#### Asst. Prof. MEHMET FATIH KARAASLAN

#### **Personal Information**

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## **International Researcher IDs**

ScholarID: eJIEgJEAAAAJ

ORCID: 0000-0001-7229-3656

Publons / Web Of Science ResearcherID: AAZ-5538-2020

ScopusID: 57188763459 Yoksis Researcher ID: 185409

#### **Education Information**

Doctorate, Yildiz Technical University, Faculty Of Arts & Science, Department Of Mathemeatics, Turkey 2010 - 2016

## Foreign Languages

English, B2 Upper Intermediate

## **Certificates, Courses and Trainings**

Vocational Training, Matlab, Yıldız Teknik Üniversitesi, 2013

## **Research Areas**

Differential Equations, Functional Analysis, Integral Equations, Statistics, Partial Differential Equations, Numerical Analysis

## **Academic Titles / Tasks**

Assistant Professor, Marmara University, Faculty of Sciences, Department of Mathematics, 2023 - Continues Research Assistant PhD, Yildiz Technical University, Faculty Of Arts & Science, Department Of Statistics, 2016 - 2023 Research Assistant, Yildiz Technical University, Faculty Of Arts & Science, Department Of Statistics, 2009 - 2016

#### **Courses**

#### **Postgraduate**

Kesirli Diferansiyel Denklemler ve Uygulamaları, Postgraduate, 2024 - 2025

### Undergraduate

İstatistik, Undergraduate, 2024 - 2025

Bilgisayar Programlama, Undergraduate, 2024 - 2025, 2023 - 2024

SQL Server ile Veri Tabanı Tasarımı, Undergraduate, 2024 - 2025, 2023 - 2024

Topluma Hizmet Uygulamaları, Undergraduate, 2023 - 2024

Calculus II, Undergraduate, 2023 - 2024, 2022 - 2023

Matematik 1, Undergraduate, 2023 - 2024

Sayısal Analiz, Undergraduate, 2022 - 2023

Calculus I, Undergraduate, 2023 - 2024

Lineer Cebir, Undergraduate, 2023 - 2024

Diferansiyel Denklemler, Undergraduate, 2023 - 2024

Mathematics I, Undergraduate, 2022 - 2023

İstatistik, Undergraduate, 2022 - 2023

Numerical Analysis, Undergraduate, 2021 - 2022

Veri Tabanı, Undergraduate, 2021 - 2022, 2018 - 2019

İstatistik, Undergraduate, 2021 - 2022

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

I. Maximal Lp—regularity of two-term fractional differential equations with boundary conditions Şahmurov V., Karaaslan M. F., Kurulay M.

TWMS JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.14, no.2, pp.1-14, 2023 (SCI-Expanded)

II. A performance assessment of an HDG method for second-order Fredholm integro-differential equation: existence-uniqueness and approximation

KARAASLAN M. F.

TURKISH JOURNAL OF MATHEMATICS, vol.45, no.5, pp.2269-2281, 2021 (SCI-Expanded)

III. Solvability of the fractional Volterra-Fredholm integro differential equation by hybridizable discontinuous Galerkin method

KARAASLAN M. F.

MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.42, no.16, pp.5626-5634, 2019 (SCI-Expanded)

IV. The accuracy of an HDG method for conservative fractional diffusion equations KARAASLAN M. F.

MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.41, no.17, pp.8201-8211, 2018 (SCI-Expanded)

V. A hybridizable discontinuous Galerkin method for a class of fractional boundary value problems KARAASLAN M. F., Celiker F., KURULAY M.

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.333, pp.20-27, 2018 (SCI-Expanded)

VI. Approximate solution of the Bagley-Torvik equation by hybridizable discontinuous Galerkin methods KARAASLAN M. F., Celiker F., KURULAY M.

APPLIED MATHEMATICS AND COMPUTATION, vol.285, pp.51-58, 2016 (SCI-Expanded)

## **Articles Published in Other Journals**

I. A numerical approach for Camassa-Holm equation using extended trial equation method KARAASLAN M. F., KURULAY M.

Tbilisi Mathematical Journal, pp.33-38, 2021 (Peer-Reviewed Journal)

II. Numerical Solution of a Nonlocal Fractional Boundary Value Problem by HDG Method KARAASLAN M. F.

Journal of Engineering Technology and Applied Sciences, vol.2, no.3, pp.121-129, 2017 (Peer-Reviewed Journal)

III. A Geometric Interpretation and Comparison of the Methods Of Ordinary Least Square OLS and Bivariate Lagrange Interpolation

ÇALIŞKAN ÇAVDAR Ş., AYDIN A. D., KARAASLAN M. F.

## Papers Published in Refereed Scientific Meetings

I. Dynamics of a vector--borne disease model with temporary immunity

Karaaslan M. F.

7th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 11 - 13 July 2023, pp.1

II. A customer churn prediction using KNN algorithm and logistic regression with Python

Karaaslan M. F., Büyükdoğan N. Y.

6th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 21 - 24 June 2022, pp.4

III. A special Green-function for steady-state fractional differential equations with nonlocal boundary condition

Karaaslan M. F.

5th INTERNATIONAL ONLINE CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 1 - 03 December 2021, pp.11

IV. Uniform separability of four-term fractional differential equations on real line

Karaaslan M. F., Kurulay M.

8th International Congress on Fundamental and Applied Sciences, Antalya, Turkey, 19 - 21 October 2021, pp.1

V. A stability and existence-uniqueness results for the system of fractional-order mathematical model of COVID-19-disease

Karaaslan M. F., Kurulay M.

4th International Conference on Mathematics "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 27 - 30 October 2020, pp.23

VI. Some existence results of fractional boundary value problems

Karaaslan M. F.

III.International Conference on Mathematics "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 3 - 05 July 2019, pp.181

VII. Convergence of the hybridizable discontinuous Galerkin method for two-point fractional boundary value problems

Karaaslan M. F.

International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017, pp.172

VIII. A hybridizable discontinuous Galerkin method for the steady state fractional advection dispersion equation

Karaaslan M. F., Kurulay M.

International Congress on Fundamental and Applied Sciences, İstanbul, Turkey, 22 - 26 August 2016, pp.121

IX. Numerical solution of a singularly perturbed problem by hybridizable discontinuous Galerkin method

Karaaslan M. F.

2nd International Conference on Analysis and its Applications, Kırşehir, Turkey, 12 - 15 July 2016, pp.183

X. On Using of the Advection Diffusion Problem as Environmental Modelling

Kurulay M., Karaaslan M. F.

1st International Conference on Environmental Science and Technology, Sarajevo, Bosnia And Herzegovina, 9 - 13 September 2015, pp.107

XI. Hybridizable discontinuous Galerkin method for convection-diffusion-reaction problems

Karaaslan M. F., Çeliker F., Kurulay M.

Karatekin Mathematics Days 2014, Çankırı, Turkey, 11 - 13 June 2014, pp.197

XII. A Comparative Analysis of Galerkin and Hybridizable Discontinuous Galerkin Method On Second Order Differential Equation Karaaslan M. F., Çeliker F., Kurulay M.

2nd International Eurasian Conference on Mathematical Sciences and Applications, Sarajevo, Bosnia And Herzegovina, 26 - 29 August 2013, pp.177

### XIII. Hybridizable Discontinuous Galerkin Method for One Dimensional Problems

Karaaslan M. F., Kurulay M.

International Conference on Applied Analysis and Mathematical Modelling, İstanbul, Turkey, 2 - 05 June 2013, pp.283

## XIV. Multidimensional Comparison of Turkey and EU member states in terms of Basic Economic Indicators Post Global Financial Crisis

Çalışkan Çavdar Ş., Karaaslan M. F.

8th International Symposium of Statistics, Eskişehir, Turkey, 11 - 13 October 2012, pp.110

# XV. On solving a type of fractional Volterra integro differential equations using Homotopy Analysis Method

Karaaslan M. F., Kurulay M.

1st International Eurasian Conference on Mathematical Sciences and Applications, Pristine, Kosovo, 3 - 07 September 2012, pp.126

# XVI. Geometric perspective on the methods of bivariate Lagrange interpolation and OLS Karaaslan M. F., Çalışkan Çavdar Ş.

International Conference on Applied Analysis and Algebra, İstanbul, Turkey, 20 - 24 June 2012, pp.168

## XVII. Discontinuous Galerkin Methods with An Application for Elliptic Problems

Karaaslan M. F., Kurulay M.

International Conference on Applied Analysis and Algebra, İstanbul, Turkey, 20 - 24 June 2012, pp.168-169

## XVIII. Parametrik Olmayan Basit Doğrusal Regresyon Modelinde Katsayıların Tahminlemesi

Karaaslan M. F., Karaman F.

VII. İstatistik Günleri Sempozyumu, Ankara, Turkey, 28 - 30 June 2010, pp.103-104

## **Activities in Scientific Journals**

Journal of Engineering Technology and Applied Sciences, Committee Member, 2016 - Continues

## Peer Reviews in Scientific Publications

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, SCI Journal, October 2021

TURKISH JOURNAL OF MATHEMATICS, SCI Journal, February 2020

 $JOURNAL\ OF\ COMPUTATIONAL\ METHODS\ IN\ SCIENCES\ AND\ ENGINEERING, Journal\ Indexed\ in\ ESCI, August\ 2019$ 

ENGINEERING COMPUTATIONS : INTERNATIONAL JOURNAL FOR COMPUTER-AIDED ENGINEERING AND SOFTWARE, SCI Journal, September 2018

TURKISH JOURNAL OF MATHEMATICS, SCI Journal, August 2018

ENGINEERING COMPUTATIONS : INTERNATIONAL JOURNAL FOR COMPUTER-AIDED ENGINEERING AND SOFTWARE, SCI Journal, April 2018

Journal of Engineering Technology and Applied Sciences, Other Indexed Journal, November 2017

Journal of Engineering Technology and Applied Sciences, Other Indexed Journal, September 2017

Journal of Engineering Technology and Applied Sciences, Other Indexed Journal, June 2017

Journal of Engineering Technology and Applied Sciences, Other Indexed Journal, January 2017

Arabian Journal of Mathematics, Journal Indexed in ESCI, June 2016

## **Congress and Symposium Activities**

7th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", Attendee, İstanbul, Turkey, 2023

6th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", Attendee, İstanbul, Turkey, 2022

5th INTERNATIONAL ONLINE CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians", Attendee, İstanbul, Turkey, 2021

8th International Congress on Fundamental and Applied Sciences, Attendee, Antalya, Turkey, 2021

4th International Conference on Mathematics "An Istanbul Meeting for World Mathematicians", Attendee, İstanbul, Turkey, 2020

III.International Conference on Mathematics "An Istanbul Meeting for World Mathematicians", Attendee, İstanbul, Turkey, 2019

6th International Congress on Fundamental and Applied Sciences, Attendee, Tirane, Albania, 2019

INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians, Attendee, İstanbul, Turkey, 2018

5th International Congress on Fundamental and Applied Sciences, Attendee, Skopje, Macedonia, 2018 Differential Equations and Applications , Attendee, Brno, Czech Republic, 2017

International Congress on Fundamental and Applied Sciences, Attendee, Sarajevo, Bosnia And Herzegovina, 2017

International Conference on Mathematics and Engineering, Attendee, İstanbul, Turkey, 2017

International Congress on Fundamental and Applied Sciences, Attendee, İstanbul, Turkey, 2016

2nd International Conference on Analysis and its Applications, Attendee, Kırşehir, Turkey, 2016

V Congress of Mathematicians of Macedonia, Attendee, Ohrid, Macedonia, 2014

Karatekin Mathematics Days, Attendee, Çankırı, Turkey, 2014

2nd International Eurasian Conference on Mathematical Sciences and Applications, Attendee, Sarajevo, Bosnia And Herzegovina, 2013

International Conference on Applied Analysis and Mathematical Modeling, Attendee, İstanbul, Turkey, 2013 8th International Symposium of Statistics, Attendee, Eskişehir, Turkey, 2012

1st International Eurasian Conference on Mathematical Sciences and Applications, Attendee, Priștine, Kosovo, 2012 International Conference on Applied Analysis and Algebra, Attendee, İstanbul, Turkey, 2012

VII. İstatistik Günleri Sempozyumu, Attendee, Ankara, Turkey, 2010