayar Bölümü, 2005 - 2009
Research Assistant, Dumlupınar Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2002 - 2005

Academic and Administrative Experience

Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, 2012 - Continues
Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, 2009 - Continues
Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Matematik Ve Bilgisayar Bilimleri Bölümü, 2009 - 2010

Advising Theses

ODABAŞ A., Julia ve Derin Öğrenme Teknikleri Kullanılarak İçme suyu Arıtma Tesisleri için Yapay Zeka Uygulaması., Doctorate, G.KAPLAN(Student), 2019
ODABAŞ A., MAKINE ÖĞRENMESİ TEKNİKLERİ İLE SAĞLIK DAVRANIŞLARINA DAYALI DİYABETİN TAHMİN EDİLMESİ, Postgraduate, H.FADHL(Student), 2019
ODABAŞ A., Braided Çaprazlanmış Modüllerin Sınıflandırılması, Postgraduate, M.MÜCAHİD(Student), 2019
ODABAŞ A., Asosyatif olmayan cebirlerin sınıflandırılması, Doctorate, E.SOYLU(Student), 2019
ODABAŞ A., Yapay zeka tekniğiyle işitme engelliler için uzaktan iletişim sistemi, Doctorate, Ö.ÇELİK(Student), 2019
ODABAŞ A., Nesnelerin interneti ile akıllı sera uygulaması, Postgraduate, K.ÇAĞLAR(Student), 2018
ODABAŞ A., Matlab ile görüntü işleme ve kenar belirlemede yeni filtreleme yöntemi, Postgraduate, G.KAPLAN(Student), 2017
ODABAŞ A., Haskell ile kategori teori, Postgraduate, E.SOYLU(Student), 2013
ODABAŞ A., Lie cebirleri üzerinde önçaprazlanmış modüller, Doctorate, A.FARUK(Student), 2013
ODABAŞ A., Grup cebirlerde hesaplamalar, Postgraduate, M.ÜNLÜ(Student), 2010

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Optical properties of Nb2O5 doped ZnO nanocomposite thin film deposited by thermionic vacuum arc**
PAT S., ÇELİK Ö., ODABAŞ A., KORKMAZ Ş.
Optik, vol.258, 2022 (SCI-Expanded)

II. **Commutativity degree of crossed modules**
ARVASİ Z., Çağlayan E. I., ODABAŞ A.
Turkish Journal of Mathematics, vol.46, no.1, pp.242-256, 2022 (SCI-Expanded)

III. **A U-Net Approach to Apical Lesion Segmentation on Panoramic Radiographs**
Bayrakdar İ. Ş., Orhan K., Çelik Ö., Bilgir E., Sağlam H., Kaplan F. A., Görür S. A., Odabaş A., Aslan A. F., Różyło-Kalinowska I.
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IV. **Artificial intelligence system for automatic deciduous tooth detection and numbering in panoramic radiographs.**
Kılıc M. C., Bayrakdar İ. Ş., Çelik Ö., Bilgir E., Orhan K., Aydın O. B., Kaplan F. A., Sağlam H., Odabaş A., Aslan A. F., et al.
Dento maxillo facial radiology, vol.50, no.6, pp.20200172, 2021 (SCI-Expanded)

V. **An artificial intelligence proposal to automatic teeth detection and numbering in dental bite-wing radiographs**
Yasa Y., Celik Ö., BAYRAKDAR İ. Ş., PEKİNCE A., ORHAN K., Akarsu S., Atasoy S., BİLGİR E., ODABAŞ A., ASLAN A. F.
ACTA ODONTOLOGICA SCANDINAVICA, vol.79, no.4, pp.275-281, 2021 (SCI-Expanded)

VI. **Detection of Lung Cancer on Computed Tomography Using Artificial In-telligence Applications Developed by Deep Learning Methods and the Con-tribution of Deep Learning to the Classification of Lung Carcinoma**
Aydın N., Çelik Ö., Aslan A. F., Odabaş A., Dündar E., Şahin M. C.
CURRENT MEDICAL IMAGING, vol.17, no.9, pp.1137-1141, 2021 (SCI-Expanded)

VII. **AN ALGORITHM FOR COMPUTING ISOCLINISM FAMILIES OF GROUPS**
ODABAŞ A.
COMPTES RENDUS DE L ACADEMIE BULGARE DES SCIENCES, vol.73, no.1, pp.3-12, 2020 (SCI-Expanded)

VIII. **Higher dimensional algebras as ideal maps**
Odabaş A., Ulualan E.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.49, no.6, pp.1865-1884, 2020 (SCI-Expanded)

IX. **On groups with action on itself**
Uslu E. O., ASLAN A. F., ODABAŞ A.
GEORGIAN MATHEMATICAL JOURNAL, vol.26, no.3, pp.459-470, 2019 (SCI-Expanded)

X. **Relationships between category theory and functional programming with an application**
ODABAŞ A., SOYLU YILMAZ E.
TURKISH JOURNAL OF MATHEMATICS, vol.43, no.3, pp.1566-1577, 2019 (SCI-Expanded)

XI. **Braided regular crossed modules bifibered over regular groupoids**
ODABAŞ A., ULUALAN E.
TURKISH JOURNAL OF MATHEMATICS, vol.41, no.6, pp.1385-1403, 2017 (SCI-Expanded)

XII. **Computing 2-dimensional algebras: Crossed modules and Cat1-algebras**
Arvasi Z., Odabas A.
Journal of Algebra and its Applications, vol.15, no.10, 2016 (SCI-Expanded)

XIII. **On Free Quadratic Modules of Commutative Algebras**
ODABAŞ A., ULUALAN E.
BULLETIN OF THE MALAYSIAN MATHEMATICAL SCIENCES SOCIETY, vol.39, no.3, pp.1059-1074, 2016 (SCI-Expanded)

XIV. **Isoclinism of crossed modules**
Odabas A., Uslu E. O., Ilgaz E.
JOURNAL OF SYMBOLIC COMPUTATION, vol.74, pp.408-424, 2016 (SCI-Expanded)

Articles Published in Other Journals

I. **Financial Performance of BIST-Cement Companies Analysis by TOPSIS and ELECTRE Methods**
BOZDOĞAN T., Odabas A., Çetin Ö. O.
Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, no.78, pp.491-510, 2023 (Peer-Reviewed Journal)

II. **Analysis of Financial Performances of Banks by ELECTRE and TOPSIS Methods in the Covid-19 Pandemic**
Kaplan G., Odabas A., BOZDOĞAN T.
Alanya Akademik Bakış, vol.7, no.2, pp.865-892, 2023 (Peer-Reviewed Journal)

III. **Segmentation of acute pulmonary embolism in computed tomography pulmonary angiography using the deep learning method Derin öğrenme yöntemiyle akut pulmoner embolinin bilgisayarlı tomografik pulmoner anjiografide segmentasyonu**
AYDIN N., CİHAN Ç., ÇELİK Ö., ASLAN A. F., ODABAŞ A., ALATAŞ F., YILDIRIM H.
Tuberkuloz ve Toraks, vol.71, no.2, pp.131-137, 2023 (ESCI)

IV. **Machine Learning Model to Diagnose Diabetes Type 2 Based on Health Behavior**
ALSHARİ H., ODABAŞ A.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.35, no.3, pp.834-852, 2022 (ESCI)

V. **Derin Öğrenme Yöntemi Kullanılarak Geliştirilen Yapay Zekâ Yöntemi ile Panoramik Radyografilerde Dental Restorasyonların Otomatik Tespiti ve Sınıflandırılması: Metodolojik Çalışmalar**
AŞÇI E., KILIÇ M., ÇELİK Ö., BAYRAKDAR İ. Ş., BİLGİR E., ASLAN A. F., ODABAŞ A., ORHAN K.
Türkiye Klinikleri Diş Hekimliği Bilimleri Dergisi, vol.28, 2022 (Peer-Reviewed Journal)

VI. **Segmentation of orbital and periorbital lesions detected in orbital magnetic resonance imaging by deep learning method**
AYDIN N., ŞAYLISOY S., Celik O., ASLAN A. F., ODABAŞ A.
Polish Journal of Radiology, vol.87, no.1, 2022 (ESCI)

VII. **Analysis of Financial Performance of Foreign Banks Having Branches in Turkey by TOPSIS and ELECTRE Methods**

Bozdoğan T., Odabaş A., Shegıwal A. H.
Alanya Academic Review Journal, vol.5, no.2, pp.1049-1067, 2021 (Peer-Reviewed Journal)

VIII. **Comparison of Gradient Boosting Decision Tree Algorithms for CPU Performance**
Odabaş A., Alsharı H., Saleh A. Y.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.37, no.1, pp.157-168, 2021 (Peer-Reviewed Journal)

IX. **Success of artificial intelligence system in determining alveolar bone loss from dental panoramic radiography images**
KURT BAYRAKDAR S., ÇELİK Ö., BAYRAKDAR İ. Ş., ORHAN K., BİLGİR E., ODABAŞ A., ASLAN A. F.
Cumhuriyet Dental Journal, vol.23, no.4, pp.318-324, 2020 (Peer-Reviewed Journal)

X. **Sign2Text: Konvolüsyonel Sinir Ağları Kullanarak Türk İşaret Dili Tanıma**
ÇELİK Ö., ODABAŞ A.
Avrupa Bilim ve Teknoloji Dergisi, no.19, pp.923-934, 2020 (Peer-Reviewed Journal)

XI. **Analysis of Financial Performances of Hospital Services Subsector By ELECTRE Method**
BOZDOĞAN C., ODABAŞ A.
New Challenges in Accounting and Finance (NCAF), vol.2020, no.3, pp.29-39, 2020 (Peer-Reviewed Journal)

XII. **KATILIM BANKALARININ FİNANSAL PERFORMANSLARININ ELECTRE YÖNTEMİYLE ANALİZİ**
ODABAŞ A., BOZDOĞAN T.
Muhasebe ve Finansman Dergisi, no.88, pp.199-224, 2020 (Peer-Reviewed Journal)

XIII. **Computing High Dimensional Algebras with GAP, I**
ARVASİ Z., ODABAŞ A.
Tathapi, vol.19, no.55, pp.428-432, 2020 (Peer-Reviewed Journal)

XIV. **Computing High Dimensional Algebras with GAP, II**
ARVASİ Z., ODABAŞ A.
Tathapi, vol.19, no.55, pp.443-447, 2020 (Peer-Reviewed Journal)

XV. **Derin öğrenme yöntemi ile panoramik radyografiden diş eksikliklerinin tespiti: Bir yapay zekâ pilot çalışması**
Çelik Ö., Odabaş A., Bayrakdar İ. Ş., Bilgir E., Akkoca Kaplan F.
Selcuk Dental Journal, vol.6, no.4, pp.168-172, 2019 (Conference Book)

XVI. **Classification of Finite Simplicial Algebras**
ODABAŞ A.
ANADOLU UNIVERSITY JOURNAL OF SCIENCE AND TECHNOLOGY A - Applied Sciences and Engineering, vol.18, no.1, pp.22, 2017 (Peer-Reviewed Journal)

XVII. **Isoclinic Lie Crossed Modules**
ILGAZ ÇAĞLAYAN E., ODABAŞ A., USLU E. Ö.
arXiv, pp.1-14, 2016 (Non Peer-Reviewed Journal)

XVIII. **Analyzing Group Theoretical Properties of Groups with Order 24 by GAP**
ASLAN A. F., ODABAŞ A.
EUROPEAN JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.8, no.3, pp.375-388, 2015 (ESCI)

XIX. **s Weakly Regularity of Group Algebras with GAP**
Odabaş A.
INTERNATIONAL MATHEMATICAL FORUM, vol.4, no.47, pp.2317-2325, 2009 (Peer-Reviewed Journal)

XX. **Peiffer Pairings in The Moore Complex of a Pro C Simplicial Group**
ODABAŞ A.
INTERNATIONAL MATHEMATICAL FORUM, vol.4, no.20, pp.977-982, 2009 (Peer-Reviewed Journal)

XXI. **From Pro C Simplicial Groups to Pro C Crossed Complexes**
ODABAŞ A.
INTERNATIONAL JOURNAL OF ALGEBRA, vol.3, no.18, pp.881-888, 2009 (Peer-Reviewed Journal)

XXII. **Some Remarks on Simplicial Commutative Algebras**
ODABAŞ A.
ALGEBRAS, GROUPS, AND GEOMETRIES, vol.26, no.2, pp.133-141, 2009 (Peer-Reviewed Journal)

XXIII. **36 Dereceden Grupların Cat1-Gruplarının GAP Kullanılarak Sıralanması**

ALP M., ODABAŞ A.
DPU FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, no.4, pp.163-174, 2003 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **ELECTRE ve TOPSIS Yöntemleriyle BİST-Bilişim Sektöründekiİşletmelerin Finansal Performanslarının Analizi**
ODABAŞ A., BOZDOĞAN T., YILMAZ A.
5. International EMI Kongre, 29 - 30 June 2020

II. **The Detection Of Tooth Deficiency On Panoramic Radiography Using Deep Learning Technique: An Artificial Intelligence Pilot Study**
ÇELİK Ö., ODABAŞ A., BAYRAKDAR İ. Ş., BİLGİR E., AKKOCA KAPLAN F.
3. Uluslararası Oral Diagnoz ve Maksillofasiyal Radyoloji Kongresi, Antalya, Turkey, 25 - 28 April 2019

III. **2-ALGEBRAS WITH GAP, I : CROSSED MODULES AND CAT-1 ALGEBRAS**
ARVASİ Z., ODABAŞ A.
INTERNATIONAL CONFERENCE ON ADVANCES IN SCIENCE AND TECHNOLOGY, ROPAR, India, 16 - 18 March 2018

IV. **2-ALGEBRAS WITH GAP, II : IMPLEMENTATIONS**
ARVASİ Z., ODABAŞ A.
INTERNATIONAL CONFERENCE ON ADVANCES IN SCIENCE AND TECHNOLOGY, ROPAR, India, 16 - 18 March 2018

V. **A NEW EDGE DETECTION FILTER METHOD FOR NARROW DYNAMIC RANGE IMAGES**
KAPLAN G., ODABAŞ A.
INTERNATIONAL SYMPOSIUM ON MULTIDISCIPLINARY STUDIES AND INNOVATIVE TECHNOLOGIES, Tokat, Turkey, 2 - 04 November 2017

VI. **IMAGE PROCESSING APPLICATION ON PSYCHOLOGY**
KAPLAN G., ODABAŞ A.
8TH WORLD CONFERENCE ON PSYCHOLOGY, COUNSELING AND GUIDANCE, 28 - 30 April 2017

VII. **HASKELL IMPLEMENTATION OF A SMALL CATEGORY**
SOYLU E., ODABAŞ A.
THE INTERNATIONAL CONFERENCE ON SCIENCE, ECOLOGY AND TECHNOLOGY I, VIYANA, Austria, 25 - 28 August 2015

VIII. **The package XModAlg**
ARVASİ Z., ODABAŞ A.
International Conference on Applied Analysis and Mathematical Modeling, 8 - 12 June 2015

IX. **CLASSIFICATION OF GROUPS UP TO ISOCLINISM WITH GAP**
ARVASİ Z., ODABAŞ A.
INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELLING, İstanbul, Turkey, 8 - 12 June 2015

Supported Projects

Kaplan G., Odabaş A., Project Supported by Higher Education Institutions, Julia ile İçme Suyu Arıtma Tesisleri için Yapay Zeka Uygulaması., 2021 - 2023

Bayrakdar İ. Ş., Orhan K., Bilgir E., Çelik Ö., Odabaş A., Aslan A. F., Bayrak Ş., Project Supported by Higher Education Institutions, Evaluation of 2D and 3D dental radiographs with Artificial Intelligence, 2020 - 2023

ODABAŞ A., TOKER M. M., Project Supported by Higher Education Institutions, Braided Çaprazlanmış Modüllerin Sınıflandırılması, 2020 - 2021

ARVASİ Z., ODABAŞ A., Project Supported by Higher Education Institutions, 3-Boyutlu Grupların Sınıflandırılması, 2017 - 2021

ODABAŞ A., ODABAŞ A., Project Supported by Higher Education Institutions, GRUP İLE ETKİLER ÜZERİNDE

HESAPLAMALAR VE GAP, 2015 - 2017
ODABAŞ A., ODABAŞ A., Project Supported by Higher Education Institutions, 3 ÇAPRAZLANMIŞ MODÜLLER VE KOMPLEKSLER İÇİN SERBESTLİK ŞARTLARI, 2015 - 2015

Metrics

Publication: 49
Citation (WoS): 88
Citation (Scopus): 114
H-Index (WoS): 5
H-Index (Scopus): 5