Prof. Kasım Murat Karakaya

Personal Information

Office Phone: +90 312 585 0000 Extension: 587
Fax Phone: +90 312 418 4148
Web: https://avesis.tedu.edu.tr/murat.karakaya

International Researcher IDs
ScholarID: FA4fcxoAAAAJ
ORCID: 0000-0002-9542-6965
Publons / Web Of Science ResearcherID: A-4952-2013
ScopusID: 16637174900
Yoksis Researcher ID: 117246

Biography

Dr. Murat KARAKAYA is a dedicated Computer Engineering expert with a passion for advancing machine learning and deep learning technologies. His academic journey began at the Turkish Military Academy, where he earned his B.S.E.E. degree in 1991. He went on to complete his M.S. and Ph.D. in Computer Engineering at Bilkent University, Ankara, Turkey in 2000 and 2008, respectively.

Professional Journey: Following his academic pursuits, Dr. KARAKAYA embarked on a PostDoc position at the Ohio State University, Columbus, USA, between 2009 and 2010. His diverse professional experience includes roles as an instructor and software engineer at the Turkish Military Academy, Ankara, Turkey from 2000 to 2005. He also served as a project manager at the NCSA, NATO HQ, Mons, Belgium from 2005 to 2008.

From 2008 to 2012, he contributed his expertise as an instructor and software engineer at the Turkish Military School of Electronics, Communications and Information Systems (MEBS) and Turkish Military Academy (KHO), Ankara, Turkey. In 2012, Dr. KARAKAYA joined the Computer Engineering department at Atılım University, Ankara, Turkey, where he has excelled as an Assistant Professor, later being promoted to Associate Professor in 2017, and subsequently to the rank of Professor in 2022. Dr. KARAKAYA currently works at the Software Engineering department at TED University, Ankara, Turkey

Research and Contributions: Dr. KARAKAYA's research interests span a range of cutting-edge fields including Machine Learning, Deep Learning, Natural Computing, Sensor Networks, and Peer-to-Peer networks. His extensive body of work encompasses 11 papers published in SCI and SCI-Expanded journals, along with 26 papers in journals indexed by other sources. Additionally, he has presented 41 international conference papers, 10 national conference papers, and contributed a book chapter. His innovative mindset is further evidenced by his granted and pending patents.

Educational Initiatives: A committed educator, Dr. KARAKAYA has recently introduced three pioneering courses: Machine Learning for Engineers, Fundamentals of Deep Learning, and An Introduction to Machine Learning. His dedication to knowledge dissemination extends to over 250 tutorials on Deep Learning and Machine Learning, available on his YouTube channel. He is an avid contributor on the Medium platform, where he shares practical solutions to Deep Learning and Machine Learning challenges. Furthermore, Dr. KARAKAYA generously provides Python source codes for numerous problems in these domains on his GitHub repository.

Leadership and Project Management: Dr. KARAKAYA has overseen eight research projects supported by Atılım University and participated as a researcher in two projects funded by TUBITAK (Scientific and Technical Research Council of Turkey). He has established two research groups, the Natural Computing Interest Group and the Salda Deep Learning Research Group and has collaborated with group members on publishing over 20 papers in the areas of Machine Learning, Deep Learning, and Natural Computing.

Recognition and Awards: His contributions have not gone unnoticed, as Dr. KARAKAYA has received two Best Paper awards from international conferences and garnered 12 research and publication incentive grants from Atılım University and TUBITAK.

Education Information

Doctorate, Ihsan Dogramaci Bilkent University, Mühendislik, Bilgisayar, Turkey 2000 - 2008
Postgraduate, Ihsan Dogramaci Bilkent University, Mühendislik, Bilgisayar, Turkey 1998 - 2000

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Counteracting free riding in pure peer-to-peer networks, Ihsan Dogramaci Bilkent University, 2008

Postgraduate, An Efficient broedcast scheduling algorithm for pull-based mobile environments, Ihsan Dogramaci Bilkent University, 2000

Research Areas

Computer Sciences, algorithms, Computer Vision, Database and Data Structures, Artificial Intelligence, Computer Learning and Pattern Recognition, Engineering and Technology

Designed Lessons

Undergraduate
Karakaya K. M., Digital Design and Computer Architecture, Undergraduate, 2024 - 2025
Karakaya K. M., Building AI Applications with Large Language Models, Undergraduate, 2024 - 2025

Published journal articles indexed by SCI, SSCI, and AHCI

I. **A novel solution for routing a swarm of drones operated on a mobile host**
Savuran H., Karakaya K. M.
Engineering Applications of Artificial Intelligence, vol.138, 2024 (SCI-Expanded)

II. **Deep learning based fall detection using smartwatches for healthcare applications**
Şengül G., Karakaya K. M., Misra S., Abayomi-Alli O. O., Damaševičius R.
Biomedical Signal Processing and Control, vol.71, 2022 (SCI-Expanded)

III. **SS-MLA: A semisupervised method for multi-label annotation of remotely sensed images**
Üstünkök T., Karakaya K. M.
Journal of Applied Remote Sensing, vol.15, no.3, 2021 (SCI-Expanded)

IV. **Analyzing students' academic success in pre-requisite course chains: A case study in Turkey**
Karakaya K. M., Eryilmaz M., Ceyhan U. O.
International Journal of Engineering Education, vol.34, no.2, pp.364-370, 2018 (SCI-Expanded)

V. **Efficient route planning for an unmanned air vehicle deployed on a moving carrier**
Savuran H., Karakaya K. M.
Soft Computing, vol.20, no.7, pp.2905-2920, 2016 (SCI-Expanded)

VI. **MSCT: An efficient data collection heuristic for wireless sensor networks with limited sensor memory capacity**
Karakaya K. M.
KSII Transactions on Internet and Information Systems, vol.9, no.9, pp.3396-3411, 2015 (SCI-Expanded)

VII. **Time-sensitive ant colony optimization to schedule a mobile sink for data collection in wireless sensor networks**
Karakaya K. M.
Ad-Hoc and Sensor Wireless Networks, vol.28, no.1-2, pp.65-82, 2015 (SCI-Expanded)

VIII. **Deadline-aware energy-efficient query scheduling in wireless sensor networks with mobile sink**
Karakaya K. M.
The Scientific World Journal, vol.2013, 2013 (SCI-Expanded)

IX. **Free riding in peer-to-peer networks**
Karakaya K. M., Korpeoglu I., Ulusoy Ö.
IEEE Internet Computing, vol.13, no.2, pp.92-98, 2009 (SCI-Expanded)

X. **Counteracting free riding in Peer-to-Peer networks**
Karakaya K. M., Körpeoğlu I., Ulusoy Ö.
Computer Networks, vol.52, no.3, pp.675-694, 2008 (SCI-Expanded)

XI. **A connection management protocol for promoting cooperation in Peer-to-Peer networks**
Karakaya K. M., Körpeoğlu I., Ulusoy Ö.
Computer Communications, vol.31, no.2, pp.240-256, 2008 (SCI-Expanded)

Articles Published in Other Journals

I. **Harmanlanmış Öğrenme Ortamlarında Sosyal Medya Kullanımının Öğrenci Doyumu Üzerine Etkisi**
ERYILMAZ M., KARAKAYA K. M.
Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi, vol.15, no.1, pp.106-129, 2018 (Peer-Reviewed Journal)

II. **Biometric Verification on e-ID-Card Secure Access Devices: A Case Study on Turkish National e-ID Card Secure Access Device Specifications**
BOSTAN A., ŞENGÜL G., KARAKAYA K. M.
INTERNATIONAL JOURNAL OF INFORMATION SECURITY SCIENCE, vol.6, no.4, pp.87-92, 2017 (Peer-Reviewed Journal)

III. **Using Bluetooth Low Energy Beacons for Indoor Localization**
ŞENGÜL G., KARAKAYA K. M.
International Journal of Intelligent Systems and Applications in Engineering, vol.5, no.2, pp.39-43, 2017 (Peer-Reviewed Journal)

IV. **Remotely Monitoring Activities of The Elders Using Smart Watches**
KARAKAYA K. M., ŞENGÜL G., BOSTAN A.
International Journal of Scientific Research in Information Systems and Engineering (IJSRISE), vol.3, no.1, pp.56-60, 2017 (Peer-Reviewed Journal)

V. **Unidirectional Data Transfer: A Secure System To Push The Data From A High Security Network To A Lower One Over An Actual Air-Gap**
BOSTAN A., ŞENGÜL G., KARAKAYA K. M.
International Journal of Scientific Research in Information Systems and Engineering (IJSRISE), vol.3, no.1, pp.35-38, 2017 (Peer-Reviewed Journal)

VI. **A Smart Classroom Application: Monitoring And Reporting Attendance Automatically Using Smart Devices**
ŞENGÜL G., KARAKAYA K. M., BOSTAN A.
International Journal of Scientific Research in Information Systems and Engineering (IJSRISE), vol.3, no.1, pp.39-43, 2017 (Peer-Reviewed Journal)

VII. **Determination and Identification Of Dangerously Lane Changing Vehicles In Traffic By Image Processing Techniques**
ŞENGÜL G., KARAKAYA K. M., BOSTAN A.
International Journal of Scientific Research in Information Systems and Engineering (IJSRISE), vol.3, no.1, pp.44-47, 2017 (Peer-Reviewed Journal)

VIII. **A Wireless Control System Based on Smart Bluetooth and Ibeacon Technology for Auditing the Patrols**
KARAKAYA K. M., ŞENGÜL G., BOSTAN A.
International Journal of Scientific Research in Information Systems and Engineering (IJSRISE), vol.2, no.3, pp.8-11, 2016 (Peer-Reviewed Journal)

IX. **Predicting Student Success according to Online Activities in a Blended Course using Artificial Neural Networks**
KARAKAYA K. M., ERYILMAZ M., BOSTAN A.
International Journal of Scientific Research in Information Systems and Engineering (IJSRISE), pp.47-51, 2015 (Peer-Reviewed Journal)

X. **Maximizing UAV Target Coverage under Flight Range and Target Service Time Constraints**
SEVİNÇ E., KARAKAYA K. M.
Lecture Notes on Software Engineering, vol.3, no.4, pp.290-294, 2015 (Peer-Reviewed Journal)

XI. **Route Optimization Method for Unmanned Air Vehicle Launched from a Carrier**
SEVİNÇ E., KARAKAYA K. M.
Lecture Notes on Software Engineering, vol.3, no.4, pp.279-284, 2015 (Peer-Reviewed Journal)

XII. **Using Service Oriented Architecture for Plate Recognition by Mobile Devices**
CERECİ İ., DAĞLAYAN H., KILINÇ N., AKTAŞ S., KARAKAYA K. M.
Girne American University Journal of Social and Applied Sciences, vol.7, no.11, pp.76-81, 2015 (Peer-Reviewed Journal)

XIII. **Efficient Data Gathering in WSN with a Range Constrained Mobile Relay**
CERECİ İ., DAĞLAYAN H., KILINÇ N., AKTAŞ S., KARAKAYA K. M.
Girne American University Journal of Social and Applied Sciences, vol.7, no.11, pp.89-95, 2015 (Peer-Reviewed Journal)

XIV. **RSRP Risk Sensitive Routing Protocol in Wireless Sensor Networks**
CERECİ İ., DAĞLAYAN H., KILINÇ N., AKTAŞ S., KARAKAYA K. M.
Girne American University Journal of Social and Applied Sciences, vol.7, no.11, pp.68-75, 2015 (Peer-Reviewed Journal)

XV. **Determining Firm Logos Using Image Processing Techniques on a Mobile Device to Aid Blind People**
CERECİ İ., DAĞLAYAN H., KILINÇ N., AKTAŞ S., KARAKAYA K. M.
Girne American University Journal of Social and Applied Sciences, vol.7, no.11, pp.83-88, 2015 (Peer-Reviewed Journal)

XVI. **A Local Optimization Technique for Assigning New Targets to the Planned Routes of Unmanned Aerial Vehicles**
SEVİNÇ E., KARAKAYA K. M.
Balkan Journal of Electrical and Computer Engineering, vol.2, no.2, 2014 (Peer-Reviewed Journal)

XVII. **UAV Route Planning For Maximum Target Coverage**
KARAKAYA K. M.
Computer Science & Engineering: An International Journal, vol.4, no.1, 2014 (Peer-Reviewed Journal)

XVIII. **A General Purpose Simulator for Unstructured P2P Networks and a Sample Application**
KARAKAYA K. M., KÖRPEOĞLU İ., ULUSOY Ö.
Savunma Bilimleri Dergisi, vol.8, no.2, pp.87-126, 2009 (Peer-Reviewed Journal)

XIX. **ARG A Tool for Automatic Report Generation**
KARAKAYA K. M., GÜVENİR H. A.
ISTANBUL UNIVERSITY - JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING, vol.4, no.2, pp.1101-1109, 2004 (Peer-Reviewed Journal)

XX. **Clustering mobile trajectories for resource allocation in mobile environments**
Katsaros D., Nanopoulos A., Karakaya K. M., Yavas G., Ulusoy Ö., Manolopoulos Y.
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), vol.2810, pp.319-329, 2003 (Scopus)

Papers Published in Refereed Scientific Meetings

I. **Detecting Errors in Automatic Image Captioning by Deep Learning Derin Ögrenme ile Otomatik Olarak Üretilen Resim Alt Yazismdaki Hatalarm Tespiti**
Karakaya K. M.
6th International Conference on Computer Science and Engineering, UBMK 2021, Ankara, Turkey, 15 - 17 September 2021, pp.46-49

II. **Topic-Controlled Text Generation**
Çağlayan C., Karakaya K. M.
6th International Conference on Computer Science and Engineering, UBMK 2021, Ankara, Turkey, 15 - 17 September 2021, pp.533-536

III. **Effect of PSO Tuned P, PD, and PID Controllers on the Stability of a Quadrotor**

Ustunkok T., Karakaya K. M.

1st International Informatics and Software Engineering Conference, IISEC 2019, Ankara, Turkey, 6 - 07 November 2019

IV. **Image Tag Refinement with Self Organizing Maps**

Ustunkok T., Acar O. C., Karakaya K. M.

1st International Informatics and Software Engineering Conference, IISEC 2019, Ankara, Turkey, 6 - 07 November 2019

V. **Deep Learning and Current Trends in Machine Learning**

Bostan A., Ekin C., Sengul G., Karakaya K. M., Tirkes G.

3rd International Conference on Computer Science and Engineering, UBMK 2018, Sarajevo, Bosnia And Herzegovina, 20 - 23 September 2018, pp.467-470

VI. **An Undergraduate Curriculum for Deep Learning**

Tirkes G., Ekin C. C., Engul G., Bostan A., Karakaya K. M.

3rd International Conference on Computer Science and Engineering, UBMK 2018, Sarajevo, Bosnia And Herzegovina, 20 - 23 September 2018, pp.604-609

VII. **Parking space occupancy detection using deep learning methods Araç park yerlerinin doluluk durumlarinin derin öğrenme yöntemi ile tespit edilmesi**

Akinci F. C., Karakaya K. M.

26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4

VIII. **An IoT application for locating victims aftermath of an earthquake**

Karakaya K. M., Şengül G., Gökçay E.

1st IEEE Ukraine Conference on Electrical and Computer Engineering, UKRCON 2017, Kyiv, Ukraine, 29 May - 02 June 2017, pp.876-880

IX. **Ontology-supported enterprise architecture analysis**

Uysal M. P., Karakaya K. M.

1st IEEE Ukraine Conference on Electrical and Computer Engineering, UKRCON 2017, Kyiv, Ukraine, 29 May - 02 June 2017, pp.771-775

X. **A case study on measuring course learning outcomes in software engineering education Yazilim Mühendisliği Eğitiminde Ders Öğrenme Çiktilarinin Ölçümlenmesi Üzerine Bir Durum Çalişmasi**

Karakaya K. M., Turhan Ç., Yazici A.

11th Turkish National Software Engineering Symposium, UYMS 2017, Alanya, Turkey, 18 - 20 October 2017, vol.1980, pp.312-320

XI. **Yazilim Mühendisliği Alaninda Yayimlanan Tez ve Makalelerin SWEBOK'a göre Degerlendirilmesi ve Yazilim Mühendisliği Eğitiminin Iyilestirilmesi için Öneriler**

Karakaya K. M., Yazici A.

10th Turkish National Software Engineering Symposium, UYMS 2016, Çanakkale, Turkey, 24 - 26 October 2016, vol.1721, pp.36-47

XII. **Mobile Sink Scheduling Method for Wireless Sensor Networks under Travel Time Uncertainty**

KARAKAYA K. M.

The 2nd International Conference on Network Technologies (ICNT 2015), 17 - 18 September 2015

XIII. **Yazılım Mühendisliği Eğitiminde Bitirme Projesinin Yürütülmesinde İki Farklı Yöntemin Öğrenci Bakış Açısıyla Değerlendirilmesi**

KARAKAYA K. M., BOSTAN A.

9. Ulusal Yazılım Muhendisliği Sempozyumu (UYMS'15), Turkey, 9 - 11 September 2015

XIV. **UAV Route Planing for Avoidıng Enemy Radars**

AKTAŞ S., KILINÇ N., DAĞLAYAN H., CERECİ İ., KARAKAYA K. M.

The 1st International Conference on Engineering and Natural Sciences (ICENS 2015), Macedonia, 15 - 19 May 2015

XV. **Yollardan Gecis Guvenligini Saglayacak Bir Sensor Aginin Modellenmesi ve Uygulanabilirliginin Benzetimle Denenmesi**

SAVURAN H., DEMİREL H., KARAKAYA K. M.

Ulusal Savunma Uygulamalari Modelleme Ve Simulasyon Konferansi (USMOS'11), Ankara, Turkey, 1 - 03 June 2011

XVI. **Efficient Routing of Ambulances Aftermath of a Disaster**

AKTAŞ S., KILINÇ N., DAĞLAYAN H., CERECİ İ., KARAKAYA K. M.

The 1st International Conference on Engineering and Natural Sciences (ICENS 2015), Macedonia, 15 - 19 May 2015

XVII. **A Genetic Algorithm for Safe and Rapid Transmission of Military Vehicles in a Minefield**

AKTAŞ S., KILINÇ N., DAĞLAYAN H., CERECİ İ., KARAKAYA K. M.

The 1st International Conference on Engineering and Natural Sciences (ICENS 2015), Macedonia, 15 - 19 May 2015

XVIII. **Yazilim mühendisligi egitiminde bitirme projesinin yürütülmesinde iki farkli yöntemin ögrenci bakis açisiyla degerlendirilmesi**

Karakaya K. M., Bostan A.

9th Turkish National Software Engineering Symposium, UYMS 2015, İzmir, Turkey, 9 - 11 September 2015, vol.1483, pp.502-512

XIX. **Determining firm logos using image processing techniques on a mobile device to aid blind people**

AKTAŞ S., KILINÇ N., DAĞLAYAN H., CERECİ İ., KARAKAYA K. M.

The Second International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2014), 5 - 07 November 2014

XX. **Efficient Data Gathering in WSN with a Range Constrained Mobile Relay**

AKTAŞ S., KILINÇ N., DAĞLAYAN H., CERECİ İ., KARAKAYA K. M.

The Second International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2014), 5 - 07 November 2014

XXI. **RSRP Risk Sensitive Routing Protocol in Wireless Sensor Networks**

AKTAŞ S., KILINÇ N., DAĞLAYAN H., CERECİ İ., KARAKAYA K. M.

The Second International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2014), 5 - 07 November 2014

XXII. **A Service Oriented Architecture to Recognize Car Plates by Mobile Devices**

AKTAŞ S., KILINÇ N., DAĞLAYAN H., CERECİ İ., KARAKAYA K. M.

The Second International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2014), 5 - 07 November 2014

XXIII. **Maximizing UAV Target Coverage under Flight Range and Target Service Time Constraints**

SAVURAN H., KARAKAYA K. M.

4th International Conference on Computer and Software Modeling (ICCSM 2014), Bangkok, Thailand, 10 - 12 October 2014

XXIV. **Route Optimization Methods for Unmanned Air Vehicle Launched from a Carrier**

SAVURAN H., KARAKAYA K. M.

4th International Conference on Computer and Software Modeling (ICCSM 2014), Bangkok, Thailand, 10 - 12 October 2014

XXV. **İnsansız Hava Aracları İcin Radar Kaplama Alanlarından Kacınacak En Kısa Rotanın Hesaplanması**

SAVURAN H., DEMİREL H., KARAKAYA K. M.

7.Savunma Teknolojileri Kongresi (SAVTEK-2014), Ankara, Turkey, 4 - 06 June 2014

XXVI. **Gemiye Konuşlu İnsansız Hava Aracının Hedeflere Rotalanmasının Optimizasyonu**

SAVURAN H., DEMİREL H., KARAKAYA K. M.

7.Savunma Teknolojileri Kongresi (SAVTEK-2014), Ankara, Turkey, 4 - 06 June 2014

XXVII. **UAV Route Planning For Maximum Target Coverage**

KARAKAYA K. M.

The First International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2013), 6 - 08 November 2013

XXVIII. **A Local Optimization Technique for Assigning New Targets to the Planned Routes of Unmanned Aerial Vehicles**

KARAKAYA K. M.

The First International Symposium on Engineering, Artificial Intelligence and Applications (ISEAIA 2013), 6 - 08 November 2013

XXIX. **Yazılım Muhendisliği Eğitiminde Bitirme Projesi Dersinin Oğrenci Bakış Acısıyla Değerlendirilmesi**
SAVURAN H., DEMİREL H., KARAKAYA K. M.

7. Ulusal Yazılım Muhendisliği Sempozyumu (UYMS'13), İzmir, Turkey, 10 - 12 September 2013

XXX. **En Az Sayıda İnsansız Hava Aracı Kullanarak Sabit Hedeflerin Gozetlenmesinin Planlanması**
SAVURAN H., DEMİREL H., KARAKAYA K. M.

15. Otomatik Kontrol Ulusal Toplantısı ve Sergisi (TOK2013), Ankara, Turkey, 3 - 05 September 2013

XXXI. **Yazilim mühendisliŋi eŋitiminde bitirme projesi dersinin öŋrenci bakiş açisiyla deŋerlendirilmesi**
Karakaya K. M., Bostan A.

7th Turkish National Software Engineering Symposium, UYMS 2013, İzmir, Turkey, 26 September 2013, vol.1072

XXXII. **A distributed and measurement-based framework against free riding in peer-to-peer networks**
Karakaya K. M., Korpeoglu I., Ulusoy Ö.

Proceedings - Fourth International Conference on Peer-to-Peer Computing, P2P2004, Zürich, Switzerland, 25 - 27 August 2004, pp.276-277

XXXIII. **Evaluation of a broadcast scheduling algorithm**
Karakaya K. M., Ulusoy Ö.

5th East European Conference on Advances in Databases and Information Systems, ADBIS 2001, Vilniaus, Lithuania, 25 - 28 September 2001, vol.2151, pp.182-195

Episodes in the Encyclopedia

I. **Encyclopedia of Data Warehousing and Mining**
KATSAROS D., GÖKHAN Y., NANOPOULOS A., KARAKAYA K. M., ULUSOY Ö., MANOLOPOULOS Y.

IDEA Group Reference, pp., 2005

Contractual Researches

Karakaya K. M., Turkcell Global Bilgi Pazarlama Danışmanlık ve Çağrı Servisi Hizmetleri A. Ş., Büyük Dil Modellerini Kullanarak Digital Asistan Geliştirilmesi" konusunda danışmanlık Hizmeti, 2024 - 2025

Metrics

Publication: 65
Citation (Scopus): 379
H-Index (Scopus): 8

Congress and Symposium Activities

9th International Conference on Computer Science and Engineering UBMK 2024, Antalya, Turkey, 27 Oct. 2024, Invited Speaker, Antalya, Turkey, 2024

Üretken Yapay Zeka Uygulamaları Ulusal Konferansı 2023, Ankara, Turkey, 12 Dec. 2023., Invited Speaker, Ankara, Turkey, 2023

8th International Conference on Computer Science and Engineering UBMK 2023, Burdur, Turkey, Invited Speaker, Burdur, Turkey, 2023