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International Researcher IDs

ScholarID: R5ubnEMAAAAJ

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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

Signal Processing, Pattern Recognition and Image Processing, Neural Networks, 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

Associate Professor, Universita Degli Studi di Padova, Mathematics, 2023 - 2024

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 N-dimensional max-product and max-min kind discrete operators with applications**
Aslan İ., Gökçer Ellidokuz T. Y.
FILOMAT, vol.38, no.5, pp.1825-1845, 2024 (SCI-Expanded)

II. **Approximation by Kantorovich-type max-min operators and its applications**
Gökçer T. Y., Aslan İ.
Applied Mathematics and Computation, vol.423, 2022 (SCI-Expanded)

III. **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)

IV. **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)

V. **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)

VI. **Approximation by Sampling-Type Nonlinear Discrete Operators in phi-Variation**
ASLAN İ.
FILOMAT, vol.35, no.8, pp.2731-2746, 2021 (SCI-Expanded)

VII. **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)

VIII. **Approximation by nonlinear integral operators via summability process**
ASLAN İ., DUMAN O.
MATHEMATISCHE NACHRICHTEN, vol.293, no.3, pp.430-448, 2020 (SCI-Expanded)

IX. **Characterization of absolute and uniform continuity**

ASLAN İ., DUMAN O.

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

X. **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)

XI. **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. **Convergence in φ-variation for Mellin-type nonlinear integral operators**

ASLAN İ.

Journal of Analysis, 2024 (ESCI)

II. **APPROXIMATION BY PSEUDO-LINEAR DISCRETE OPERATORS**

ASLAN İ., Gokcer T. Y.

MATHEMATICAL FOUNDATIONS OF COMPUTING, 2021 (ESCI)

III. **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. **Sözde-Doğrusal Sinir Ağı Operatörleriyle Yaklaşım ve Gürültü Giderme**

ASLAN İ., Erb W.

36. Ulusal Matematik Sempozyumu, Amasya, Turkey, 9 - 12 September 2024

II. **Approximation by Kantorovich-type Max-Min Neural Network Operators and Applications to Signal Processing**

ASLAN İ., De Marchi S., Erb W.

Approximation Theory and Special Functions ATSF 2024 Conference - 8th Series, Ankara, Turkey, 4 - 07 September 2024

III. **Maksimum-minimum sinir ağı operatörleri ve sinyal analizi üzerine uygulamaları**

ASLAN İ.

15. Ankara Matematik Günleri, Ankara, Turkey, 23 - 24 May 2024

IV. **Approximation by Kantorovich type Max-Min Operators with Applications**

ASLAN İ., GÖKÇER ELLİDOKUZ T. Y.

Dolomites Research Week on Approximation and Applications 2023, San Vito Di Cadore, Italy, 15 - 19 September 2023

V. **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

VI. **Φ-variational Approximation by Mellin-type Nonlinear Integral Operators**

ASLAN İ.

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

VII. **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

VIII. **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

IX. **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

X. **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

XI. **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

XII. **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

XIII. **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

XIV. **N-dimensional φ-variation of nonlinear discrete operators**
ASLAN İ.
3rd International Conference on Pure and Applied Mathematics, Van, Turkey, 3 - 05 September 2020

XV. **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

XVI. **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

XVII. **Summability of Nonlinear Integral Operators in the Space of Bounded φ-variation**
ASLAN İ.
Summability of Nonlinear Integral Operators in the Space of Bounded φ-variation, Brüksel, Belgium, 22 - 25 July 2019

XVIII. **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

XIX. **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

XX. **Lineer Olmayan İntegral Operatörleriyle Yaklaşımda Bell-Tipinde Toplanabilme Metodu**
ASLAN İ., DUMAN O.
13. Ankara Matematik Günleri, Ankara, Turkey, 27 - 28 April 2018

XXI. **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

XXII. **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

XXIII. **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

XXIV. **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

XXV. **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, Bell Tipinde Toplanabilme Metodunun Lineer Olmayan Operatörlere Uygulanması Ve Görüntü İşleme, 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

International Journal of Applied and Computational Mathematics, Other Indexed Journal, July 2024

CONTEMPORARY MATHEMATICS, Journal Indexed in ESCI, June 2023

HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, Journal Indexed in SCI-E, March 2023

KRAGUJEVAC JOURNAL OF MATHEMATICS, Journal Indexed in ESCI, September 2022

Tasks In Event Organizations

Aslan İ., Yaklaşımlar Teorisi ve Uygulamaları Çalıştayı, Workshop Organization, Ankara, Turkey, Mart 2022

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: 39

Citation (WoS): 61

Citation (Scopus): 50

H-Index (WoS): 5
H-Index (Scopus): 4

Invited Talks

Sözde-Lineer Sinir Ağı Operatörleri ve Sinyal İşleme Üzerine Uygulamaları, Seminar, Hacettepe Üniversitesi, Turkey, May 2024

Approximation by Pseudo-Linear Neural Network Operators and Their Applications to Signal Processing, Seminar, Padua University, Italy, March 2024

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

Scholarships

Bideb 2219, TUBITAK, 2023 - 2024

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