

Prof. Fevzi Erdoğan

Personal Information

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Address: Yuzuncu Yıl Üniversitesi Fen Fakültesi

Education Information

Doctorate, Van Yüzüncü Yıl University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1995 - 1999

Postgraduate, Van Yüzüncü Yıl University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1992 - 1995

Undergraduate, Van Yüzüncü Yıl University, Fen Edebiyat Fakültesi, Matematik, Turkey 1988 - 1992

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Başlangıç Sıçramalı Başlangıç Sınır Değer Problemlerinin Sonlu Fark Metotuyla Çözümü, Van Yüzüncü Yıl University, Fen Bilimleri Enstitüsü, Matematik, 1999

Postgraduate, Diferansiyel Denklemlerin Çözümlerinin Kararlılığı, Van Yüzüncü Yıl University, Fen Bilimleri Enstitüsü, Matematik, 1995

Research Areas

Mathematics, Numerical Analysis, Natural Sciences

Academic Titles / Tasks

Professor, Van Yüzüncü Yıl University, İktisadi ve İdari Bilimler Fakültesi, Ekonometri, 2017 - Continues

Associate Professor, Van Yüzüncü Yıl University, Fen Fakültesi, Matematik, 2012 - 2017

Assistant Professor, Van Yüzüncü Yıl University, Fen Fakültesi, Matematik, 2000 - 2012

Research Assistant, Van Yüzüncü Yıl University, Fen Fakültesi, Matematik, 1992 - 2010

Academic and Administrative Experience

Van Yüzüncü Yıl University, İktisadi ve İdari Bilimler Fakültesi, 2019 - Continues

Van Yüzüncü Yıl University, İktisadi ve İdari Bilimler Fakültesi, Ekonometri, 2017 - Continues

Van Yüzüncü Yıl University, İktisadi ve İdari Bilimler Fakültesi, 2017 - Continues

Van Yüzüncü Yıl University, Bitlis Sağlık Yüksekokulu, 2000 - 2008

Courses

İleri Nümerik Analiz, Doctorate, 2018 - 2019

Advising Theses

Erdoğan F., Belirli Singuler pertürbe özellikli reaksiyon-difüzyon problem sınıfının nümerik çözümleri, Doctorate, K.YAMAÇ(Student), 2019

Erdoğan F., Didaktik Oyunların Öğrencilerin Derse Karşı Tutum ve Başarılarına Etkisi, Postgraduate, G.ADANAŞ(Student), 2019

Erdoğan F., Kayri M., ÖĞRENCİLERİN MATEMATİK BAŞARILARINI ETKİLEYEN FAKTÖRLERİN RASTGELE ORMAN, ÇOK KATMANLI ALGILAYICI VE RADYAL TABANLI FONKSİYON YAPAY SİNİR AĞLARI YÖNTEMLERİ İLE TAHMİNLEME YETENEĞİ AÇISINDAN KARŞILAŞTIRILMASI: Türkiye Örneği, Doctorate, Ö.BEZEK(Student), 2019

Erdoğan F., The Study of Traffic Fatal Crashes Based on Time series Model, Postgraduate, H.Rashid(Student), 2017

Erdoğan F., The 2018 Forecasting of OPEC price by using Time series model, Postgraduate, H.Assad(Student), 2017

Erdoğan F., Doğuran Çekirdekli Hilbert Uzaylarında Bazı Diferansiyel Denklemlerin Nümerik Çözümleri, Postgraduate, F.Uludağ(Student), 2014

Erdoğan F., Kesirli Mertebeli Diferansiyel Denklemlerin Analitik ve Nümerik Çözümleri, Doctorate, M.Ğiyas(Student), 2012

Erdoğan F., Birinci Mertebe Gecikmeli Diferansiyel Denklemler için üstel katsayılı fark şemaları, Postgraduate, M.Erdoğan(Student), 2009

Erdoğan F., Birinci Mertebe Lineer Gecikmeli Diferansiyel Denklemlerin Sayısal Çözümü, Postgraduate, T.Yüksel(Student), 2007

Erdoğan F., Parabolik Başlangıç-sınır Değer Problemlerinin Nümerik Çözümleri, Postgraduate, M.Gök(Student), 2006

Erdoğan F., Singuler Perturbe Özellikle Bir Başlangıç-sınır Değer Problemin Sonlu Fark Yöntemiyle Çözümü, Postgraduate, T.Tuğ(Student), 2004

Erdoğan F., Reaksiyon-difüzyon Sınır-değer Problemlerinin Sonlu Fark Metodu ile Çözümü, Postgraduate, C.Hezer(Student), 2003

Jury Memberships

Post Graduate, Yüksek Lisans Tez Savunması, Yüzüncü Yıl Üniversitesi, July, 2019

Associate Professor Exam, Doçentlik yayın Jurisi, Doçentlik Sınav Jürisi, Üniversitelerarası Kurul, Mart 2019, July, 2019

Doctorate, Yüksek Lisans Tez Savunması, Yüzüncü Yıl Üniversitesi, June, 2019

Associate Professor Exam, Doçentlik Eser İnceleme, YÖK, December, 2017

Associate Professor Exam, Doçentlik Eser İnceleme, YÖK, December, 2017

Doctoral Examination, Doktora Savunması, Fırat Üniversitesi, November, 2017

Doctorate, Doktora Savunması, Atatürk Üniversitesi, November, 2017

Published journal articles indexed by SCI, SSCI, and AHCI

I. Existence, uniqueness and blow-up of solutions for generalized auto-convolution Volterra integral equations

Mostafazadeh M., Shahmorad S., Erdoğan F.

Applied Mathematics and Computation, vol.471, 2024 (SCI-Expanded)

II. An iterative approximation for time-fractional Cahn–Allen equation with reproducing kernel method

Sakar M. G., Saldır O., Erdoğan F.

COMPUTATIONAL & APPLIED MATHEMATICS, vol.37, pp.5951-5964, 2018 (SCI-Expanded)

- III. **A uniformly almost second order convergent numerical method for singularly perturbed delay differential equations**
 Erdoğan F., Cen Z.
 JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.333, pp.382-394, 2018 (SCI-Expanded)
- IV. **Novel Behaviors to the Nonlinear Evolution Equation Describing the Dynamics of Ionic Currents along Microtubules**
 Başkonus H. M., Erdoğan F., Arif O., Ilham A.
 INTERNATIONAL JOURNAL OF WEB SERVICES RESEARCH, vol.13, pp.10-15, 2017 (SCI-Expanded)
- V. **On the new hyperbolic and trigonometric structures to the simplified MCH and SRLW equations**
 BULUT H., SULAIMAN T. A., Erdoğan F., BASKONUS H. M.
 EUROPEAN PHYSICAL JOURNAL PLUS, vol.132, no.350, pp.1-15, 2017 (SCI-Expanded)
- VI. **Numerical solution of time-fractional nonlinear PDEs with proportional delays by homotopy perturbation method**
 Sakar M. G., Uludağ F., Erdoğan F.
 APPLIED MATHEMATICAL MODELLING, vol.40, pp.6639-6649, 2016 (SCI-Expanded)
- VII. **An almost second order uniformly convergent scheme for a singularly perturbed initial value problem**
 Cen Z., Erdoğan F., XU A.
 NUMERICAL ALGORITHMS, vol.67, no.2, pp.457-476, 2014 (SCI-Expanded)
- VIII. **The homotopy analysis method for solving the time-fractional Fornberg-Whitham equation and comparison with Adomian's decomposition method**
 Sakar M. G., Erdoğan F.
 APPLIED MATHEMATICAL MODELLING, vol.37, pp.8876-8885, 2013 (SCI-Expanded)
- IX. **Variational iteration method for the time-fractional Fornberg-Whitham equation**
 Sakar M. G., Erdoğan F., YILDIRIM A.
 COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.63, no.9, pp.1382-1388, 2012 (SCI-Expanded)
- X. **Fitted finite difference method for singularly perturbed delay differential equations**
 Erdoğan F., Amiraliyev G. M.
 NUMERICAL ALGORITHMS, vol.59, no.1, pp.131-145, 2012 (SCI-Expanded)
- XI. **A uniform numerical method for dealing with a singularly perturbed delay initial value problem**
 Amiraliyeva I. G., Erdoğan F., Amiraliyev G. M.
 APPLIED MATHEMATICS LETTERS, vol.23, no.10, pp.1221-1225, 2010 (SCI-Expanded)
- XII. **A Parameter Robust Method for Singularly Perturbed Delay Differential Equations**
 Erdogan F.
 JOURNAL OF INEQUALITIES AND APPLICATIONS, 2010 (SCI-Expanded)
- XIII. **A finite difference scheme for a class of singularly perturbed initial value problems for delay differential equations**
 AMIRALIYEV G. M., Erdoğan F.
 NUMERICAL ALGORITHMS, vol.52, no.4, pp.663-675, 2009 (SCI-Expanded)
- XIV. **An Exponentially Fitted Method for Singularly Perturbed Delay Differential Equations**
 Erdogan F.
 ADVANCES IN DIFFERENCE EQUATIONS, 2009 (SCI-Expanded)
- XV. **Uniform numerical method for singularly perturbed delay differential equations**
 AMIRALIYEV G. M., Erdogan F.
 COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.53, no.8, pp.1251-1259, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **STATISTICAL METHODS FOR EFFECTIVE DECISION MAKING IN BUSINESS**
 Taha H. R., Erdoğan F.

- Community Practitioner, vol.20, no.8, pp.404-416, 2023 (Scopus)
- II. A quasilinearization technique for the solution of singularly perturbed delay differential equation
Erdoğan F., Sakar M. G.
Mathematics in Natural Science, vol.2, no.1, pp.1-7, 2018 (Peer-Reviewed Journal)
- III. A quasilinearization technique for the solution of singularly perturbed delay differential equation
Erdoğan F., Sakar M. G.
MATHEMATICS in NATURAL SCIENCE, vol.2, pp.1-7, 2018 (Peer-Reviewed Journal)
- IV. On the instability of solutions of certain non-autonomous vector differential equations of fifth order.
Erdoğan F., Tunç C.
SUT J. Math., vol.43, no.1, pp.35-48, 2007 (Peer-Reviewed Journal)

Supported Projects

- Erdoğan F., Project Supported by Higher Education Institutions, Küçük parametreli gecikmeli konveksiyon-difüzyon problemler için uygun fark şemaları, 2019 - 2020
- Erdoğan F., Yamaç K., Project Supported by Higher Education Institutions, Belirli Singüler Pertürbe Özellikli Reaksiyon-Difüzyon Problem Sınıfının Nümerik Çözümleri, 2017 - 2020
- Çelik H. E., Uludağ F., Çavuş H., Şensoy S., Tanhan F., Hamzadayı A., Van M. H., Canayaz M., Özdağ R., ÇELİK İ., et al., Project Supported by Higher Education Institutions, Uluslararası Veri Bilimi Makine Öğrenme ve İstatistik Konferansı DMS2019, 2019 - 2019
- Erdoğan F., Project Supported by Higher Education Institutions, Küçük parametreye sahip gecikmeli diferansiyel denklemlerin çözümü için Yaklaşık metotlar, 2018 - 2019
- Erdoğan F., Project Supported by Higher Education Institutions, A Fitted Numerical Method for Singularly Perturbed Integro Differential Equations with Delay, 2017 - 2018
- AMİRALİ G., Erdoğan F., Duru H., Çakır M., Şevgin S., Project Supported by Higher Education Institutions, Nonlinear dispersive dalga yayılım problemleri için matematiksel ve hesaplama metotları, 2005 - 2008

Activities in Scientific Journals

- Journal of Mathematics Sciences and Computational mathematics, Committee Member, 2019 - Continues
- VAN YÜZUNCÜ YIL ÜNİVERSİTESİ İKTİSADİ VE İDARİ BİLİMLER FAKÜLTESİ DERGİSİ, Publication Committee Member, 2018 - Continues
- Computer Simulation in Application, Committee Member, 2018 - Continues
- Mathematics in Natural Sciences, Committee Member, 2018 - Continues

Scientific Refereeing

- Mathematics and Computer in Simulation, SCI Journal, August 2019
- Iranian Journal of Science and Technology Transactions A, SCI Journal, August 2019
- Advances in Difference Equations, SCI Journal, May 2019
- Journal of Applied Mathematics and Computing, SCI Journal, January 2019
- International Journal of Computer Mathematics, SCI Journal, July 2018
- Differential Equations and Dynamical Systems, SCI Journal, June 2017
- Mathematical Modelling and analysis, SCI Journal, June 2017
- Advances in Difference Equations, SCI Journal, June 2017
- The IMA Journal of Applied Mathematics, SCI Journal, April 2017
- Journal of Computational and Applied Mathematics, SCI Journal, April 2017
- The IMA Journal of Applied Mathematics, SCI Journal, December 2016

Applied Mathematics and Computation, SCI Journal, November 2016

Journal of Computational and Applied Mathematics, SCI Journal, February 2016

Metrics

Publication: 83

Citation (WoS): 283

Citation (Scopus): 363

H-Index (WoS): 9

H-Index (Scopus): 9

Congress and Symposium Activities

The 1st International Symposium on Computational Mathematics and Engineering Sciences, CMES- 2016, Invited Speaker, Miknas, Morocco, 2016

Non Academic Experience

Yüzüncü Yıl Üniversitesi