Asst. Prof. SERKAN SARITAŞ

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: C-6374-2019

ScopusID: 35171233800

Yoksis Researcher ID: 351962

Education Information

Doctorate, Ihsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Turkey 2013 - 2018
Postgraduate, Ihsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Turkey 2010 - 2013
Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Electrical And Electronics
Engineering, Turkey 2005 - 2010

Dissertations

Doctorate, Signaling games in networked systems, Ihsan Dogramaci Bilkent University, Institute Of Engineering And
Natural Sciences, 2018
Postgraduate, Analysis of android random number generator, Ihsan Dogramaci Bilkent University, Institute Of
Engineering And Natural Sciences, 2013

Research Areas

Information Theory, Distributed Control Systems, Communication Control Systems

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics
Engineering, 2021 - Continues
Researcher, Kungl. Tekniska Högskolan (Royal Institute of Technology), The School of Electrical Engineering and
Computer Science, Division of Information Science and Engineering, 2020 - 2021
Researcher, Kungl. Tekniska Högskolan (Royal Institute of Technology), The School of Electrical Engineering and
Computer Science , Division of Network and Systems Engineering, 2019 - 2019
Researcher, Kungl. Tekniska Högskolan (Royal Institute of Technology), The School of Electrical Engineering and
Computer Science , Division of Decision and Control Systems, 2018 - 2019

Courses

ENGINEERING DESIGN II, Undergraduate, 2022 - 2023, 2021 - 2022
INTRODUCTION TO LOGIC DESIGN, Undergraduate, 2022 - 2023, 2021 - 2022
OPTIMIZATION, Postgraduate, 2023 - 2024
DATA STRUCTURES, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
ENGINEERING DESIGN I, Undergraduate, 2022 - 2023, 2021 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Quadratic Signaling With Prior Mismatch at an Encoder and Decoder: Equilibria, Continuity, and Robustness Properties**
Kazikli E., Sartas S., Gezici S., Yuksel S.
IEEE Transactions on Automatic Control, vol.68, no.2, pp.705-720, 2023 (SCI-Expanded)

II. **Signaling Games for Log-Concave Distributions: Number of Bins and Properties of Equilibria**
Kazikli E., SARITAŞ S., GEZİCİ S., Linder T., Yuksel S.
IEEE TRANSACTIONS ON INFORMATION THEORY, vol.68, no.3, pp.1731-1757, 2022 (SCI-Expanded)

III. **Dynamic signaling games with quadratic criteria under Nash and Stackelberg equilibria**
Saritas S., Yuksel S., Gezici S.
AUTOMATICA, vol.115, 2020 (SCI-Expanded)

IV. **Hypothesis Testing Under Subjective Priors and Costs as a Signaling Game**
Saritas S., Gezici S., Yuksel S.
IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.67, no.19, pp.5169-5183, 2019 (SCI-Expanded)

V. **Optimal Power Allocation for Average Detection Probability Criterion Over Flat Fading Channels**
Saritas S., DÜLEK B., Sezer A. D., Gezici S., Yuksel S.
IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol.65, no.6, pp.1383-1398, 2017 (SCI-Expanded)

VI. **Quadratic Multi-Dimensional Signaling Games and Affine Equilibria**
Saritas S., Yuksel S., Gezici S.
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.62, no.2, pp.605-619, 2017 (SCI-Expanded)

Books & Book Chapters

I. **Continuous Authentication Security Games**
SARITAŞ S., Shereen E., Sandberg H., Dán G.
in: Game Theory and Machine Learning for Cyber Security, Kamhoua Charles A, Kiekintveld Christopher D, Fang Fei, Zhu Quanyan, Editor, John Wiley & Sons, Inc., New Jersey, pp.180-203, 2021

Refereed Congress / Symposium Publications in Proceedings

I. **Privacy Signaling Games with Binary Alphabets**
Stavrou P. A., SARITAŞ S., Skoglund M.
European Control Conference (ECC), London, Canada, 12 - 15 July 2022, pp.1268-1273

II. **Adversarial Attacks on CFO-Based Continuous Physical Layer Authentication: A Game Theoretic Study**
SARITAŞ S., Forssell H., Thobaben R., Sandberg H., Dan G.
2021 IEEE International Conference on Communications, ICC 2021, Virtual, Online, Canada, 14 - 23 June 2021

III. **Quadratic Signaling Games with Channel Combining Ratio**
Saritas S., Stavrou P. A., Thobaben R., Skoglund M.

IEEE International Symposium on Information Theory (ISIT), ELECTR NETWORK, 12 - 20 July 2021, pp.2690-2695

IV. **A Nash equilibrium-based moving target defense against stealthy sensor attacks**
Umsonst D., SARITAŞ S., Sandberg H.
59th IEEE Conference on Decision and Control, CDC 2020, Virtual, Jeju Island, South Korea, 14 - 18 December 2020, vol.2020-December, pp.3772-3778

V. **Asymptotic Security of Control Systems by Covert Reaction: Repeated Signaling Game with Undisclosed Belief**
Sasahara H., SARITAŞ S., Sandberg H.
59th IEEE Conference on Decision and Control, CDC 2020, Virtual, Jeju Island, South Korea, 14 - 18 December 2020, vol.2020-December, pp.3243-3248

VI. **Passive Fault-tolerant Estimation under Strategic Adversarial Bias**
Saritas S., Dan G., Sandberg H.
American Control Conference (ACC), Colorado, United States Of America, 1 - 03 July 2020, pp.4644-4651

VII. **Adversarial Attacks on Continuous Authentication Security: A Dynamic Game Approach**
Saritas S., Shereen E., Sandberg H., Dan G.
10th International Conference on Decision and Game Theory for Security (GameSec), Stockholm, Sweden, 30 October - 01 November 2019, vol.11836, pp.439-458

VIII. **On the Number of Bins in Equilibria for Signaling Games**
Saritas S., Furrer P., Gezici S., Linder T., Yuksel S.
IEEE International Symposium on Information Theory (ISIT), Paris, France, 7 - 12 July 2019, pp.972-976

IX. **Binary Signaling under Subjective Priors and Costs as a Game**
Saritas S., Gezici S., Yuksel S.
57th IEEE Conference on Decision and Control (CDC), Florida, United States Of America, 17 - 19 December 2018, pp.1130-1135

X. **Nash and Stackelberg Equilibria for Dynamic Cheap Talk and Signaling Games**
Saritas S., Yuksel S., Gezici S.
American Control Conference (ACC), Washington, United States Of America, 24 - 26 May 2017, pp.3644-3649

XI. **Dynamic Signaling Games under Nash and Stackelberg Equilibria**
Saritas S., Yuksel S., Gezici S.
IEEE International Symposium on Information Theory (ISIT), Barcelona, Spain, 10 - 15 July 2016, pp.1631-1635

XII. **On Multi-Dimensional and Noisy Quadratic Signaling Games and Affine Equilibria**
Saritas S., Yueksel S., Gezici S.
American Control Conference, Illinois, United States Of America, 1 - 03 July 2015, pp.5390-5395

XIII. **Analysis of photonic-crystal problems with MLFMA and approximate Schur preconditioners**
Ergül Ö. S., Malas T., Kilinç S., Saritaş S., Gürel L.
2009 Computational Electromagnetics International Workshop, CEM 2009, İzmir, Turkey, 20 - 23 July 2009, pp.82-86

Metrics

Publication: 20
Citation (WoS): 64
Citation (Scopus): 48
H-Index (WoS): 4
H-Index (Scopus): 4