Prof. ERSİN ASLAN

Personal Information

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International Researcher IDs
ScholarID: quSMaswAAAAJ
ORCID: 0000-0002-5496-2075
Publons / Web Of Science ResearcherID: DVG-4611-2022
ScopusID: 55869112400
Yoksis Researcher ID: 104615

Education

Doctorate, Ege University, Turkey 2007 - 2011
Postgraduate, Ege University, Turkey 2005 - 2007
Undergraduate, Ege University, Turkey 2000 - 2005

Foreign Languages

English

Dissertations

Doctorate, Çizgelerin isoperimetrik sayısı üzerine, Ege University, 2011
Postgraduate, Graflar ve zedelenebilirlik ölçümleri, Ege University, 2007

Research Areas

Avesis Research Areas: Engineering and Technology
WoS Research Areas: Engineering Computing & Technology (Eng)
Scopus Research Areas: Computer Science (miscellaneous)

Academic Positions

Professor, Manisa Celal Bayar University, Hasan Ferdi Turgutlu Teknoloji Fakültesi, Yazılım Mühendisliği, 2023 - Present
Associate Professor, Manisa Celal Bayar University, Hasan Ferdi Turgutlu Teknoloji Fakültesi, Yazılım Mühendisliği, 2017 - Present
2012 - 2017
Lecturer, 2009 - 2012

Academic and Administrative Experience

Academic and Administrative Experience

Manisa Celal Bayar University, 2022 - Present
Manisa Celal Bayar University, 2019 - Present
Manisa Celal Bayar University, 2019 - Present
Manisa Celal Bayar University, 2019 - 2022
2015 - 2016
2013 - 2015

Courses

Undergraduate Double Major
Bilgisayar Destekli Optimizasyon, Undergraduate Double Major, 2016-2017, 2015-2016
Mühendislikte İleri Yazılım Teknikleri, Undergraduate Double Major, 2016-2017
Bilimsel Hesaplama ve Programlama II, Undergraduate Double Major, 2016-2017, 2015-2016, 2014-2015
Bilimsel Hesaplama ve Programlama I, Undergraduate Double Major, 2016-2017, 2015-2016, 2013-2014
İleri Graf Teorisi I, Undergraduate Double Major, 2015-2016
Graf Teorisi ve Uygulamaları, Undergraduate Double Major, 2015-2016, 2014-2015

Supervised Theses

ASLAN E., Graf Teoride Bazı İzole Zedelenebilirlik Parametrelerinin İncelenmesi, Postgraduate, T.DEMİR(Student), 2024
ASLAN E., Şirket Karar Vericileri için Graf Teorinin Veri Görselleştirmede Kullanımı, Postgraduate, Y.BÜYÜKDAĞ(Student), 2024
ASLAN E., Ağırlıklı graflarda bazı zedelenebilirlik parametreleri ve algoritmaları, Postgraduate, T.KÖROĞLU(Student), 2024
ASLAN E., Çizge teoride ortalama zedelenebilirlik parametreleri üzerine, Postgraduate, A.TEZEL(Student), 2023
ASLAN E., Çizgelerde ağırlıklı zedelenebilirlik parametreleri, Postgraduate, Ş.KESER(Student), 2023
ASLAN E., Ağlarda zedelenebilirlik ve ayrıt parametreleri üzerine, Postgraduate, R.SÜRÜCÜ(Student), 2022
ASLAN E., Ağlarda Zedelenebilirliğin Ağırlıklı Graflar Yardımıyla İncelenmesi, Postgraduate, Ö.KULUÇ(Student), 2022
ASLAN E., Ağlarda ortalama bağlama sayısı üzerine, Postgraduate, A.KAHVECİ(Student), 2021
ASLAN E., Dickson ve graph-matching polinomlarinin temel matris özellikleri ve fonksiyonel integro-diferansiyel denklemlere uygulamalari, Doctorate, Ö.KIVANÇ(Student), 2019
ASLAN E., Ağlarda güvenlik için komşu zedelenebilirlik ölçümleri üzerine, Postgraduate, M.AYKUT(Student), 2019
ASLAN E., Transformasyon graflarda ortalama düşük bağlantılılık ve komşu izole saçılım sayısı, Postgraduate, B.AÇAN(Student), 2017
ASLAN E., Graflarda bazı zedelenebilirlik ölçümleri ve aralarındaki ilişkiler, Postgraduate, Ö.KIVANÇ(Student), 2016

Articles

I. **On The Weighted Binding Number Of Graphs**
Keser Ş., aslan e.
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.29, no.2, pp.434-439, 2025 (TRDizin)
II. **Vulnerability Prameters in Fuzzy Graphs: Fuzzy Node Tenacity**
Altundağ F. N., Turan G., aslan e.
Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.15, no.1, pp.316-329, 2025 (TRDizin)
III. **Algorithm of Neighbor Isolated Scattering Number**
TOSUN M. A., ASLAN E., BORANDAĞ E.
Konya mühendislik bilimleri dergisi (Online), vol.11, no.1, pp.150-159, 2023 (TRDizin)
IV. **Computing the weighted neighbor isolated tenacity of interval graphs in polynomial time**

ASLAN E., Tosun M. A.
Numerical Methods for Partial Differential Equations, vol.37, no.3, pp.2540-2549, 2021 (SCI-Expanded, Scopus)

V. **A fast numerical method for fractional partial integro-differential equations with spatial-time delays**
ASLAN E., Kürkçü Ö. K., Sezer M.
Applied Numerical Mathematics, vol.161, pp.525-539, 2021 (SCI-Expanded, Scopus)

VI. **An integrated numerical method with error analysis for solving fractional differential equations of quintic nonlinear type arising in applied sciences**
Kürkçü Ö. K., ASLAN E., Sezer M.
Mathematical Methods in the Applied Sciences, vol.42, no.18, pp.6114-6130, 2019 (SCI-Expanded, Scopus)

VII. **On the numerical solution of fractional differential equations with cubic nonlinearity via matching polynomial of complete graph**
Kürkçü Ö. K., ASLAN E., Sezer M.
Sadhana - Academy Proceedings in Engineering Sciences, vol.44, no.12, 2019 (SCI-Expanded, Scopus)

VIII. **An advanced method with convergence analysis for solving space-time fractional partial differential equations with multi delays**
Kıvanç Kürkçü Ö., ASLAN E., Sezer M.
European Physical Journal Plus, vol.134, no.8, 2019 (SCI-Expanded, Scopus)

IX. **A novel hybrid method for solving combined functional neutral differential equations with several delays and investigation of convergence rate via residual function**
Kürkçü Ö. K., ASLAN E., Sezer M.
Computational Methods for Differential Equations, vol.7, no.3, pp.396-417, 2019 (Scopus)

X. **An inventive numerical method for solving the most general form of integro-differential equations with functional delays and characteristic behavior of orthoexponential residual function**
Kürkçü Ö. K., ASLAN E., Sezer M.
Computational and Applied Mathematics, vol.38, no.2, 2019 (SCI-Expanded, Scopus)

XI. **The average binding number of graphs**
ASLAN E.
ScienceAsia, vol.45, no.1, pp.85-91, 2019 (SCI-Expanded, Scopus)

XII. **A novel graph-operational matrix method for solving multidelay fractional differential equations with variable coefficients and a numerical comparative survey of fractional derivative types**
Kürkçü Ö. K., ASLAN E., Sezer M.
Turkish Journal of Mathematics, vol.43, no.1, pp.373-392, 2019 (SCI-Expanded, Scopus, TRDizin)

XIII. **Feasible Sanitary Sewer Network Generation Using Graph Theory**
Turan M. E., Bacak Turan G., Cetin T., Aslan E.
Advances in Civil Engineering, vol.2019, 2019 (SCI-Expanded, Scopus)

XIV. **A comparison between edge neighbor rupture degree and edge scattering number in graphs**
Kürkçü Ö. K., ASLAN E.
International Journal of Foundations of Computer Science, vol.29, no.7, pp.1119-1142, 2018 (SCI-Expanded, Scopus)

XV. **A Numerical Approach Technique for Solving Generalized Delay Integro-Differential Equations with Functional Bounds by Means of Dickson Polynomials**
Kürkçü O. K., ASLAN E., Sezer M., Ilhan O.
International Journal of Computational Methods, vol.15, no.5, 2018 (SCI-Expanded, Scopus)

XVI. **Edge harmonic index of carbon nanocones and an algorithm**
ASLAN E., Kürkçü O.
Bulgarian Chemical Communications, vol.50, no.3, pp.478-483, 2018 (Scopus)

XVII. **A numerical method for solving some model problems arising in science and convergence analysis based on residual function**
Kürkçü Ö. K., ASLAN E., Sezer M.
Applied Numerical Mathematics, vol.121, pp.134-148, 2017 (SCI-Expanded, Scopus)

XVIII. **Weak-Rupture Degree of Graphs**

ASLAN E.
International Journal of Foundations of Computer Science, vol.27, no.6, pp.725-738, 2016 (SCI-Expanded, Scopus)

XIX. **The average scattering number of graphs**
ASLAN E., Kilinç D., YÜCALAR F., BORANDAĞ E.
RAIRO - Theoretical Informatics and Applications, vol.50, no.3, pp.263-272, 2016 (Scopus)

XX. **Multi-level reranking approach for bug localization**
Kılınç D., YÜCALAR F., BORANDAĞ E., ASLAN E.
Expert Systems, vol.33, no.3, pp.286-294, 2016 (SCI-Expanded, Scopus)

XXI. **A numerical approach with error estimation to solve general integro-differential-difference equations using Dickson polynomials**
Kürkçü Ö. K., ASLAN E., Sezer M.
Applied Mathematics and Computation, vol.276, pp.324-339, 2016 (SCI-Expanded, Scopus)

XXII. **Neighbor isolated tenacity of graphs**
ASLAN E.
RAIRO - Theoretical Informatics and Applications, vol.2013, pp.269-284, 2016 (Scopus)

XXIII. **Mean rupture degree of graphs**
ASLAN E., BACAK TURAN G.
UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, vol.78, no.1, pp.233-242, 2016 (SCI-Expanded, Scopus)

XXIV. **The average lower reinforcement number of a graph**
Turaci T., ASLAN E.
RAIRO - Theoretical Informatics and Applications, vol.2014, pp.135-144, 2016 (Scopus)

XXV. **Neighbour isolated scattering number of graphs**
ASLAN E.
ScienceAsia, vol.41, no.6, pp.423-431, 2015 (SCI-Expanded, Scopus)

XXVI. **The edge eccentric connectivity index of armchair polyhex nanotubes**
ASLAN E.
Journal of Computational and Theoretical Nanoscience, vol.12, no.11, pp.4455-4458, 2015 (SCI-Expanded, Scopus)

XXVII. **On the fourth atom-bond connectivity index of nanocones**
ASLAN E.
Optoelectronics and Advanced Materials, Rapid Communications, vol.9, no.3-4, pp.525-527, 2015 (SCI-Expanded, Scopus)

XXVIII. **Edge-rupture degree of a graph**
ASLAN E.
Dynamics of Continuous, Discrete and Impulsive Systems Series B: Applications and Algorithms, vol.22, no.2, pp.155-161, 2015 (Scopus)

XXIX. **The average lower connectivity of graphs**
ASLAN E.
Journal of Applied Mathematics, vol.2014, 2014 (Scopus)

XXX. **Edge-neighbor-rupture degree of graphs**
ASLAN E.
Journal of Applied Mathematics, vol.2013, 2013 (SCI-Expanded, Scopus)

Papers Presented at Peer-Reviewed Scientific Conferences

I. **A Reliable Numerical Approximation to Physical Pendulum Equation using Dickson Polynomials**
KÜRKÇÜ Ö. K., ASLAN E., SEZER M.
3rd International Students Science Congress, İzmir, Turkey, 3 - 04 May 2019, pp.273-280, (Full Text)

II. **The Average Binding Number of Trees**
KAHVECİ A., ASLAN E.

3rd International Students Science Congress, İzmir, Turkey, 3 - 04 May 2019, pp.208-213, (Full Text)

III. **A Hybrid Numerical Method Based on Dickson Polynomials for Solving Some Fractional Model Differential Equations**
KÜRKÇÜ Ö. K., ASLAN E., SEZER M.
II. INTERNATIONAL UNIVERSITY INDUSTRY COOPERATION, RD AND INNOVATION CONGRESS (ARGEINV 2018), Manisa, Turkey, 14 - 15 November 2018, pp.122-128, (Full Text)

IV. **Kanalizasyon Sistemi Optimizasyonunda Çizge Teorisi Kullanımı**
Turan M. E., Bacak Turan G., Çetin T., Aslan E.
International Symposium on Urban Water and Wastewater Management, Denizli, Turkey, 25 - 27 October 2018, pp.192-199, (Full Text)

V. **A Numerical Method for Solving Functional Differential Equations with Delays**
KÜRKÇÜ Ö. K., ASLAN E., SEZER M.
2nd International Students Science Congress, İzmir, Turkey, 4 - 05 May 2018, pp.72-77, (Full Text)

VI. **INNOVATION ADVISORY BOARD CREATED WITH THE DATABASE AND MATCHING FIRM GROUPS WITH GRAPH THEORY**
ASLAN E.
1.ULUSLARARASI ÜNİVERSİTE-SANAYİ İŞBİRLİĞİ, AR-GE VE İNOVASYON KONGRESİ, 17 - 18 December 2017, (Summary Text)

VII. **A Dickson Matrix Technique for Solving Some Special Equations Arising in Science**
KÜRKÇÜ Ö. K., ASLAN E., SEZER M.
International Students Science Conference, İzmir, Turkey, 5 - 06 May 2017, pp.66, (Summary Text)

VIII. **GEAR GRAFLARIN TOUGHNESS DEĞERİ**
ASLAN E., KIRLANGIÇ A.
XXI. ULUSAL MATEMATİK SEMPOZYUMU, Turkey, 1 October - 04 September 2015, (Summary Text)

Funded Projects

BORANDAĞ E., YÜCALAR F., ÖZÇEVİK M., ÇELİKTEN T., AYGÜN İ., VAROL ALTAY E., ASLAN E., ÖZÇİFT A., AYGÜN E. N., ALTAY O., et al., Project Supported by Higher Education Institutions, Dijital Dönüşüm ve Yenilikçi Teknolojiler Çalıştayı, 2023 - 2024

ASLAN E., BORANDAĞ E., TOSUN M. A., Project Supported by Higher Education Institutions, BAP Research Project, Komşu İzole Saçılım Sayısı ve Ortalama Saçılım Sayısı Algoritmalarının Oluşturulması, Görüntü İşleme Yöntemi Yardımıyla Oluşturulan Algoritmalarla Bir Ağın Zedelenebilirlik Ölçümlerinin Hesaplanarak Algoritmaların ve Ölçümlerin Analizi, 2019 - 2020

BORANDAĞ E., ASLAN E., YÜCALAR F., Project Supported by Higher Education Institutions, Smart Anti CO, 2019 - 2019

BACAK TURAN G., ASLAN E., ALTUNDAĞ F. N., Project Supported by Higher Education Institutions, BAP Research Project, Bulanık Çizgelerde Zedelenebilirlik Parametreleri, 2018 - 2021

BORANDAĞ E., YÜCALAR F., ONAN A., ASLAN E., Project Supported by Higher Education Institutions, Araç Plaka Takip Sistemi, 2018 - 2019

ASLAN E., Project Supported by Higher Education Institutions, Graflarda Zedelenebilirlik Ölçümleri, 2005 - 2007

Peer Reviews in Scientific Publications

Other journals, January 2017

UTILITAS MATHEMATICA, Other journals, January 2017

Other journals, January 2017

Other journals, January 2016

OPEN JOURNAL OF DISCRETE MATHEMATICS, Other journals, January 2016

Other journals, January 2016

JOURNAL OF APPLIED MATHEMATICS, Other journals, January 2016
Other Journals, January 2015
NEURAL NETWORK WORLD, Other journals, January 2014

Metrics

Publication: 38
Citation (WoS): 34
Citation (Scopus): 246
H-Index (WoS): 4
H-Index (Scopus): 10