## Assoc. Prof. İSMAİL ASLAN

### **Personal Information**

Office Phone: <u>+90 312 297 7850</u> Extension: 117

Email: ismail-aslan@hacettepe.edu.tr

Web: http://www.mat.hacettepe.edu.tr/people/academic/ismail-aslan/index.html

#### **International Researcher IDs**

ScholarID: R5ubnEMAAAAJ ORCID: 0000-0001-9753-6757

Publons / Web Of Science ResearcherID: L-2566-2018

ScopusID: 57194781083 Yoksis Researcher ID: 222126

### **Education Information**

Doctorate, Tobb University Of Economics And Technology, Institute Of Science, Matematik, Turkey 2014 - 2019
Postgraduate, Tobb University Of Economics And Technology, Institute Of Science, Matematik Bölümü, Turkey 2012 - 2014

Undergraduate, Hacettepe University, Fen Fakültesi, Matematik Bölümü, Turkey 2006 - 2011

## Foreign Languages

English, C2 Mastery

## **Certificates, Courses and Trainings**

Other, Image Processing Onramp, Matlab Organization, 2020

#### **Dissertations**

Doctorate, Study of Approximation Properties fof Nonlinear Operators via Summability Process, Tobb University Of Economics And Technology, Institute Of Science, Matematik, 2019

Postgraduate, Application of Summability Process on Baskakov-type Korovkin Theory, Tobb University Of Economics And Technology, Institute Of Science, Matematik (Yl) (Tezli), 2014

## Research Areas

Mathematics, Sequences, Series, Summability, Integral Equations, Integral Transformations, Computational Calculation, Measure and Integration, Numerical Analysis, Approximations and Expansions, Natural Sciences

# **Academic Titles / Tasks**

Associate Professor, Hacettepe University, Fen Fakültesi, Matematik Bölümü, 2022 - Continues

Assistant Professor, Hacettepe University, Fen Fakültesi, Matematik Bölümü, 2022 - 2022

Research Assistant PhD, Hacettepe University, Fen Fakültesi, Matematik Bölümü, 2019 - 2022

Research Assistant, Hacettepe University, Fen Fakültesi, Matematik Bölümü, 2017 - 2019

Research Assistant, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Mathematics, 2014 - 2017

#### Courses

Mathematics II, Undergraduate, 2021 - 2022

Mathematics 2, Undergraduate, 2021 - 2022

Basic Mathematics I, Undergraduate, 2021 - 2022

Mathematics for Engineers, Undergraduate, 2021 - 2022

Basic Mathematics, Undergraduate, 2020 - 2021

General Mathematics 2, Undergraduate, 2019 - 2020

Mathematics, Undergraduate, 2019 - 2020

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

I. Approximation by Kantorovich-type max-min operators and its applications

Gökçer T. Y., Aslan İ.

Applied Mathematics and Computation, vol.423, 2022 (SCI-Expanded)

II. Approximation to the classical fractals by using non-affine contraction mappings

Aslan N., Aslan İ.

PORTUGALIAE MATHEMATICA, vol.79, no.1/2, pp.1-16, 2022 (SCI-Expanded)

III. Multivariate approximation in phi-variation for nonlinear integral operators via summability

methods

ASLAN İ.

TURKISH JOURNAL OF MATHEMATICS, vol.46, pp.277-298, 2022 (SCI-Expanded)

IV. Nonlinear approximation in N-dimension with the help of summability methods

ASLAN İ., DUMAN O.

REVISTA DE LA REAL ACADEMIA DE CIENCIAS EXACTAS FISICAS Y NATURALES SERIE A-MATEMATICAS, vol.115, no.3, 2021 (SCI-Expanded)

V. Approximation by Sampling-Type Nonlinear Discrete Operators in phi-Variation

ASLAN İ.

FILOMAT, vol.35, no.8, pp.2731-2746, 2021 (SCI-Expanded)

VI. Convergence in Phi-Variation and Rate of Approximation for Nonlinear Integral Operators Using

**Summability Process** 

ASLAN İ.

MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.18, no.1, 2020 (SCI-Expanded)

VII. Approximation by nonlinear integral operators via summability process

ASLAN İ., DUMAN O.

MATHEMATISCHE NACHRICHTEN, vol.293, no.3, pp.430-448, 2020 (SCI-Expanded)

VIII. Characterization of absolute and uniform continuity

ASLAN I., DUMAN O.

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.49, no.5, pp.1550-1565, 2020 (SCI-Expanded)

IX. Summability on Mellin-type nonlinear integral operators

ASLAN İ., Duman O.

INTEGRAL TRANSFORMS AND SPECIAL FUNCTIONS, vol.30, no.6, pp.492-511, 2019 (SCI-Expanded)

### X. A summability process on Baskakov-type approximation

Aslan I., Duman O.

PERIODICA MATHEMATICA HUNGARICA, vol.72, no.2, pp.186-199, 2016 (SCI-Expanded)

# Articles Published in Other Journals

### I. APPROXIMATION BY PSEUDO-LINEAR DISCRETE OPERATORS

ASLAN I., Gokcer T. Y.

MATHEMATICAL FOUNDATIONS OF COMPUTING, 2021 (ESCI)

#### II. APPROXIMATION BY SAMPLING TYPE DISCRETE OPERATORS

ASLAN İ.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.69, no.1, pp.969-980, 2020 (ESCI)

# Refereed Congress / Symposium Publications in Proceedings

I. Kantorovich tipindeki Maksimum-Minimum Operatörleri ve Görüntü İşleme Üzerine Uygulamaları ASLAN İ., GÖKÇER T. Y.

Yaklaşımlar Teorisi ve Uygulamaları Çalıştayı, Ankara, Turkey, 4 - 05 March 2022

ASLAN İ.

Studies on Scientific Developments in Geometryi Algebra and Applied Mathematics, Ankara, Turkey, 1 - 03 February 2022

III. Sampling-type Nonlinear Discrete Operators and Applications to the Image Processing ASLAN İ.

8th International Conference on Recent Advances in Pure and Applied Mathematics, Muğla, Turkey, 24 - 27 September 2021

IV. Approximation to fractals by means of non-affine contraction mappings

ASLAN İ., ASLAN N.

The Second International Conference on Applied Mathematics in Engineering, Balıkesir, Turkey, 1 - 03 September 2021

V. Approximation properties of pseudo-linear operators with discrete kernels and application to image processing

ASLAN İ., GÖKÇER T. Y.

INTERNATIONAL SOCIETY FOR ANALYSIS ITS APPLICATIONS AND COMPUTATION, Gent, Belgium, 2 - 06 August 2021

VI. Approximation by kantorovich variant of max-min operators with applications to digital image processing

ASLAN İ., GÖKÇER T. Y.

International Conference on Mathematics and Its Applications in Science and Engineering (ICMASE 2021), Salamanca, Mexico, 1 - 02 July 2021

## VII. Approximation by discrete operators of Max-Product kind

Aslan İ., Gökçer T. Y.

International Online Workshop on Approximation Theory, Ivano-Frankivsk, Ukraine, 19 - 21 March 2021, pp.6

## VIII. Approximation by discrete operators of Max-Min kind

Gökçer T. Y., Aslan İ.

International Online Workshop on Approximation Theory, Ivano-Frankivsk, Ukraine, 19 - 21 March 2021, pp.16

IX. Some Approximation Properties of Nonlinear Discrete Operators of Sampling-type Aslan İ.

7th INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN PURE ANDAPPLIED MATHEMATICS, Muğla, Turkey, 25 - 28 September 2020

X. N-dimensional  $\varphi$ -variation of nonlinear discrete operators

ASLAN İ.

3rd International Conference on Pure and Applied Mathematics, Van, Turkey, 3 - 05 September 2020

XI. Nonlinear Approximation in Discrete Operators of Sampling-type

ASLAN İ.

International Conference on Mathematics and its Applications in Science and Engineering, Ankara, Turkey, 9 - 10 July 2020

XII. Convergence in phi-variation and Rate of Approximation in Ndimension with the Help of Summability Method

ASLAN İ.

Multivariate Approximation: Theory and Applications, Perugia, Italy, 16 - 18 January 2020

XIII. Summability of Nonlinear Integral Operators in the Space of Bounded  $\phi$ -variation ASLAN  $\dot{I}$ .

Summability of Nonlinear Integral Operators in the Space of Bounded  $\phi$ -variation, Brüksel, Belgium, 22 - 25 July 2019

XIV. Application of Summability Process on the Mellin-type Nonlinear Integral Operators ASLAN İ., DUMAN O.

THE FIRST INTERNATIONAL WORKSHOP ON CONSTRUCTIVE MATHEMATICAL ANALYSIS, Konya, Turkey, 11 - 13 February 2019

XV. Summability method in the approximation by nonlinear integral operators in N-dimension BV-space ASLAN İ., DUMAN O.

2018 The 7th International Conference on Pure and Applied Mathematics, Budapest, Hungary, 10 - 13 July 2018

XVI. Lineer Olmayan İntegral Operatörleriyle Yaklaşımda Bell-Tipinde Toplanabilme Metodu ASLAN İ., DUMAN O.

13. Ankara Matematik Günleri, Ankara, Turkey, 27 - 28 April 2018

XVII. Approximation by nonlinear integral operators with the help of summation methods ASLAN İ., DUMAN O.

The International Society for Analysis, its Applications and Computation, Vaxjö, Sweden, 14 - 18 August 2017

XVIII. Summability Process on the Approximation by Nonlinear Integral Operators of Convolution Type ASLAN İ., DUMAN O.

International Conference on Mathematics and Mathematics Education, Şanlıurfa, Turkey, 11 - 13 May 2017

XIX. A Generalized Version of the Korovkin Theory

ASLAN İ., DUMAN O.

Emerging Trends In Applied Mathematics And Mechanics, Perpignan, France, 30 May - 03 June 2016

XX. Application of Summability Process on Baskakov Type Korovkin Theory

ASLAN İ., DUMAN O.

International Conference on Recent Advances in Pure and Applied Mathematics, Antalya, Turkey, 6 - 09 November 2014

XXI. Summability Process on the Baskakov type Approximation theory

ASLAN İ., DUMAN O.

International Conference Mathematics Days In Sofia, Sofya, Bulgaria, 7 - 10 July 2014

## **Supported Projects**

Gökçer T. Y., Duman O., Aslan İ., TUBITAK Project, Application of Bell Type Summability Method on Nonlinear Operators and Image Processing, 2020 - 2022

Aslan İ., Aslan N., Project Supported by Higher Education Institutions, Approximation to Fractals by Non-affine Mappings, 2020 - 2021

# Activities in Scientific Journals

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, Assistant Editor/Section Editor, 2021 - Continues Researches in Mathematics, Committee Member, 2021 - Continues

# Scientific Refereeing

TUBITAK Project, 1002 - Quick Support Program, Hacettepe University, Turkey, August 2021

# **Tasks In Event Organizations**

Aslan İ., 12. Ankara Matematik Günleri, Scientific Congress, Ankara, Turkey, Mayıs 2017
Aslan İ., AMAT 2015 - 3rd International Conference on Applied Mathematics and Approximation Theory, Scientific Congress, Ankara, Turkey, Mayıs 2015

## **Metrics**

Publication: 33 Citation (WoS): 60 Citation (Scopus): 50 H-Index (WoS): 5 H-Index (Scopus): 4

### **Invited Talks**

Toplam Sürecinin Lineer Olmayan İntegral Operatörleri Üzerindeki Etkileri, Seminar, Ankara Üniversitesi, Turkey, March 2019

## **Scholarships**

Full scholarship for doctoral education, University, 2014 - 2019 2211-A Ph.D. Scholarship, TUBITAK, 2016 - 2018 Full scholarship for master education, University, 2012 - 2014

### **Awards**

Aslan İ., Excellent Oral Presentation Certificate, 2018 International Conference On Pure And Apllied Mathematics, July 2018

## Representation and Promotion Activities

Institutional Promotion, Hacettepe Üniversitesi, Turkey, Ankara, 2022 - 2022