## Assoc. Prof. Özlem FAYDASIÇOK

### **Personal Information**

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International Researcher IDs ScholarID: dH0BcS0AAAAJ ORCID: 0000-0002-7621-4350 Publons / Web Of Science ResearcherID: AAE-7206-2020 ScopusID: 54787621100 Yoksis Researcher ID: 175841

### **Education Information**

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Matematik, Turkey 2010 - 2019 Postgraduate, Istanbul University, Institute of Graduate Studies In Sciences, Matematik, Turkey 2007 - 2010 Undergraduate, Istanbul University, Faculty Of Science, Matematik, Turkey 2003 - 2007

#### **Foreign Languages**

English, B2 Upper Intermediate

### **Dissertations**

Doctorate, Zaman Gecikmeli ve Belirsiz Yapay Sinir Ağlarının Kararlılık Analizi, İstanbul University, İnstitute of Graduate Studies In Sciences, Matematik/Matematik, 2019 Postgraduate, GENELLEŞTİRİLMİŞ LİNEER MODELLERDE MODEL SEÇİMİ ÜZERİNE ALTERNATİF BİR YAKLAŞIM, İstanbul University, İnstitute of Graduate Studies In Sciences, Matematik, 2010

## **Research Areas**

Differential Equations, Dynamic Systems and Ergodic Theory, Linear and Multilinear Algebra: Matrix Theory, System Theory: Control

## Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty of Science, Department of Mathematics, 2022 - Continues Assistant Professor, Istanbul University, Faculty of Science, Department of Mathematics, 2020 - 2022 Research Assistant, Istanbul University, Faculty of Science, Department of Mathematics, 2009 - 2019

### Academic and Administrative Experience

İstanbul Üniversitesi, Faculty of Science, Matematik , 2009 - 2019

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

- I. The combined Lyapunov functionals method for stability analysis of neutral Cohen-Grossberg neural networks with multiple delays
   FAYDASIÇOK Ö., ARIK S.
   Neural Networks, vol.180, 2024 (SCI-Expanded)
- II. Sampled-data control for Markovian switching neural networks with output quantization and packet dropouts

Chen Y., Zhang X., Yan Z., FAYDASIÇOK Ö., ARIK S.

Journal of the Franklin Institute, vol.361, no.18, 2024 (SCI-Expanded)

III. Robust stability of dynamical neural networks with multiple time delays: a review and new results Aktas E., FAYDASIÇOK Ö., ARIK S.

Artificial Intelligence Review, vol.56, pp.1647-1684, 2023 (SCI-Expanded)

IV. A general framework for robust stability analysis of neural networks with discrete time delays Solak M., FAYDASIÇOK Ö., ARIK S.

Neural Networks, vol.162, pp.186-198, 2023 (SCI-Expanded)

- V. A novel Lyapunov stability analysis of neutral-type Cohen-Grossberg neural networks with multiple delays
  - Faydasıçok Ö., Arık S.

NEURAL NETWORKS, vol.155, pp.330-339, 2022 (SCI-Expanded)

VI. NOVEL CRITERIA FOR ROBUST STABILITY OF COHEN-GROSSBERG NEURAL NETWORKS WITH MULTIPLE TIME DELAYS

Faydasıçok Ö., Arık S., Ketencigil M. M.

DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS-SERIES S, pp.1-15, 2022 (SCI-Expanded)

VII. DEEP NEURAL NETWORKS AS A TOOL TO ESTIMATION OF COSMIC RADIATION DOSE RECEIVED ON FLIGHT

YILMAZ A., YILMAZ ALAN H., FAYDASIÇOK Ö., Susam L., Samli R., AKKUŞ B., Erol A., GÜDEKLİ E., Inci C. I., EMİRHAN M. E.

UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, vol.84, no.2, pp.187-202, 2022 (SCI-Expanded)

# VIII. ESTIMATION OF COSMIC RADIATION DOSE RECEIVED ON FLIGHT BY MEANS OF DIFFERENT MACHINE LEARNING METHODS AND CARI-7A CALCULATIONS

YILMAZ ALAN H., YILMAZ ALAN H., FAYDASIÇOK Ö., Susam L., ŞAMLI R., AKKUŞ B., Erol A., GÜDEKLİ E., İnci Ç. İ., EMİRHAN M. E.

Romanian Journal of Physics, vol.67, no.1-2, 2022 (SCI-Expanded)

# IX. FURTHER STABILITY ANALYSIS OF NEUTRAL-TYPE COHEN-GROSSBERG NEURAL NETWORKS WITH MULTIPLE DELAYS

FAYDASIÇOK Ö.

DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS-SERIES S, vol.14, no.4, pp.1245-1258, 2021 (SCI-Expanded)

# X. An improved Lyapunov functional with application to stability of Cohen-Grossberg neural networks of neutral-type with multiple delays

FAYDASIÇOK Ö.

NEURAL NETWORKS, vol.132, pp.532-539, 2020 (SCI-Expanded)

## XI. A new Lyapunov functional for stability analysis of neutral-type Hopfield neural networks with multiple delays FAYDASIÇOK Ö.

NEURAL NETWORKS, vol.129, pp.288-297, 2020 (SCI-Expanded)

XII. New Results on Stability of Delayed Cohen-Grossberg Neural Networks of Neutral Type

FAYDASIÇOK Ö.

COMPLEXITY, vol.2020, 2020 (SCI-Expanded)

- XIII. New criteria for global stability of neutral-type Cohen-Grossberg neural networks with multiple delays
   FAYDASIÇOK Ö.
   NEURAL NETWORKS, vol.125, pp.330-337, 2020 (SCI-Expanded)
   XIV. An analysis of stability of uncertain neural networks with multiple time delays
   Faydasicok O., Arik S.
   JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.350, no.7, pp.1808-
- 1826, 2013 (SCI-Expanded)
   XV. A new upper bound for the norm of interval matrices with application to robust stability analysis of delayed neural networks
   Faydasicok O., Arik S.
   NEURAL NETWORKS, vol.44, pp.64-71, 2013 (SCI-Expanded)
   XVI. A new robust stability criterion for dynamical neural networks with multiple time delays
- Faydasicok O., Arik S. NEUROCOMPUTING, vol.99, pp.290-297, 2013 (SCI-Expanded)
- XVII. **Robust stability analysis of a class of neural networks with discrete time delays** Faydasicok O., Arik S. NEURAL NETWORKS, pp.52-59, 2012 (SCI-Expanded)
- XVIII. Further analysis of global robust stability of neural networks with multiple time delays
   Faydasicok O., Arik S.
   JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.349, no.3, pp.813-825, 2012 (SCI-Expanded)
  - XIX. Equilibrium and stability analysis of delayed neural networks under parameter uncertainties Faydasicok O., Arik S.

APPLIED MATHEMATICS AND COMPUTATION, vol.218, no.12, pp.6716-6726, 2012 (SCI-Expanded)

# **Articles Published in Other Journals**

- I. A NEW CRITERION FOR STABILITY OF NEUTRAL-TYPE HOPFIELD NEURAL NETWORKS WITH CONSTANT DELAYS
  - Faydasıçok Ö.

Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.25, no.2, pp.639-650, 2020 (Peer-Reviewed Journal)

II.Stability Analysis of Neutral-Type Hopfield Neural Networks with Discrete Delays<br/>Faydasıçok Ö.

Avrupa Bilim ve Teknoloji Dergisi, vol.2020, no.19, pp.515-523, 2020 (Peer-Reviewed Journal)

III. An Analysis of Global Stability of a Class of Neutral-Type Neural Systems with Time Delays FAYDASIÇOK Ö., arık s.

International Journal of Mathematical, Computational, Physical, Electrical and Computer Engineering, vol.6, pp.391-395, 2012 (Peer-Reviewed Journal)

# **Refereed Congress / Symposium Publications in Proceedings**

 I. A New Lyapunov Stability Analysis of Neutral Systems with Multiple Delays FAYDASIÇOK Ö., ARIK S.
 2024 International Conference on Control, Automation and Diagnosis, ICCAD 2024, Paris, France, 15 - 17 May 2024 
 II.
 An Analysis of Stability of Multiple Delayed Cohen-Grossberg Neural Networks of Neutral Type

 Faydasıçok Ö., Arık S.

7th International Conference on Mathematics and Computers in Sciences and Industry, Athens, Greece, 22 - 24 August 2022, pp.1-5

III. Stability Analysis of Neutral-Type Hopfield Neural Networks with Multiple Delays Faydasıçok Ö.

21st Conference on Engineering Applications of Neural Networks, Halkida, Greece, 5 - 07 June 2020, pp.558-568

- IV. A Novel Condition for Stability of Cohen-Grossberg Neural Networks of Neutral-Type with Discrete Delays
  - FAYDASIÇOK Ö.

2nd International Conference on Electrical, Communication and Computer Engineering, ICECCE 2020, İstanbul, Turkey, 12 - 13 June 2020

V. A new robust stability result for delayed neural networks

Faydasıçok Ö., Çiçek C., Arık S. 25. International Conference on Neural Information Processing, ICONIP 2018,, Siem-Reab, Cambodia, 12 - 16 December 2018, pp.343-352

- VI. A novel criterion for global asymptotic stability of neutral-type neural networks with discrete time delays
  - FAYDASIÇOK Ö., arık s.

25. International Conference on Neural Information Processing, ICONIP 2018, Siem Reap, Cambodia, 12 - 16 December 2018, pp.353-360

VII. A new robust stability result for delayed neural networks
 FAYDASIÇOK Ö., ÇİÇEK C., arık s.
 25. International Conference on Neural Information Processing, ICONIP 2018, Siem Reap, Cambodia, 12 - 16

25. International Conference on Neural Information Processing, ICONIP 2018, Siem Reap, Cambodia, 12 - 1 December 2018, pp.343-352

### VIII. A new sufficient condition for robust stability of delayed neural networks Faydasıçok Ö., Çiçek C., Arık S.

33. International Technical Conference on Circuits Systems, Computers and Communications, ITC-CSCC201, Bangkok, Thailand, 4 - 07 July 2018, pp.248-251

IX. Stability analysis of neutral-type neural networks with constant time delay FAYDASIÇOK Ö., arık s.

33. International Technical Conference on Circuits Systems, Computers and Communications, ITC-CSCC2018, Bangkok, Thailand, 4 - 07 July 2018, pp.29-32

## X. A new sufficient condition for robust stability of delayed neural networks FAYDASIÇOK Ö., ÇİÇEK C., arık s.

33. International Technical Conference on Circuits Systems, Computers and Communications, ITC-CSCC2018, Bangkok, Thailand, 4 - 07 July 2018, pp.248-251

XI. An alternative approach on model selection in Generalized Linear Models FAYDASIÇOK Ö., AKAY K. U. International Conference on Trends and Perspectives in Linear Statistical Inference, LINST

International Conference on Trends and Perspectives in Linear Statistical Inference, LINSTAT2010, Tomar, Portugal, 27 - 31 July 2010, pp.142

# **Activities in Scientific Journals**

Mathematical Modelling and Control, Scientific Committee Membership, 2021 - Continues

## **Scientific Refereeing**

FRACTAL AND FRACTIONAL, SCI Journal, August 2022

JOURNAL OF EXPERIMENTAL & THEORETICAL ARTIFICIAL INTELLIGENCE, SCI Journal, August 2022 ADVANCES IN DIFFERENCE EQUATIONS, Journal Indexed in SCI-E, July 2021 COGNITIVE NEURODYNAMICS, Journal Indexed in SSCI, April 2021 NEURAL NETWORKS, SCI Journal, February 2020 NEURAL PROCESSING LETTERS, SCI Journal, January 2020 IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS, SCI Journal, January 2020 IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS, SCI Journal, December 2019 NEURAL COMPUTING & APPLICATIONS, Journal Indexed in SSCI, December 2019 Neural Computing and Applications, Journal Indexed in SSCI, April 2013 IEEE Transactions on Neural Networks and Learning Systems, SCI Journal, February 2013 Neurocomputing, Journal Indexed in SSCI, January 2013 Neural Processing Letters, SCI Journal, December 2012 Abstract and Applied Analysis, SCI Journal, June 2012 Nonlinear Dynamics, SCI Journal, January 2012 IEEE Transactions on Circuits and Systems-I, SCI Journal, December 2011

## **Metrics**

Publication: 33 Citation (WoS): 412 Citation (Scopus): 435 H-Index (WoS): 9 H-Index (Scopus): 10

### **Congress and Symposium Activities**

22. International Conference on Neural Information Processing, ICONIP 2015, Attendee, İstanbul, Turkey, 2015 Ulusal Karmaşık Dinamik Sistemler ve Uygulamaları, Attendee, ANKARA, Turkey, 2012 International Conference on Computer Mathematics and Natural Computing/An Analysis of Global Stability of a Class of Neutral-Type Neural Systems with Time Delays, Attendee, VENEDİK, Italy, 2012 International Conference on Trends and Perspectives in Linear Statistical Inference/An Alternative Approach on Model Selection in Generalized Linear Models, Attendee, TOMAR, Portugal, 2010