Sinem Coleri

Professor, Electrical and Electronics Engineering
Director, Wireless Networks Laboratory
Director, Ford Otosan Automotive Technologies Laboratory

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EDUCATION

01/2003-12/2005: **Ph.D.** in Electrical Engineering and Computer Sciences
University of California, Berkeley, CA, USA
Thesis: Wireless Sensor Networks: Energy Efficiency, Delay Guarantee and Fault Tolerance
Advisor: Prof. Pravin Varaiya

08/2000-12/2002: **M.S.** in Electrical Engineering and Computer Sciences
University of California, Berkeley, CA, USA
Thesis: PEDAMACS: Power Efficient and Delay Aware Medium Access Protocol for Sensor Networks
Advisor: Prof. Pravin Varaiya

09/1995-06/2000: **B.S.** in Electrical and Electronics Engineering
Bilkent University, Ankara, Turkey
Advisor: Prof. Erdal Arikan, **GPA:** 3.97/4.00

EXPERIENCE

02/2020-present: **Professor,** Electrical and Electronics Engineering
Koc University, Istanbul, Turkey

02/2016-02/2020: **Associate Professor,** Electrical and Electronics Engineering
Koc University, Istanbul, Turkey

09/2009-02/2016: **Assistant Professor,** Electrical and Electronics Engineering
Koc University, Istanbul, Turkey

06/2012-09/2012: **Visiting Research Scholar,** Electrical Engineering and Computer Sciences
University of California, Berkeley, CA, USA

06/2011-09/2011: **Visiting Research Scholar,** Electrical Engineering and Computer Sciences
University of California, Berkeley, CA, USA

07/2006-08/2009: **Research Scientist,** Wireless Sensor Networks Berkeley Lab
Pirelli and Telecom Italia, Berkeley, CA, USA

Advisor: Prof. Alberto Sangiovanni-Vincentelli

01/2006-06/2006: **Postdoctoral Researcher,** Electrical Engineering and Computer Sciences
University of California, Berkeley, CA, USA
Advisor: Prof. Pravin Varaiya

10/2004-06/2006: **Consultant,** Sensys Networks, Berkeley, CA
Sensys Networks is a start-up company that develops vehicle detection products based on ultra-low-power wireless sensor networking.

08/2000-12/2005: **Graduate Student Researcher,** Electrical Engineering and Computer Sciences, University of California, Berkeley, CA, USA
Advisor: Prof. Pravin Varaiya

06/2004-08/2004: **Research Intern**, Wireless Communication Division
National Semiconductor, San Jose, CA

10/1999-05/2000: **Part-time Engineer**, Microwave and System Technologies Division
ASELSAN, Ankara, Turkey

TEACHING EXPERIENCE

ELEC450/550: Machine Learning in Wireless Networks, Koc University
Spring 2021

ELEC 428/COMP 428/ELEC 528: Wireless Networks (2010-2021), Communication Networks (2022-), Koc University
Fall 2010, Fall 2011, Fall 2012, Fall 2014, Spring 2021, Spring 2022, Spring 2023

ELEC 413: Networks, Koc University
Spring 2018, Spring 2019

ELEC 411/ ELEC 511: Digital Communications, Koc University
Spring 2010, Spring 2011, Fall 2011, Fall 2012, Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018, Fall 2020, Fall 2021, Fall 2022, Fall 2023

ELEC 316: Analog and Digital Communication Systems, Koc University
Fall 2009, Fall 2010, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017

ENGR 200: Probability and Statistical Methods for Engineers, Koc University
Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018, Spring 2019, Fall 2020, Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023

ELEC 311: Digital Integrated Circuits, Koc University
Spring 2010

RESEARCH GRANTS

Source: TUBITAK (The Scientific and Technological Research Council of Turkey) 2247-A National Outstanding Researchers Program
Title: Machine Learning and Extreme Value Theory Based Ultra-Reliable Communication for Wireless Control Systems
Duty: Principal Investigator, **Duration:** 2022-2025

Source: TUBITAK (The Scientific and Technological Research Council of Turkey) 2244 Industrial Doctoral Program together with Ford Otosan
Title: Inter-vehicular and Intra-vehicular Innovative Communication Technologies
Duty: Principal Investigator, **Duration:** 2020-2027

Source: Ford Otosan
Title: Innovative Vehicular Communication Technologies
Duty: Principal Investigator, **Duration:** 2018-2024

Source: CHIST-ERA- Smart Distribution of Computing in Dynamic Networks (SDCDN)
Title: CONNECT: COmmunicatioN-aware dyNamic Edge CompuTing
Duty: Coordinator, **Duration:** 2020-2023

Source: TUBITAK (The Scientific and Technological Research Council of Turkey) 1001
Title: Radio Frequency Energy Harvesting based Communication Protocol Design for Time Critical Wireless Sensor Networks
Duty: Principal Investigator, **Duration:** 2018-2022

Source: Turk Telekom
Title: Energy Efficient Machine-to-Machine Communications
Duty: Principal Investigator, **Duration:** 2013-2016

Source: TUBITAK (The Scientific and Technological Research Council of Turkey) 1001
Title: Energy Efficient Robust Communication Network Design for Wireless Networked Control Systems
Duty: Principal Investigator, **Duration:** 2013-2016

Source: Turk Telekom
Title: Cross-Layer Epidemic Protocol Design for Inter-vehicular Communication Networks
Duty: Principal Investigator, **Duration:** 2012-2015

Source: Marie Curie Reintegration Grant
Title: Intra-Vehicular Wireless Sensor Networks
Duty: Principal Investigator, **Duration:** 2010-2014

Source: Istanbul Metropolitan Municipality
Title: Magnetic Sensor Networks for Traffic Monitoring
Duty: Principal Investigator, **Duration:** 2011-2012

Source: University of California Berkeley
Title: RSSI based Localization of Mobile Phones
Duty: Principal Investigator, **Duration:** 2010-2012

HONORS & AWARDS

2023: Selected as Women in Engineering (WIE) Distinguished Lecturer

2022: IEEE Communications Letters Exemplary Editor Award as Area Editor.

2022: Selected as N2Women: Stars in Computer Networking and Communications.

2022: Selected as Fellow of Asia-Pacific Artificial Intelligence Association (AAIA).

2021: Selected as IEEE ComSoc Distinguished Lecturer.

2021: Elevated to IEEE Fellow for contributions to wireless technologies and sensor networks.

2020: IEEE Communications Letters Exemplary Editor Award as Area Editor.

2020: TUBITAK Incentive Award, for contributions in wireless sensor networks, machine-to-machine wireless communication and vehicular communication.

2020: IEEE Vehicular Technology Society 2020 Neal Stepherd Memorial Best Propagation Paper Award.

2019: IEEE Communications Letters Exemplary Editor Award as Area Editor.

2019: Outstanding Faculty Award, College of Engineering, Koc University.

2018: Academician of the Year Award by ANTIKAD (Antalya Businesswoman Association)

2018: Outstanding Achievement Award, Individual Awards Category, by Higher Education Council.

2018: Finalist for ERC Consolidator Grant.

2017: IEEE Communications Letters Exemplary Editor Award.

2017: METU- Prof. Dr. Mustafa Parlar Foundation Research Encouragement Award.

2017: Advisor to doctoral thesis receiving IEEE Turkey Best Doctoral Thesis Award.

2017: Selected as Member of NSERC Electrical & Computer Engineering Evaluation Group.

2017: Advisor to doctoral thesis receiving GSSE Academic Excellence Award at Koc University.

2016: IEEE Communications Letters Exemplary Editor Award.

2016: Elevated to IEEE Senior Membership.

2016: Science Heroes Association - Scientist of The Year Award.

2015: Turkish Academy of Sciences Distinguished Young Scientist (TUBA-GEBIP) Award.

2015: TAF (Turkish Academic Fellowship) Network - Outstanding Scientist Award.

2014: Docent Title from the Council of Higher Education (YOK).

2014: Science Academy Young Scientist (BAGEP) Award.

2012: Turk Telekom Collaborative Research Award.

2012: Best Student Poster Award, ACM Mobicom S3 Workshop.

2011: Turk Telekom Collaborative Research Award.

2011: Advisor to Best Senior Design Project in Electrical and Electronics Engineering Department at Koc University.

2010: Marie Curie Reintegration Grant.

2000: University of California Regents Fellowship.

2000: Princeton University Fellowship (declined).

2000: Massachusetts Institute of Technology Graduate Research Assistantship (declined).

2000: Salutatorian- Ranked second in the Electrical and Electronics Engineering Department and in the University.

1995-2000: Dean's office high honor list in all semesters at Bilkent University.

1995: Bilkent University Full Scholarship.

1995: Scholarship from the Ministry of Education of Turkey to fund any 4-year undergraduate education abroad (did not use it).

1995: Ranked 81st in University Placement Examination, OYS, among 1,500,000 test takers.

1995: Ranked 1st in Ankara Science Competition.

SUPERVISED Ph.D. THESES

Yalcin Sadi, Optimal Resource Allocation for Delay and Energy Constrained Wireless Networks, 11/2015.

Seyhan Ucar, Visible Light Communication Assisted Secure and Efficient Architecture for Autonomous Platoon, 02/2017 (co-advisor: Oznur Ozkasap).

Merve Saimler, Energy Efficient User Association and Handover in 5G Heterogeneous Cloud Radio Access Networks, 01/2020.

Muhammad Shahid Iqbal, Optimal Scheduling for Full Duplex Wireless Powered Communication Networks, 01/2021.

Bugra Turan, Vehicular Visible Light Communication Channel Modeling and Performance Analysis, 06/2021.

Syed Adil Abbas Kazmi, Full-Duplex Relay Based Energy Harvesting Wireless Networks, 01/2022.

Burak Soner, Visible Light Communication and Positioning for Autonomous Vehicles, 01/2022.

Niloofar Mehrnia, Wireless Channel Modeling based on Extreme Value Theory for Ultra-Reliable Low Latency Communications (URLLC), 10/2022.

Aysun Gurur Onalan, Deep Learning Based Optimization Framework for Wireless Powered Communication Networks, 09/2023.

Nasir Khan, Explainable and Robust Artificial Intelligence for Trustworthy Resource Management in 6G Networks, expected in 2024.

Mohammad Saeid Haghighifard, Hierarchical Federated Learning in Clustered Vehicular Networks, expected in 2024.

Reza Sayyari, Cell-Free MIMO for Vehicular Communications, expected in 2025.

Berire Gunes, Minimizing Age of Information in Wireless Networked Control Systems, expected in 2026.

Parmida Sadat Valiahdi, Transfer Learning based Real-Time Ultra-Reliable Ultra-Low Latency Communication, expected in 2026.

SUPERVISED M.S. THESES

C. Umit Bas, Ultra-Wideband Channel Model for Intra-Vehicular Wireless Sensor Networks, 06/2012.

Yalcin Sadi, Optimal Power Control, Rate Adaptation and Scheduling for UWB-based Intra-vehicular Wireless Sensor Networks, 09/2012.

Nabeel Akhtar, Vehicle Mobility, Communication Channel Modeling and Traffic Density Estimation in VANETs, 06/2013. (co-advisor: Oznur Ozkasap)

Irem Nizamoglu, Epidemic Density Adaptive Data Dissemination Exploiting Opposite Lane in VANETs, 06/2013. (co-advisor: Oznur Ozkasap)

Seyhan Ucar, Multi-Hop Cluster and LTE Based Heterogeneous Architecture for VANET, 09/2013. (co-advisor: Oznur Ozkasap)

Utku Demir, Engine Compartment and Beneath the Chassis UWB Channel Model for Intra-Vehicular Wireless Sensor Networks, 09/2014.

Mehmet Kontik, Minimum Length Scheduling in Wireless Networks with Successive Interference Cancellation, 09/2014.

Bakhtiyar Farayev, Robust and Energy Efficient System Design of Wireless Networked Control Systems, 09/2015.

Anique Akhtar, Directional MAC Protocol for IEEE 802.11ad WLAN, 09/2015.

Recep Gul, QoS Constrained Semi-Persistent Scheduling of Machine Type Communications in Cellular Networks, 12/2016.

Ibrahim Pehlivan, Scheduling of Energy Harvesting for Multi-Antenna Wireless Powered Communication Networks, 08/2019.

Goksu Karadag, Optimal Power Control, Scheduling and Energy Harvesting for Wireless Networked Control Systems, 09/2019.

Umuralp Kaytaz, Towards More Reliable Medium Access Control with Data-Driven Spectrum Allocation, 01/2020.

Gokhan Gurbilek, Vehicular Visible Light Communication Physical Layer Design based on Measurement Driven Channel Statistics, 06/2020.

Mertkan Koca, Millimeter Wave Channel Model for Intra-Vehicular Wireless Sensor Networks, 01/2020.

Amirhassan Babazadeh Darabi, Reinforcement Learning based Resource Allocation in Ultra-Reliable Low Latency Networks, expected in 6/2024.

SUPERVISED UNDERGRADUATE PROJECTS

Said Safi and Yigit Berik, ECG Data Processing for Body Sensor Networks, 10/2009-06/2010.

Ovunc Demir, Step Counter for Health Applications, 10/2009-06/2010.

Onur Uraz, Critical Market Penetration for Vehicular Networks, 02/2010-06/2010.

Emre Demirer and Haluk Aksan, Bicycle Gear Shifting Aid Design, 02/2010-06/2010.

Isinsu Akcetin and Evren Ozer, 3D Computer Mouse based on the Classification of Motion Patterns, 02/2010-06/2010.

C. Umit Bas, Investigating Spatio-Temporal Characteristics of Link Quality in Wireless Sensor Networks, 10/2009-06/2010.

Yalcin Sadi, TDMA based MAC Protocol for Intra-Vehicular Wireless Sensor Networks, 10/2009-06/2010.

Isinsu Akcetin, HMM based Inertial Sensor System for Coaching of Rowing Activity, 10/2010-06/2011.

Zeynep Tutengil, Placement of Road Sensors based on Quantifying Traffic Information, 10/2010-06/2011.

Huseyin Serhat Tetikol, RSSI based Vehicle Positioning, 02/2010-06/2011.

Cem Yildirim and Mehmet Kontik, Sensory Network Cooperative Spectrum Sensing with Soft Combination in Cognitive Radio, 10/2010-06/2011.

Doruk Tirasoglu, Medium Access Control (MAC) Protocol Design for Inter-Vehicular Communication Networks, 10/2010-01/2011.

Doga Yuksel, Analyzing Topology Characteristics of Inter-Vehicular Communication Networks, 10/2010-01/2011.

Erdem Timucin and Seda Doven, Routing Protocol Design for Inter-Vehicular Communication Networks, 10/2010-01/2011.

Utku Demir and Beytullah Yilmaz, Distributed Fault Detection in Wireless Sensor Networks, 10/2011-06/2012.

Levent Ertuzun and Ugur Can Ulkumen, Wireless Collision Detection System, 01/2013-06/2013.

Can Ekin Cam and Atilay Tosunor, Improved Quality of Service for a VPN Service, 10/2012-01/2013.

Elif Dilek Salik and Hanife Usta, 60 GHz Wireless Networks, 10/2013-06/2014.

Recep Gul and Kemal Emrecan Sahin, MAC Protocols for Full-Duplex Wireless Networks, 10/2014-01/2015.

Ibrahim Pehlivan, Energy Efficient Transmission Policy for Single Node with RF Energy Harvesting, 09/2015-05/2016.

Mustafa Akin Yilmaz and Berkcan Okur, Algorithms for Partitioning a Mesh Network into Mesh Islands for Optimized Aggregate Throughput, 02/2017-06/2017.

Gokhan Gurbilek and Mertkan Koca, Vehicular Visible Light Communication (V2LC) Physical Layer Implementation with Software Defined Radio, 09/2017-12/2017.

Bensu Baran and Utku Akin, Autonomous Vehicle Platoon Communications Using Hybrid RF-VLC V2V Implementation, 09/2018-12/2018.

Merve Karakas and Utku Noyan, Angle-of-Arrival based Vehicular Visible Light Positioning, 09/2019-05/2020.

Merve Karakas, Furkan Sahbaz and Utku Noyan, Performance Analysis and Comparison of Vehicular Visible Light Positioning Methods, 09/2020-12/2020.

Kerem Buyukdereli and Ali Emre Heybeli, Low-Cost Optical Camera Communication Transceiver for Vehicle-to-Vehicle Communications, 02/2021-06/2021.

PROFESSIONAL SERVICE

- Editor-In-Chief, IEEE Open Journal of the Communications Society (2024-present)
- Senior Editor, IEEE Access (2022-present)
- Interim Editor-In-Chief, IEEE Open Journal of the Communications Society (2023-2024)
- Executive Editor, IEEE Communications Letters (2023-2024)
- Editor-at-Large, IEEE Transactions on Communications (2023-2024)
- Editor, IEEE Transactions on Machine Learning in Communications and Networking (2022-2024)
- Editor, IEEE Transactions on Vehicular Technology (2016-2023)
- Area Editor, IEEE Open Journal of the Communications Society, Area: Vehicular, Aerial and Satellite Communications and Networks (2019-2023)
- Area Editor, IEEE Communications Letters, Area: Wireless Networks I (2019-2023)
- Editor, IEEE Transactions on Communications (2017-2022)
- Senior Editor, IEEE Communications Letters (2018-2019)
- Editor, IEEE Communications Letters (2015-2018)
- Technical Editor of Low Power Routing (LPR) Group in ZigBee (2007-2009)
- Guest Editor, IEEE Internet of Things Journal Special Issue on "Towards Securing Internet of Connected Vehicles (IoV) from Virtual Vehicle Hijacking" 2019.

- Member, IEEE ComSoc Fellow Evaluation Committee (FEC) 2024.
- Member, TUBITAK Research and Publication Ethics Committee (AYEK) (2022-present).
- Member, IEEE ComSoc Turkey Advisory Board (2021-present).
- Member, IEEE Communications Society Publication Council (2022-present).
- Awards Sub-Committee Member-at-Large, IEEE ComSoc Women in Communications Engineering (WICE) (2022-present).
- Secretary, IEEE ComSoc Women in Communications Engineering (WICE) (2018-2022).
- Publicity Chair, IEEE ComSoc Women in Communications Engineering (WICE) (2015-2018, 2019-2022).
- Student Competition Representative of Signal Processing and Computing for Communications Technical Committee (2017-2020)
- Member of WICE Award Selection Committee (2015-2022)
- Member of NetWorld2020 Expert Group (2015-2021).
- Member of NSERC Electrical & Computer Engineering Evaluation Group (2017-2020).
- Member of TUBITAK Focus Group on Technological Roadmap for Embedded Systems in Automotive and Machine Sectors (2014).
- Inventram Technology, Advisory Board (2013-present).

- Lead Track Chair, Track 2: Medium Access Control and Networking, IEEE WCNC 2024.
- Tutorial Chair, IEEE International Conference on Machine Learning in Communications and Networking (ICMLCN) 2023.
- Co-Chair, IEEE Vehicular Networking Conference (VNC) 2023.
- Special Session Co-chair, IEEE BlackSeaCom 2023.
- TPC Co-chair, IEEE BlackSeaCom, 2022.
- Co-chair, Symposia: Wireless Communications, IEEE ICC, 2022.
- Co-chair, Track: SAC Full-Duplex Communications, IEEE ICC, 2022.
- Track Chair, IEEE Conference on Signal Processing and Communications Applications (SIU) 2021, 2022.
- WICE/YP & Special Sessions Chair, IEEE GLOBECOM 2021.
- Co-chair, Track: MAC and Cross-Layer Design, IEEE WCNC, 2021.
- Co-chair, Track: Wireless Networks: Protocols, Services and Security, IEEE VTC-Fall 2020.
- Technical Program Chair, WICE Workshop, IEEE GLOBECOM 2019.
- Publicity Co-Chair, IEEE Vehicular Networking Conference (VNC) 2019.
- Co-Chair, MobiHoc Workshop on Technologies, mOdels, and Protocols for Cooperative Connected Cars (TOP-Cars) 2019.
- TPC Co-chair, AdHocNow Conference 2019.
- Co-chair, Track 2: MAC and Cross-Layer Design, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2019.
- Publicity Co-Chair, IEEE Vehicular Networking Conference (VNC) 2018.
- Co-Chair, "Electric Vehicles, Vehicular Electronics and Intelligent Transportation" track of IEEE Vehicular Technology Conference (VTC) 2018- Fall.
- Publications Chair, IEEE International Workshop on Communication, Computing and Networking in Cyber-Physical Systems (CCNCPS), in conjunction with IEEE ICC 2018.

- Co-chair, Disaster Management: An Information and Communications Technology Approach with 5G-and-Beyond Communications and Networks 2017.
- Organizing Committee member, IEEE GLOBECOM WICE Workshop 2016.
- TPC Co-chair, IEEE ICDCS Workshop on Communication, Computing and Networking in Cyber Physical Systems (CCNCPS) 2017.
- Co-chair, IPCCC International Workshop on Communication, Computing and Networking in Cyber Physical Systems (CCNCPS) 2016.
- Publicity Chair, International Conference on Body Area Networks (BodyNets) 2007.

- Technical program committee member
    - IEEE ICC: SAC Machine Learning for Communications and Networking Track (MLCN) 2023.
    - IEEE GLOBECOM Workshop on Wireless Communications for Distributed Intelligence (WCDI) 2022.
    - IEEE International Conference on Communications (ICC) 2006, 2010, 2012, 2013, 2014, 2015, 2018.
    - IEEE Vehicular Networking Conference (VNC) 2013, 2015, 2016, 2017, 2018, 2019, 2020, 2021.
    - The Third International Workshop on Intelligent Transportation and Connected Vehicles Technologies (ITCVT) 2020
    - Annual Mediterranean Ad Hoc Networking Workshop (MedComNet) 2018, 2020, 2021.
    - ICC Workshop - 5G Auto: 2nd International Workshop on 5G and Cooperative Autonomous Driving 2019.
    - Model-based Design of Cyber-Physical Systems (CyPhy) 2018, 2019.
    - International Balkan Conference on Communication and Networking (BalkanCom) 2019, 2020, 2021.
    - IEEE ICC- Workshop on Communication, Computing and Networking in Cyber-Physical Systems (CCN-CPS) 2021.
    - IEEE ICC - WC Symposium 2019.
    - IEEE ICC Workshop - NOMA for 5G 2018.
    - IEEE PIMRC Workshop on Energy Harvesting Communication Networks 2018.
    - IEEE GLOBECOM International Workshop on Ultra-Low Latency and Ultra-High Reliability in Wireless Communications (ULTRA) 2015, 2016, 2017.
    - IEEE GLOBECOM International Workshop on Sub-6 GHz Spectrum for 5G Progress (SenSE5G) 2017.
    - IEEE WCNC Time Critical Cyber Physical Systems (TC-CPS) 2017.
    - European Wireless (EW) 2018.
    - Wireless Days 2019 (Track: Connected and Autonomous Vehicles in Land, Water and Sky).
    - IEEE Wireless Communications and Networking Conference (WCNC) 2008, 2009, 2010.
    - IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2014, 2015, 2016, 2017.
    - IEEE Vehicular Technology Conference (VTC) Spring 2017, Spring 2019, Fall 2019, Spring 2021, Fall 2021, Spring 2022.

- International Conference on ITS Communications (ITST) 2011, 2012, 2013, 2015, 2016, 2017, 2018.
- International Conference on Connected Vehicles and Expo (ICCVE) 2013, 2014, 2015, 2016.
- IEEE International Symposium on Computer and Communications (ISCC) 2017.
- International Conference on Recent Advances in Signal Processing, Telecommunications and Computing (SigTelCom) 2018, 2019, 2020.
- IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom) 2021.
- IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS) 2016.
- International Conference on Distributed Computing in Sensor Systems (DCOSS) 2012.
- IEEE International Conference on Smart Computing (SMARTCOMP) 2016, 2017, 2018.
- IEEE Conference on Vehicular Electronics and Safety (ICVES) 2012.
- IEEE Global Communications Conference (GLOBECOM) 2007.
- International Conference on Body Area Networks (BodyNets) 2007.

- Reviewer for:
  - IEEE Transactions on Wireless Communications
  - IEEE Transactions on Vehicular Technology
  - IEEE Transactions on Communications
  - IEEE Transactions on Networking
  - IEEE Transactions on Mobile Computing
  - IEEE Transactions on Broadcasting
  - IEEE Transactions on Parallel and Distributed Systems
  - IEEE Communications Letters
  - IET Intelligent Transportation Systems
  - EURASIP Journal on Wireless Communications and Networking
  - International Journal of Distributed Sensor Networks
  - Wireless Networks
  - Ad Hoc Networks

- Proposal reviewer for TUBITAK 1001, 1003 - Scientific and Technological Research Council Projects Funding Program (2009-present).
- Proposal reviewer and project progress evaluator for TUBITAK 1511 - Research and Technology Development and Innovation Projects in Priority Areas (2010-present).
- Project progress evaluator for KOSGEB R&D Projects

- Fellow Member
  - Institute of Electrical and Electronics Engineers (IEEE)
  - IEEE Communications Society
  - IEEE Control Systems Society
  - IEEE Vehicular Technology Society

UNIVERSITY SERVICE

Erasmus+ Coordinator, Electrical and Electronics Engineering, Koc University (2021-present)

Department Chair, Electrical and Electronics Engineering, Koc University (2020-present)

Coordinator of Electrical and Electronics Engineering Graduate Program of the Graduate School of Sciences and Engineering (2018-2019, 2021-present)

Koc University Fener-Frontier Editorial Board (2014-present)

Koc University Library Advisory Committee (2014-present)

Engineering Faculty Committee Member (2009-2012)

Koc University Student Advisor for Electrical and Electronics Engineering Department (2010-present)

Oral/Written Qualification Exam Committee Member at Electrical and Electronics Engineering Department (2009-present)

TUTORIALS

C. Fischione and **S. Coleri**, "Wireless Networked Control Systems: Design, Technologies and Applications", IEEE GLOBECOM, December 2019.

A. Balador, A. Bazzi, C. Campolo and **S. Coleri Ergen**, "V2X Communication Technologies for Connected and Automated Vehicles", IEEE PIMRC, September 2019.

INVITED TALKS

Explainable AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, **Keynote Speech**, International Symposium on Intelligent Signal Processing and Communication Systems, December 2024.

Explainable AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, **Keynote Speech**, IEEE International Mediterranean Conference on Communications and Networking (MeditCom), July 2024.

Explainable AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, 6G Summit, KAUST, November 2023.

Explainable AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, Kyung Hee University, October 2023.

AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, Northumbria University, as part of Distinguished Lecture Tour, September 2023.

AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, University of Leeds, as part of Distinguished Lecture Tour, September 2023.

AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, King's College London, as part of Distinguished Lecture Tour, September 2023.

CONNECT: COmmunicatioN-aware dNamic Edge CompuTing, CHIST-ERA Conference, April 2023.

AI Based Machine-to-Machine Communications in 6G, International Workshop on Integrated Communication and Sensing For Intelligent Next Generation Wireless, February 2023.

AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, **Keynote Speech**, Second International Conference on Artificial Intelligence of Things (ICAIoT), December 2022.

AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, Princess Sumaya University of Technology (PSUT), December 2022.

AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, **Keynote Speech**, IEEE Middle East & North Africa Communications Conference (MENACOMM), December 2022.

AI Based Machine-to-Machine Communications in 6G, Virtual Distinguished Lecture hosted by Spanish IEEE Signal Processing and Communications, IEEE UK and Ireland Communications Chapters, November 2022.

AI Based Ultra-Reliable Wireless Networked Control Systems in 6G, 25th International Symposium on Wireless Personal Multimedia Communications (WPMC), Special Session: Connecting Intelligence in 6G, November 2022.

AI Based Machine-to-Machine Communications in 6G, Kadir Has University, September 2022.

AI Based Zero Energy Communications in 6G, Virtual Distinguished Lecture, hosted by Central Texas Austin Joint chapter of Communications, Signal Processing and Consumer Technology societies, September 2022.

AI Based Machine-to-Machine Communications in 6G, Telenity, September 2022.

Communication-Aware Dynamic Edge Computing (CONNECT project), IEEE MeditCom, Intelligent Distribution of Computing in Cloud Continuum (ID3C), September 2022.

AI Based Communications in 6G, IEEE ComSoc School Series Kuala Lumpur, June 2022.

AI Based Machine-to-Machine Communications in 6G, 20th Mediterranean Communication and Computer Networking Conference (MedComNet), June 2022.

Machine-to-Machine Communications in 6G, Congress of AI-Human Interaction in Business, Kapadokya University, May 2022.

AI Based Machine-to-Machine Communications in 6G, Kordsa, February 2022.

AI Based Heterogeneous Vehicular Networks in 6G, Workshop on Vehicular Communication Technology Evolution Towards 6G, IIIT-Delhi, December 2021.

AI Based Ultra-Reliable Networked Control Systems in 6G, **Keynote speech**, Ericsson Research Day Turkey, December 2021.

AI Based Machine-to-Machine Communications in 6G, EU-US Frontiers of Engineering Symposium, November 2021.

AI Based Machine-to-Machine Communications in 6G, 6G Workshop, Medipol University, September 2021.

Towards AI Based Machine-to-Machine Communications in 5G and Beyond Networks, Yasar University, July 2021.

Machine-to-Machine Communications: 5G and Beyond, University of Sousse, June 2021.

Machine-to-Machine Communications: 5G and Beyond, IEEE ComSoc Summer School, Bangalore, India, June 2021.

Connected Vehicles: 5G and Beyond, International Automotive Engineering Conference – IAEC, November 2020.

Machine-to-Machine Communications: 5G and Beyond, **Keynote talk**, International Symposium on Advanced Electrical and Communication Technologies (ISAECT), November 2020.

Vehicular Networks: 5G and Beyond, Ford Otosan BIG Event, December 2019.

Machine-to-Machine Communications: 5G and Beyond, Sabanci University, July 2019.

5G and Beyond, Koc Holding, February 2019.

Machine-to-Machine Communications: 5G and Beyond, Carleton University, Canada, February 2019.

Scheduling Algorithm Design for Cyber-Physical Systems, National Military Aircraft Symposium, TUBITAK-BILGEM, December 2018.

Machine-to-Machine Communications: 5G and Beyond, IEEE 5G/IoT Summit, October 2018.

Visible Light Communication based Vehicular Networks, International Conference on Photonics Research, October 2018.

Wireless Network Design for Cyber-Physical Systems, CPS Summer School on Cyber-Physical Systems, Halmstad University, Sweden, June 2018.

Vehicular Wireless Communication in 5G and Beyond, 4th Annual World Automotive Conference, October 2017.

Vehicular Wireless Communication in 5G and Beyond, Disaster Management: An Information and Communications Technology Approach with 5G-and-Beyond Communications and Networks, September 2017.

6G and Beyond for Intelligent Transportation Systems, Medipol University, 6G: Communication Technologies and Applications Workshop, August 2017.

Future Wireless Communication Networks, Gebze Technical University IEEE Week, December 2015.

Vehicular Communication Networks, Internet of Things Workshop, hosted by Ford, November 2015.

Machine-to-Machine Communications: Beyond 5G, NetWorld2020 Joint Expert Group and Vision Group Workshop, June 2015.

Future Wireless Communication Networks, Koc University, May 2014.

Towards Energy Efficient and Robust Cyber-Physical Systems, ICT LEIT in H2020 International Brokerage Event, December 2013.

Optimal Power Control, Rate Adaptation and Scheduling for UWB-based Wireless Networked Control Systems, COST IC0804 Energy Efficiency in Large Scale Distributed Systems, November 2012.

Intra-Vehicular Wireless Sensor Networks, **Keynote talk**, Innovations on Communication Theory (INCT), October 2012.

Intra-Vehicular Wireless Sensor Networks, NSF United States/Middle East Workshop on Trustworthiness in Emerging Distributed Systems and Networks, June 2012.

Intra-Vehicular Wireless Sensor Networks, Middle East Technical University, April 2012.

Intra-Vehicular Wireless Sensor Networks, Istanbul Technical University, March 2012.

Intra-Vehicular Wireless Sensor Networks, University of California Berkeley, July 2011.

Intra-Vehicular Wireless Sensor Networks, Fiat Research Center, November 2010.

Designing Communication Protocol for Wireless Sensor Networks, Koc University, December 2008.

Application-driven Design for Sensor Networks, Carnegie Mellon University, March 2006.

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