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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABI-4520-2020

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Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Mathematical Engineering, Turkey 2013 - 2020

Undergraduate Minor, Istanbul Technical University, Fen-Edebiyat, Fizik Mühendisliği, Turkey 2008 - 2015

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Transportation Engineering, Turkey 2011 - 2013

Undergraduate, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, Turkey 2006 - 2011

Foreign Languages

German, C1 Advanced

English, C1 Advanced

Research Areas

Nonlinear Systems, Stability, Traffic Engineering, Differential Equations, Dynamic Systems and Ergodic Theory, System Theory: Control

Academic Titles / Tasks

Lecturer, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Mathematics Engineering, 2022 - Continues

Research Assistant, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2013 - 2020

Academic and Administrative Experience

Deputy Head of Department, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Mathematics Engineering, 2024 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Input-to-state exponential stability of switched nonlinear time-delay systems having stable/unstable subsystems**
GÖKSU G.
Systems and Control Letters, vol.184, 2024 (SCI-Expanded)
- II. **ϵ -Controllability/ ϵ -Observability of linear switched sampled-data systems with the non-equidistant time schedule**
Hamidoğlu A., GÖKSU G.
ISA Transactions, vol.139, pp.167-178, 2023 (SCI-Expanded)
- III. **Combined Control of Freeway Traffic Involving Cooperative Adaptive Cruise Controlled and Human Driven Vehicles Using Feedback Control Through SUMO**
Silgu M. A., Erdağı İ. G., Goksu G., Çelikoğlu H. B.
IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, vol.23, no.8, pp.11011-11025, 2022 (SCI-Expanded)
- IV. **Lyapunov-Krasovskii Characterizations of Integral Input-to-State Stability of Delay Systems With Nonstrict Dissipation Rates**
Chaillet A., Goksu G., Pepe P.
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.67, no.7, pp.3259-3272, 2022 (SCI-Expanded)
- V. **Integral input-to-state stable time-delay systems in cascade**
Goksu G., Chaillet A.
AUTOMATICA, vol.139, 2022 (SCI-Expanded)
- VI. **Finite-time stability for switched linear systems by Jordan decomposition**
Goksu G., Baser U.
APPLIED MATHEMATICS AND COMPUTATION, vol.395, 2021 (SCI-Expanded)
- VII. **Observer-based H-infinity finite-time control for switched linear systems with interval time-delay**
Goksu G., Baser U.
TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.41, no.5, pp.1348-1360, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Soil Moisture Dynamics Management with Robust Control Strategies in Smart Agriculture**
GÖKSU G.
EMO Bilimsel Dergi, vol.13, no.3, pp.17-26, 2023 (Peer-Reviewed Journal)

Books

- I. **Constrained Switching of Exponentially Stable Time-Delay Systems: Perspectives and Open Questions**
Göksu G.
in: Analysis and Applied Mathematics, Allaberen Ashyralyev, Michael Ruzhansky, Makhmud A. Sadybekov, Editor,
Birkhäuser, Zug, pp.231-239, 2024

Refereed Congress / Symposium Publications in Proceedings

- I. **Fréchet Discrete Gradient and Hessian Operators on Infinite-Dimensional Spaces**
Moreschini A., GÖKSU G., Parisini T.
7th IFAC Conference on Analysis and Control of Nonlinear Dynamics and Chaos, ACNDC 2024, London, England, 5 - 07 June 2024, vol.58, pp.78-83
- II. **A Methodology to Consider Explicitly Emissions in Dynamic User Equilibrium Assignment**

Silgu M. A., Erdağı İ. G., Hulagu S., Akti S., Akova H., Akyol G., Goncu S., GÖKSU G., Çelikoğlu H. B.

18th International Conference on Computer Aided Systems Theory, EUROCAST 2022, Las Palmas de Gran Canaria, Spain, 20 - 25 February 2022, vol.13789 LNCS, pp.362-369

III. Integral Input-to-State Stability of Traffic Flow with Variable Speed Limit

Goksu G., Silgu M. A., Erdağı İ. G., Çelikoğlu H. B.

16th IFAC Symposium on Control in Transportation Systems (CTS), Lille, France, 8 - 10 June 2021, vol.54, pp.31-36

IV. H-infinity State Feedback Controller for ODE Model of Traffic Flow

Silgu M. A., Erdağı İ. G., Goksu G., Çelikoğlu H. B.

16th IFAC Symposium on Control in Transportation Systems (CTS), Lille, France, 8 - 10 June 2021, vol.54, pp.19-24

V. Analysis of Integral Input-to-State Stable time-delay systems in cascade

Goksu G., Chaillet A.

21st IFAC World Congress on Automatic Control - Meeting Societal Challenges, ELECTR NETWORK, 11 - 17 July 2020, vol.53, pp.6404-6409

VI. Finite-Time Control for Switched Linear Systems with Interval Time-Delay

Goksu G., Ilgaz U. B.

14th International Federation of Automatic Control (IFAC) Workshop on Time Delay Systems (TDS), Budapest, Hungary, 28 - 30 June 2018, vol.51, pp.130-135

VII. Dynamic ramp metering approach for an urban highway using microscopic traffic simulation

Kesten A. S., GÖKSU G., Akbaş A.

2013 13th International Conference on ITS Telecommunications, ITST 2013, Tampere, Finland, 5 - 07 November 2013, pp.90-96

Supported Projects

Göksu G., Chaillet A., TÜBİTAK International Bilateral Joint Cooperation Program Project, Characterizations of Input-to-State Stability Related Properties for Time-Delay Systems, 2024 - 2025

Göksu G., Çelikoğlu H. B., TUBITAK Project, Ulaştırma Ağlarının Çevreye Duyarlı Optimizasyonu: Küçük Ölçekli Gerçek Bir Ağ Üzerinde İrdeleme, 2019 - 2022

Scientific Refereeing

TRANSPORTATION RESEARCH. PART C: EMERGING TECHNOLOGIES, Journal Indexed in SCI-E, December 2022

IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, Journal Indexed in SCI-E, December 2022

ADVANCES IN DIFFERENCE EQUATIONS, Journal Indexed in SCI-E, December 2022

TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, Journal Indexed in SCI-E, December 2022

AUTOMATICA, Journal Indexed in SCI-E, December 2022

INTERNATIONAL JOURNAL OF CONTROL, Journal Indexed in SCI-E, December 2022

EXPERT SYSTEMS WITH APPLICATIONS, Journal Indexed in SCI-E, December 2022

IEEE ACCESS, Journal Indexed in SCI-E, December 2022

JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS, Journal Indexed in SCI-E, December 2022

IEEE TRANSACTIONS ON AUTOMATIC CONTROL, Journal Indexed in SCI-E, December 2022

IEEE TRANSACTIONS ON FUZZY SYSTEMS, Journal Indexed in SCI-E, December 2022

SYSTEMS AND CONTROL LETTERS, Journal Indexed in SCI-E, December 2022

IEEE INTELLIGENT TRANSPORTATION SYSTEMS MAGAZINE, Journal Indexed in SCI-E, December 2022

Scholarships

2214-A - International Research Fellowship Programme for PhD Students, TUBITAK, 2019 - 2019

