

Prof.Dr. ELİF UYSAL

Kişisel Bilgiler

İş Telefonu: [+90 312 210 2318](tel:+903122102318)

Fax Telefonu: [+90 321 210 2304](tel:+903212102304)

E-posta: uelif@metu.edu.tr

Web: <https://avesis.metu.edu.tr/uelif>

Uluslararası Araştırmacı ID'leri

ScholarID: GRHYG9MAAAAJ

ORCID: 0000-0002-7258-4872

Publons / Web Of Science ResearcherID: AAF-7958-2019

ScopusID: 6602270978

Yoksis Araştırmacı ID: 164194

Eğitim Bilgileri

Doktora, Stanford University, Elektrik Muh Bil, Amerika Birleşik Devletleri 1999 - 2003

Yabancı Diller

İngilizce, C1 İleri

Yaptığı Tezler

Doktora, Energy Efficient Wireless Communication, Stanford University, Elektrik Muh Bil, 2003

Araştırma Alanları

Elektrik-Elektronik Mühendisliği

Akademik Unvanlar / Görevler

Prof.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik ve Elektronik Mühendisliği Bölümü, 2006 - Devam Ediyor

Yönetilen Tezler

UYSAL E., Optimizing information freshness in random access channels, Yüksek Lisans, O.TAHİR(Öğrenci), 2022

UYSAL E., Query age of information in communication networks, Yüksek Lisans, M.EMRULLAH(Öğrenci), 2022

UYSAL E., Implementation and evaluation of age-aware downlink scheduling policies in communication networks, Yüksek Lisans, T.KEREM(Öğrenci), 2021

UYSAL E., Timely communication for energy-efficiency, datafreshness and tracking, Doktora, B.TAN(Öğrenci), 2021

UY SAL E., Haberleşme ağlarında bilgi yaşı farkında çizelgeleme, Yüksek Lisans, H.Burhan(Öğrenci), 2020

UY SAL E., Rastgele erişim kanallarında bilgi tazeliğinin iyileştirilmesi, Yüksek Lisans, D.Can(Öğrenci), 2019

UY SAL BIYIKOĞLU E., Dynamic allocation of renewable energy through a stochastic knapsack problem formulation for an access point on the move, Yüksek Lisans, E.TUĞÇE(Öğrenci), 2014

UY SAL BIYIKOĞLU E., Optimizing the service policy of a mobile service provider through competitive online solutions to the 0/1 knapsack problem with dynamic capacity, Yüksek Lisans, T.ERKILIÇ(Öğrenci), 2014

UY SAL BIYIKOĞLU E., Optimization of feedback in a multiuser miso communication downlink with energy harvesting users, Yüksek Lisans, M.SHAKIBA(Öğrenci), 2014

UY SAL BIYIKOĞLU E., Design and optimization of a rate adaptation algorithm for energy harvesting transmitters, Yüksek Lisans, C.EMRE(Öğrenci), 2014

UY SAL BIYIKOĞLU E., A low-complexity, near-optimal scheduling policy for solving a restless multi-armed bandit problem occurring in a single-hop wireless network, Yüksek Lisans, Ö.MELİH(Öğrenci), 2014

UY SAL BIYIKOĞLU E., Optimal transmission scheduling for energy harvesting systems and implementation of energy efficient scheduling algorithms on software defined radio, Yüksek Lisans, G.UÇTU(Öğrenci), 2014

UY SAL BIYIKOĞLU E., Duty cycle optimization in energy harvesting sensor networks with application to bluetooth low energy, Yüksek Lisans, B.AKGÜN(Öğrenci), 2014

UY SAL BIYIKOĞLU E., Implementation of the HEED clustering protocol with sleep scheduling in TinyOS 2 on a wireless sensor network testbed, Yüksek Lisans, C.ÖZKAN(Öğrenci), 2013

UY SAL BIYIKOĞLU E., Identification and localization on a wireless magnetic sensor network, Yüksek Lisans, S.BAGHAEE(Öğrenci), 2012

UY SAL BIYIKOĞLU E., Efficient resource allocation in energy harvesting wireless networks, Doktora, N.TEKBIYIK(Öğrenci), 2012

UY SAL BIYIKOĞLU E., Optimal and implementable transmission schemes for energy harvesting networks, Yüksek Lisans, F.MEHMET(Öğrenci), 2012

UY SAL BIYIKOĞLU E., SWIM: A new multicast routing algorithm for wireless networks, Yüksek Lisans, A.SİNAN(Öğrenci), 2011

UY SAL BIYIKOĞLU E., Optimization of energy harvesting wireless communication systems, Yüksek Lisans, H.ERKAL(Öğrenci), 2011

UY SAL BIYIKOĞLU E., A study on certain theoretical and practical problems in wireless networks, Yüksek Lisans, M.AKİF(Öğrenci), 2010

UY SAL BIYIKOĞLU E., Optimal resource allocation algorithms for efficient operation of wireless networks, Yüksek Lisans, Ö.ÖZEL(Öğrenci), 2009

UY SAL BIYIKOĞLU E., YILMAZ A. Ö., Subcarrier allocation in OFDMA systems with time varying channel and packet arrivals, Yüksek Lisans, E.TOKTAŞ(Öğrenci), 2008

UY SAL BIYIKOĞLU E., Energy-efficient routing to maximize network lifetime in wireless sensor networks, Yüksek Lisans, A.ZENGİN(Öğrenci), 2007

Jüri Üyelikleri

Ödül, IEEE Turkey Awards Committee, IEEE Türkiye, Haziran, 2022

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. MiSTA: An Age-Optimized Slotted ALOHA Protocol

Ahmetoglu M., Yavascan O. T., Uysal E.

IEEE INTERNET OF THINGS JOURNAL, cilt.9, sa.17, ss.15484-15496, 2022 (SCI-Expanded)

II. Semantic Communications in Networked Systems: A Data Significance Perspective

UY SAL E., KAYA O., Ephremides A., Gross J., Codreanu M., Popovski P., Assaad M., Liva G., Munari A., Soret B., et al.

IEEE NETWORK, cilt.36, sa.4, ss.233-240, 2022 (SCI-Expanded)

- III. Implementation and Evaluation of Age-Aware Downlink Scheduling Policies in Push-Based and Pull-Based Communication**
 Oğuz T. K., Ceran Arslan E. T., Uysal E., Girici T.
Entropy, cilt.24, sa.5, 2022 (SCI-Expanded)
- IV. Analysis of Slotted ALOHA With an Age Threshold**
 Yavascan O. T., UYSAL E.
IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, cilt.39, sa.5, ss.1456-1470, 2021 (SCI-Expanded)
- V. Sampling of the Wiener Process for Remote Estimation Over a Channel With Random Delay**
 Sun Y., Polyaniskiy Y., UYSAL E.
IEEE TRANSACTIONS ON INFORMATION THEORY, cilt.66, sa.2, ss.1118-1135, 2020 (SCI-Expanded)
- VI. Optimal Status Updating with a Finite-Battery Energy Harvesting Source**
 Bacinoglu B. T., Sun Y., UYSAL E., Mutlu V.
JOURNAL OF COMMUNICATIONS AND NETWORKS, cilt.21, sa.3, ss.280-294, 2019 (SCI-Expanded)
- VII. Implementation of Energy-Neutral Operation on Vibration Energy Harvesting WSN**
 Chamanian S., Baghaee S., Ulusan H., Zorlu O., UYSAL BIYIKOĞLU E., KÜLAH H.
IEEE SENSORS JOURNAL, cilt.19, sa.8, ss.3092-3099, 2019 (SCI-Expanded)
- VIII. Reliable Transmission of Short Packets Through Queues and Noisy Channels Under Latency and Peak-Age Violation Guarantees**
 Devassy R., Durisi G., Ferrante G. C., Simeone O., UYSAL BIYIKOĞLU E.
IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, cilt.37, sa.4, ss.721-734, 2019 (SCI-Expanded)
- IX. Scheduling Policies for Minimizing Age of Information in Broadcast Wireless Networks**
 Kadota I., Sinha A., UYSAL BIYIKOĞLU E., Singh R., Modiano E.
IEEE-ACM TRANSACTIONS ON NETWORKING, cilt.26, sa.6, ss.2637-2650, 2018 (SCI-Expanded)
- X. Update or Wait: How to Keep Your Data Fresh**
 Sun Y., UYSAL BIYIKOĞLU E., Yates R. D., Koksal C. E., Shroff N. B.
IEEE TRANSACTIONS ON INFORMATION THEORY, cilt.63, sa.11, ss.7492-7508, 2017 (SCI-Expanded)
- XI. Finite-Horizon Energy-Efficient Scheduling With Energy Harvesting Transmitters Over Fading Channels**
 BACINOĞLU B. T., UYSAL BIYIKOĞLU E., Koksal C. E.
IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, cilt.16, sa.9, ss.6105-6118, 2017 (SCI-Expanded)
- XII. Optimal energy allocation policies for a high altitude flying wireless access point**
 Ceran E. T., Erkilic T., UYSAL BIYIKOĞLU E., GİRİCİ T., Leblebicioglu K.
TRANSACTIONS ON EMERGING TELECOMMUNICATIONS TECHNOLOGIES, cilt.28, sa.4, 2017 (SCI-Expanded)
- XIII. Wearable battery-less wireless sensor network with electromagnetic energy harvesting system**
 Chamanian S., Ulusan H., Zorlu O., Baghaee S., UYSAL BIYIKOĞLU E., KÜLAH H.
SENSORS AND ACTUATORS A-PHYSICAL, cilt.249, ss.77-84, 2016 (SCI-Expanded)
- XIV. Implementation of an Enhanced Target Localization and Identification Algorithm on a Magnetic WSN**
 Baghaee S., GÜRBÜZ S. Z., UYSAL BIYIKOĞLU E.
IEICE TRANSACTIONS ON COMMUNICATIONS, sa.10, ss.2022-2032, 2015 (SCI-Expanded)
- XV. Powering-up Wireless Sensor Nodes Utilizing Rechargeable Batteries and an Electromagnetic Vibration Energy Harvesting System**
 Chamanian S., Baghaee S., Ulusan H., Zorlu O., KÜLAH H., UYSAL BIYIKOĞLU E.
ENERGIES, cilt.7, sa.10, ss.6323-6339, 2014 (SCI-Expanded)
- XVI. Finite-Horizon Online Transmission Scheduling on an Energy Harvesting Communication Link with a Discrete Set of Rates**
 BACINOĞLU B. T., UYSAL BIYIKOĞLU E.
JOURNAL OF COMMUNICATIONS AND NETWORKS, cilt.16, sa.3, ss.293-300, 2014 (SCI-Expanded)
- XVII. Network-wide energy efficiency in wireless networks with multiple access points**
 Ozel O., UYSAL BIYIKOĞLU E.
TRANSACTIONS ON EMERGING TELECOMMUNICATIONS TECHNOLOGIES, cilt.24, sa.6, ss.568-581, 2013 (SCI-Expanded)

- XVIII. **Optimal offline broadcast scheduling with an energy harvesting transmitter**
 Erkal H., Ozcelik F. M., UYSAL BIYIKOĞLU E.
 EURASIP JOURNAL ON WIRELESS COMMUNICATIONS AND NETWORKING, 2013 (SCI-Expanded)
- XIX. **Proportional Fair Resource Allocation on an Energy Harvesting Downlink**
 Tekbiyik N., GİRİCİ T., UYSAL BIYIKOĞLU E., Leblebicioglu K.
 IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, cilt.12, sa.4, ss.1699-1711, 2013 (SCI-Expanded)
- XX. **Minimization of Transmission Duration of Data Packets over an Energy Harvesting Fading Channel**
 Ozcelik F. M., Uctu G., UYSAL BIYIKOĞLU E.
 IEEE COMMUNICATIONS LETTERS, cilt.16, sa.12, ss.1968-1971, 2012 (SCI-Expanded)
- XXI. **A Greedy Link Scheduler for Wireless Networks With Gaussian Multiple-Access and Broadcast Channels**
 Sridharan A., Koksal C. E., UYSAL BIYIKOĞLU E.
 IEEE-ACM TRANSACTIONS ON NETWORKING, cilt.20, sa.1, ss.100-113, 2012 (SCI-Expanded)
- XXII. **Energy efficient wireless unicast routing alternatives for machine-to-machine networks**
 Tekbiyik N., UYSAL BIYIKOĞLU E.
 JOURNAL OF NETWORK AND COMPUTER APPLICATIONS, cilt.34, sa.5, ss.1587-1614, 2011 (SCI-Expanded)
- XXIII. **Optimal Packet Scheduling on an Energy Harvesting Broadcast Link**
 Antepli M. A., UYSAL BIYIKOĞLU E., Erkal H.
 IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, cilt.29, sa.8, ss.1721-1731, 2011 (SCI-Expanded)
- XXIV. **A Depth-optimal Low-complexity Distributed Wireless Multicast Algorithm**
 Akyurek A. S., UYSAL BIYIKOĞLU E.
 COMPUTER JOURNAL, cilt.54, sa.6, ss.988-1003, 2011 (SCI-Expanded)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Analysis of Threshold ALOHA in a Packet Erasure Channel Paket Silme Kanalında Yaş Eşikli ALOHA Analizi**
 Yavascan O. T., UYSAL E.
 30th Signal Processing and Communications Applications Conference, SIU 2022, Safranbolu, Türkiye, 15 - 18 Mayıs 2022
- II. **An Inequality for Query Age of Information and Age of Information Sorğu Anı Bilgi Yaşı (QAOI) ve Ortalama Bilgi Yaşı (AoI) Arasında bir Eşitsizlik**
 Ildiz M. E., Avsar S., UYSAL E.
 30th Signal Processing and Communications Applications Conference, SIU 2022, Safranbolu, Türkiye, 15 - 18 Mayıs 2022
- III. **Query Age of Information: Optimizing AoI at the Right Time**
 Ildiz M. E., Yavascan O. T., UYSAL E., Kartal O. T.
 2022 IEEE International Symposium on Information Theory, ISIT 2022, Espoo, Finlandiya, 26 Haziran - 01 Temmuz 2022, cilt.2022-June, ss.144-149
- IV. **When to Pull Data for Minimum Age Penalty**
 Yavascan O. T., CERAN ARSLAN E. T., Cakir Z., UYSAL E., Kaya O.
 19th International Symposium on Modeling and Optimization in Mobile, Ad hoc, and Wireless Networks, WiOpt 2021, Pennsylvania, Amerika Birleşik Devletleri, 18 - 21 Ekim 2021
- V. **Information Freshness in Random Access Channels for IoT Systems**
 Munari A., UYSAL E.
 4th International Balkan Conference on Communications and Networking, BalkanCom 2021, Novi-Sad, Sırbistan, 20 - 22 Eylül 2021, ss.112-116
- VI. **Evaluation of Age Control Protocol (ACP) and ACP+ on ESP32**
 Guloglu U., Baghaee S., UYSAL E.
 17th International Symposium on Wireless Communication Systems, ISWCS 2021, Berlin, Almanya, 6 - 09 Eylül

2021, cilt.2021-September

VII. **MiSTA: Threshold-ALOHA with Mini Slots**

Ahmetoğlu M., Yavaşcan O. T., UYSAL E.

IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom), Romanya, 24 - 28 Mayıs 2021

VIII. **Implementation and Evaluation of Age-Aware Downlink Scheduling Policies**

Öğuz T. K., UYSAL E., GİRİCİ T.

IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom), Bükreş, Romanya, 24 - 28 Mayıs 2021

IX. **On the Trackability of Stochastic Processes Based on Causal Information**

Bacinoglu B. T., Sun Y., UYSAL E.

2020 IEEE International Symposium on Information Theory, ISIT 2020, California, Amerika Birleşik Devletleri, 21 - 26 Temmuz 2020, ss.2228-2233

X. **Towards AoI-aware Smart IoT Systems**

Beytur H. B., Baghaee S., UYSAL E.

2020 International Conference on Computing, Networking and Communications, ICNC 2020, Hawaii, Amerika Birleşik Devletleri, 17 - 20 Şubat 2020, ss.353-357

XI. **Improving Age of Information in Random Access Channels**

Atabay D. C., Uysal E., Kaya O.

IEEE Conference on Computer Communications (IEEE INFOCOM), ELECTR NETWORK, 6 - 09 Temmuz 2020, ss.912-917

XII. **Analysis of Age-Aware Slotted ALOHA**

Yavascan O. T., UYSAL E.

IEEE Global Communications Conference (GLOBECOM) on Advanced Technology for 5G Plus, ELECTR NETWORK, 7 - 11 Aralık 2020

XIII. **Peak-Age Violation Guarantees for the Transmission of Short Packets over Fading Channels**

Ostman J., Devassy R., Durisi G., UYSAL E.

IEEE INFOCOM 2019 - IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), Paris, France, 29 Nisan - 02 Mayıs 2019

XIV. **Age Minimization of Multiple Flows using Reinforcement Learning**

beytur h. b., UYSAL E.

2019 International Conference on Computing, Networking and Communications (ICNC), Honolulu, HI, USA, 18 - 21 Şubat 2019, sa.1

XV. **Measuring age of information on real-life connections**

Beytur H. B., Baghaee S., UYSAL E.

27th Signal Processing and Communications Applications Conference, SIU 2019, Sivas, Türkiye, 24 - 26 Nisan 2019

XVI. **Age-Optimal Channel Coding Blocklength for an M/G/1 Queue with HARQ**

Sac H., Bacinoglu T., Uysal-Biyikoglu E., Durisi G.

19th IEEE International Workshop on Signal Processing Advances in Wireless Communications, SPAWC 2018, Kalamata, Yunanistan, 25 - 28 Haziran 2018

XVII. **Optimizing age of information on real-life TCP/IP connections through reinforcement learning**

Sert E., Sonmez C., Baghaee S., Uysal-Biyikoglu E.

26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Türkiye, 2 - 05 Mayıs 2018, ss.1-4

XVIII. **Delay and Peak-Age Violation Probability in Short-Packet Transmissions**

Devassy R., Durisi G., Ferrante G. C., Simeone O., UYSAL BIYIKOĞLU E.

IEEE International Symposium on Information Theory (ISIT), Colorado, Amerika Birleşik Devletleri, 17 - 22 Haziran 2018, ss.2471-2475

XIX. **Achieving the Age-Energy Tradeoff with a Finite-Battery Energy Harvesting Source**

BACINOĞLU B. T., Sun Y., UYSAL BIYIKOĞLU E., Mutlu V.

IEEE International Symposium on Information Theory (ISIT), Colorado, Amerika Birleşik Devletleri, 17 - 22

- Haziran 2018, ss.876-880
- XX. **Age-of-Information in Practice: Status Age Measured over TCP/IP Connections through WiFi, Ethernet and LTE**
Sonmez C., Baghaee S., Ergisi A., UYSAL BIYIKOĞLU E.
IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom), Batumi, Gürcistan, 4 - 07 Haziran 2018, ss.76-80
- XXI. **Minimizing Age of Information for Multiple Flows**
Beytur H. B., UYSAL BIYIKOĞLU E.
IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom), Batumi, Gürcistan, 4 - 07 Haziran 2018, ss.31-35
- XXII. **Age-Optimal Updates of Multiple Information Flows**
Sun Y., UYSAL BIYIKOĞLU E., Kompella S.
IEEE Conference on Computer Communications (IEEE INFOCOM), Hawaii, Amerika Birleşik Devletleri, 15 - 19 Nisan 2018, ss.136-141
- XXIII. **Energy Efficient Transmission Scheduling for Channel-adaptive Wireless Energy Transfer**
BACINOĞLU B. T., Kaya O., UYSAL BIYIKOĞLU E.
IEEE Wireless Communications and Networking Conference (WCNC), Barcelona, İspanya, 15 - 18 Nisan 2018
- XXIV. **Scheduling Status Updates from a Sensor to Minimize the Age of Information at the Destination**
UYSL BIYIKOĞLU E.
Dagstuhl Workshop on Fundamentals of Wireless Networking, Saarbrücken, Almanya, 2 - 07 Temmuz 2017
- XXV. **Scheduling Status Updates to Minimize Age of Information with an Energy Harvesting Sensor**
BACINOĞLU B. T., UYSAL BIYIKOĞLU E.
IEEE International Symposium on Information Theory (ISIT), Aachen, Almanya, 25 - 30 Haziran 2017, ss.1122-1126
- XXVI. **Remote estimation of the Wiener process over a channel with random delay**
Sun Y., Polyanskiy Y., UYSAL BIYIKOĞLU E.
2017 IEEE International Symposium on Information Theory (ISIT), Aachen, Germany, Almanya, 25 - 30 Haziran 2017, ss.321-325
- XXVII. **Enerji hasatçı ve batarya kısıtlı bir sensör ile en taze veri güncellemlerinin gönderilmesi**
BACINOĞLU B. T., UYSAL BIYIKOĞLU E.
2017 25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 Mayıs 2017
- XXVIII. **Age-Optimal Status Updating with an Energy Harvesting Sender**
BACINOĞLU B. T., UYSAL BIYIKOĞLU E.
Information Theory and Applications Workshop, San Diego, Amerika Birleşik Devletleri, 11 - 15 Şubat 2017
- XXIX. **Minimizing the Age of Information in Broadcast Wireless Networks**
Kadota I., UYSAL BIYIKOĞLU E., Singh R., Modiano E.
54th Annual Allerton Conference on Communication, Control, and Computing (Allerton), Illinois, Amerika Birleşik Devletleri, 27 - 30 Eylül 2016, ss.844-851
- XXX. **Age of information Controlling the freshness of status updates under energy constraints Keynote Talk**
UYSL BIYIKOĞLU E.
30th International Symposium on Computer and Information Sciences, Londrina, Brezilya, 23 - 25 Eylül 2015
- XXXI. **Age of Information under Energy Replenishment Constraints**
BACINOĞLU B. T., Ceran E. T., UYSAL BIYIKOĞLU E.
Information Theory and Applications Workshop (ITA), California, Amerika Birleşik Devletleri, 1 - 06 Şubat 2015, ss.25-31
- XXXII. **Finite Horizon Online Lazy Scheduling with Energy Harvesting Transmitters over Fading Channels**
BACINOĞLU B. T., UYSAL BIYIKOĞLU E.
IEEE International Symposium on Information Theory (ISIT), Hawaii, Amerika Birleşik Devletleri, 29 Haziran - 04 Temmuz 2014, ss.1176-1180

- XXXIII. **Achieving Nearly 100% Throughput without Feedback in Energy Harvesting Wireless Networks**
GÜL Ö. M., UYSAL BIYIKOĞLU E.
IEEE International Symposium on Information Theory (ISIT), Hawaii, Amerika Birleşik Devletleri, 29 Haziran - 04 Temmuz 2014, ss.1171-1175
- XXXIV. **Demonstration of Energy-Neutral Operation on a WSN Testbed Using Vibration Energy Harvesting**
Baghaee S., Uluşan H., Chamanian S., Zorlu Ö., Uysal Biyikoğlu E., Külah H.
20th European Wireless Conference, Barcelona, İspanya, 14 - 16 Mayıs 2014, ss.1-4
- XXXV. **Advertisement Scheduling in Bluetooth Low Energy Devices**
BACINOĞLU B. T., Ozcelik F. M., UYSAL BIYIKOĞLU E.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Türkiye, 23 - 25 Nisan 2014, ss.1575-1578
- XXXVI. **A Randomized Scheduling Algorithm for Energy Harvesting Wireless Sensor Networks Achieving Nearly 100% Throughput**
GÜL Ö. M., UYSAL BIYIKOĞLU E.
IEEE Wireless Communications and Networking Conference (WCNC), İstanbul, Türkiye, 6 - 09 Nisan 2014, ss.2456-2461
- XXXVII. **Routing with Mutual Information Accumulation in Energy-Limited Wireless Networks**
Shakiba-Herfeh M., GİRİCİ T., UYSAL BIYIKOĞLU E.
24th Tyrrhenian International Workshop on Digital Communications - Green ICT (TIWDC), Genoa, İtalya, 23 - 25 Eylül 2013
- XXXVIII. **Finite Horizon Online Packet Scheduling with Energy and Delay Constraints**
BACINOĞLU B. T., UYSAL BIYIKOĞLU E.
1st International Black Sea Conference on Communications and Networking (BlackSeaCom), Batumi, Gürcistan, 3 - 05 Temmuz 2013, ss.191-195
- XXXIX. **Application and Modeling of a Magnetic WSN for Target Localization**
Baghaee S., GÜRBÜZ S. Z., UYSAL BIYIKOĞLU E.
UKSim-AMSS 15th International Conference on Computer Modelling and Simulation (UKSim), Cambridge, Kanada, 10 - 12 Nisan 2013, ss.687-692
- XL. **Kalman Prediction Based Proportional Fair Resource Allocation for a Solar Powered Base Station**
Tekbiyik-Ersoy N., Uysal-Biyikoglu E., Leblebicioglu K., Girici T.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 Nisan 2013
- XLI. **Optimal Offline Packet Scheduling on an Energy Harvesting Broadcast Link**
Ozcelik F. M., Erkal H., UYSAL BIYIKOĞLU E.
IEEE International Symposium on Information Theory (ISIT), St Petersburg, Rusya, 31 Temmuz - 05 Ağustos 2011, ss.2886-2890
- XLII. **Ferromagnetic Target Detection and Localization with a Wireless Sensor Network**
Antepli M. A., Gurbuz S. Z., UYSAL BIYIKOĞLU E.
MILCOM Military Communications Conference, San-Jose, Kostarika, 31 Ekim - 03 Kasım 2010, ss.1068-1073
- XLIII. **Buffer Sharing on an OFDMA Downlink**
GİRİCİ T., Ozel O., UYSAL BIYIKOĞLU E.
21st Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), İstanbul, Türkiye, 26 - 30 Eylül 2010, ss.1162-1167
- XLIV. **A Greedy Link Scheduler for Wireless Networks with Gaussian Multiple Access and Broadcast Channels**
Sridharan A., Koksal C. E., UYSAL BIYIKOĞLU E.
Conference on IEEE INFOCOM, California, Amerika Birleşik Devletleri, 15 - 19 Mart 2010
- XLV. **Optimal Buffer Partitioning on a Multiuser Wireless Link**
Ozel O., UYSAL BIYIKOĞLU E., GİRİCİ T.
Information Theory and Applications Workshop (ITA), California, Amerika Birleşik Devletleri, 31 Ocak - 05 Şubat 2010, ss.505-514
- XLVI. **A Power Control Game with Smooth Reduction of SINR Objectives**

- Ozel O., UYSAL BIYIKOĞLU E.
47th Annual Allerton Conference on Communication, Control, and Computing, Illinois, Amerika Birleşik Devletleri,
30 Eylül - 02 Ekim 2009, ss.1187-1188
- XLVII. Distributed Power Control Using Non-monotonic Reaction Curves**
Ozel O., UYSAL BIYIKOĞLU E.
International Conference on Game Theory for Networks, İstanbul, Türkiye, 13 - 15 Mayıs 2009, ss.60-67
- XLVIII. Energy-efficient scheduling of packet transmissions over wireless networks**
Balaji P., UYSAL BIYIKOĞLU E., El Gamal A.
IEEE INFOCOM 2002: THE CONFERENCE ON COMPUTER COMMUNICATIONS, VOLS 1-3, PROCEEDINGS, New York,
Amerika Birleşik Devletleri, 23 - 27 Haziran 2002, ss.1773-1782

Desteklenen Projeler

BEKLİOĞLU M., JEPPESEN E., UYSAL E., ÖZKAN K., Yükseköğretim Kurumları Destekli Proje, Mezokozm deney sistemleri için bütünsel otonom gözlem ağı oluşturulması, 2022 - Devam Ediyor

UYSAL BIYIKOĞLU E., TÜBİTAK Projesi, Haberleşme Ağlarında Enerji Hasadı Yöntemi Kullanımının Eniyileme ve Gerçekleşmesi, 2012 - Devam Ediyor

UYSAL E., TÜBİTAK Projesi, Optimal Bilgi Yaşı İçin Veri Örnekleme Ve Çizelgelemenin Kuramsal Sinirları, Algoritmalar Ve Deneysel Uygulamalar, 2018 - 2021

Akin T., Külah H., Uysal E., TÜBİTAK Projesi, ENERJİ VERİMLİ GİYİLEBİLİR SENSÖR UYGULAMALARI İÇİN ESNEK TABANLI/MINYATÜR ENERJİ TOPLAYICILAR VE ULTRA-DÜŞÜK GÜC İLE ÇALIŞAN ARAYÜZ ELEKTRONİĞİ GELİŞTİRİLMESİ, 2017 - 2020

UYSAL E., TÜBİTAK Projesi, Enerji Verimli Kablosuz Ağ Tasarımı için Temel İlkeler ve Deneysel Uygulamalar, 2011 - 2014

UYSAL E., TÜBİTAK Projesi, Minumum Enerjili Yüksek Performanslı Kablosuz Haberleşme Ağı Tasarımı: Katmanlararası Optimizasyon Ve Algoritmalar, 2007 - 2010

Bilimsel Dergilerdeki Faaliyetler

IEEE-ACM Transactions On Networking, Yayın Kurul Üyesi, 2018 - Devam Ediyor

Metrikler

Yayın: 72
Atıf (WoS): 1622
Atıf (Scopus): 1037
H-İndeks (WoS): 17
H-İndeks (Scopus): 13

Davetli Konuşmalar

Minimizing Age of Information in the Finite Blocklength Regime, Konferans, University Of California, San Diego, Amerika Birleşik Devletleri, Şubat 2019

Ödüller

Uysal E., IEEE Fellow Award, Ieee, Aralık 2022
Uysal E., Kaya O., Ankaralı M. M., 2024 - Eşik Üstü Ödülü, Tubitak, Mayıs 2020

Girişimcilik Faaliyetleri

Limited, FRESHDATA , 04 Mayıs 2022, Sahibi

Akademî Dışı Deneyim

ODTÜ Prof Dr Mustafa Parlar Vakfı

METU

The Ohio State University

The Ohio State University

Massachusetts Institute of Technology

Stanford University

Massachusetts Institute of Technology