

PROGRAM

Econometric Research Association 3rd International Data Analytics and Machine Learning
Conference

“Artificial Intelligence and Economic Efficiency: Sectoral Applications and Value Generation”

DATAMACLEA'26

May 11 - 13, 2026

Ankara Yıldırım Beyazıt University Milli İrade Campus & Online

11 MAYIS PAZARTESİ | MONDAY, MAY 11

08.30 Kayıt | Registration

09.30-10.30 Açılış ve Protokol Konuşmaları | Welcome and Opening Remarks

Büyük Konferans Salonu | Grand Conference Hall

Assoc. Prof. Sıdıka BAŞÇI, Ph.D.

Ankara Yıldırım Beyazıt University

Econometric Research Association

Prof. İbrahim DEMİR, Ph.D.

Ankara Yıldırım Beyazıt University

Institute for International Relations and Strategic Research

Prof. Ali Cengiz KÖSEOĞLU, Ph.D.

Rector, Ankara Yıldırım Beyazıt University

Mustafa Latif EMEK, Ph.D.

Institute of Economic Development and Social Research President

Mourad AMER, Ph.D.

Chief Executive Officer & Founder at IEREK (TBC)

10.30 – 10.45 Aile Fotoğrafı | Family Photo

10.45 – 12.15 Davetli Konuşmacı | Keynote Speaker

Oturum Başkanı | Session Chair: Prof. İbrahim DEMİR, Ph.D.

Büyük Konferans Salonu | Grand Conference Hall

Dr. Şeyma Handan AKYÖN

Sincan Education and Research Hospital

Rethinking Healthcare Workflows with AI

12.15-13.00 Öğle Arası | Lunch Break

13.00 – 14.50 Davetli Konuşmacı | Keynote Speaker

Oturum Başkanı | Session Chair: Assoc. Prof. Mustafa Göktuğ KAYA, Ph.D.

Büyük Konferans Salonu | Grand Conference Hall

Prof. Enrique MALLEN, Ph.D.

Sam Houston State University, USA

Enhancing Knowledge of History Through
Visual Arts

14.30-14.45 Kahve Arası | Coffee Break

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| 14.45- 16.00 Davetli Konuşmacı Keynote Speaker | |
| Oturum Başkanı Session Chair: Prof. Fatih Cemil ÖZBUĞDAY, Ph.D. | |
| Büyük Konferans Salonu Grand Conference Hall | |
| Fatih Çağatay AKYÖN (Postgraduate, METU), Viddexa AI, Ultralytics Inc, METU | Building the Company That Never Sleeps |
| 16.00-16.15 Kahve Arası Coffee Break | |

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| 16.15-17.45 | |
| Oturum 1 Session 1: AI, Data and Machine Learning Applications | |
| Oturum Başkanı Session Chair: Assoc. Prof. Bige KÜÇÜKEFE, Ph.D. | |
| Büyük Konferans Salonu Grand Conference Hall | |
| Yazar(lar) Author(s) | Bildiri Başlığı Paper Title |
| Yeliz YALÇIN <i>Hacı Bayram Veli University</i> M. Kenan TERZİOĞLU <i>Trakya University</i> Ayşegül İŞCANOĞLU ÇEKİÇ <i>Trakya University</i> | Simulation, Optimization, and AI-Based Decision Systems |
| Fatih Cemil ÖZBUĞDAY <i>Ankara Yıldırım Beyazıt University</i> | Moment Inequality Estimators in Competition Analysis: A Practitioner's Guide with Synthetic Data Applications |
| Erdem BAŞÇI <i>TED University</i> | Reinforcement Learning in Dynamic Economic Analysis |
| Emre AYIKLAR <i>Econometric Research Association</i> Sıdika BAŞÇI <i>Ankara Yıldırım Beyazıt University</i> | Intragroup Social Network Analysis Using Sociogram Techniques |
| Bige KÜÇÜKEFE <i>Tekirdağ Namık Kemal University</i> | Deep Unsupervised Anomaly Detection in ODS Trade Data: A Variational Autoencoder Approach |

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| 16.15- 17.45 | |
| Oturum 2 Session 2: AI in Economics and Macroeconomic Analysis | |
| Oturum Başkanı Session Chair: Cumhur ÇİÇEKÇİ | |
| Menekşe Salonu Menekşe Room | |
| Yazar(lar) Author(s) | Bildiri Başlığı Paper Title |
| Aybüke MİNTEMÜR <i>Ankara Yıldırım Beyazıt University</i> Sıdika BAŞÇI <i>Ankara Yıldırım Beyazıt University</i> | Demand Deficiency and Inflation in G20 Countries |

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| <p>Veli Emre SAVAŞ <i>TED University</i></p> <p>Feyza ÜNAL <i>TED University</i></p> <p>Hakan EMEKÇİ <i>TED University</i></p> | <p>Lighting Up Development: Do Human Development Indicators Drive Nighttime Light Intensity Across Indian States</p> |
| <p>Mehmet Orkun APAYDIN <i>TED University</i></p> <p>Hakan EMEKÇİ <i>TED University</i></p> | <p>Do the Central Bank Independence and Democracy Have Impact on the Level of Inflation for G20 Countries?</p> |
| <p>Murad TİRYAKİOĞLU <i>Afyon Kocatepe University</i></p> | <p>AI and Emergency Data Governance in the Age of Polycrisis: A Framework from a Development Economics Perspective</p> |
| <p>Cumhur ÇİÇEKÇİ <i>Türkiye Ministry of Treasury and Finance</i></p> <p>Yusuf Ömür YILMAZ <i>Mardin Artuklu University</i></p> | <p>Artificial Intelligence Shocks in a New Keynesian Framework: The Displacement, Productivity, And Reinstatement Channels</p> |

19.00- 21.30 Konferans Gala Yemeği | [Conference Gala Dinner](#)

12 MAYIS SALI | TUESDAY, MAY 12

10.00 – 11.30 Çevrimiçi Panel I **Online Panel: Problems of Editors After AI and Suggestions to Academicians While Publishing**

Zoom Link: <https://us06web.zoom.us/j/83259611523?pwd=IZ5AX54Z3XrU6fxcBRCpUk2R1eI8Ov.1>

Toplantı Kimliği | Meeting ID: 832 5961 1523

Parola | Password: 527587

Oturum Başkanı | **Session Chair: Assoc. Prof. Sıdıka BAŞÇI, Ph.D.**

Büyük Konferans Salonu | **Grand Conference Hall**

Prof. Gökhan TUNCEL, Ph.D.

Editor of Journal of Academic Approaches

Assist. Prof. Elif KAYA, Ph.D.

Editor of Journal of Political and Social Studies

Prof. Mert TOPÇU, Ph.D.

Associate Editor of Journal of Research in Economics, Politics & Finance

Assoc. Prof. Burcu ŞENTÜRK, Ph.D.

Editor of Ege Academic Review

Dr. Mourad AMER, Ph.D.

Series Editor of ASTI, SUCI, and SLNR book series by Springer (TBC)

11.30-12.45 Öğle Arası | **Lunch Break**

12.45-14.00

Oturum 3 | **Session 3: Finance, Banking and Financial Markets**

Oturum Başkanı | **Session Chair: Abdelhadi BENGHALEM**

Büyük Konferans Salonu | **Grand Conference Hall**

Yazar(lar) | Author(s)

Bildiri Başlığı | Paper Title

Muhammed RAHMETULLAH
Ankara Yıldırım Beyazıt University

How Blockchain Is Transforming Digital Finance: A Comparative Analysis Between Türkiye and Germany

Selman DAL
Central Bank of The Republic of Türkiye
Seyid Fahri MAHMUD
Social Sciences University of Ankara

The Role of Banks' Lending Standards in Determining Creditworthiness of Firms: Evidence from Turkish Banks

Abderrahim CHIBI
University Center of Maghnia
Sidi Mohammed CHEKOURI
University Center of Maghnia

Oil Rents, Institutional Quality, and Economic Performance in Algeria: A Machine Learning Investigation of the Resource Curse Hypothesis

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| Abdelhadi BENGHALEM <i>ORAN Graduate School of Economics</i> Mohamed BENBOUZIANE <i>University of Tlemcen</i> Rabia Meriem BENBOUZIANE <i>Istanbul Technical University</i> | When Deep Learning Meets Small Data: Revisiting Predictive Superiority in Oil Price Volatility Forecasting |
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14.00-14.15 Kahve Arası | [Coffee Break](#)

12.45-14.00

Oturum 4 | [Session 4: Sustainability, Energy and Green Economy](#)

Oturum Başkanı | [Session Chair: Mohamed BENBOUZIANE](#)

Menekşe Salonu | [Menekşe Room](#)

Yazar(lar) | Author(s)

Bildiri Başlığı | Paper Title

Hadjer BOULILA

University of Tlemcen

Rabia Meriem BENBOUZIANE

Istanbul Technical University

Seyfeddine BENBEKHTI

University of Tlemcen

Mohamed BENBOUZIANE

University of Tlemcen

Can Artificial Intelligence Improve Energy Market Forecasting in Times of Conflict? Evidence from Machine Learning Models

Erol Can İLDES

Ankara Social Sciences University

Seyid Fahri MAHMUD

Ankara Social Sciences University

A Hybrid Machine Learning-Econometric Approach to Modelling Food and Energy Inflation Dynamics in Emerging Markets

Erkan ERDİL

Middle East Technical University

Gizem ÖĞÜTÇÜ ULAŞ

Başkent University

AI, Sustainable Growth, and Long-Term Value Creation

Mohamed BENBOUZIANE

University of Tlemcen

Abderrezzak BENHABIB

University of Tlemcen

Benabbou SENOUCI

Graduate School of Economics

Forecasting Green Hydrogen Production Potential in Algeria: A Machine Learning Approach

14.00-14.15 Kahve Arası | [Coffee Break](#)

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| 14.15-15.30 | |
| Oturum 5 Session 5: Digital Transformation, Industry and Innovation | |
| Oturum Başkanı Session Chair: Assist. Prof. Asad UI Islam Khan, Ph.D. | |
| Büyük Konferans Salonu Grand Conference Hall | |
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| Yazar(lar) Author(s) | Bildiri Başlığı Paper Title |
| Amna ABDULLAH <i>Ibn Haldun University</i> | AI-Driven Carbon Pricing and Digital Transformation: Evolutionary Game Theory Evidence on Economic Efficiency in Turkey's Manufacturing Sector |
| Fatih Çağatay AKYÖN <i>Middle East Technical University</i> | AI in Software Development and Digital Industries: Economic Efficiency, Vibe Coding Pitfalls, and the Industrial Revolution Analog |
| Ayuba NAPARI <i>University of Environment and Sustainable Development</i> | A Fuzzy Panel Analysis of Over-innovation in Sub-Saharan Africa |
| Mustapha DJENNAS <i>University of Tlemcen</i> Sidi Mohammed AYAD Sarah BOURI | AI-Driven E-HRM Systems and Organizational Efficiency in Algeria: Adoption Barriers, Institutional Challenges, and Value Generation Prospects |
| Asad UI Islam KHAN <i>Ibn Haldun University</i> | Does the Digital Competence Gap Hurt Workers? Multilevel and Causal Machine Learning Evidence from Europe |
| 15.30-15.45 Kahve Arası Coffee Break | |

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| 14.15-15.30 | |
| Oturum 6 Session 6: AI in Economics and Macroeconomic Analysis | |
| Oturum Başkanı Session Chair: Deniz Göktaş, Ph.D. | |
| Menekşe Salonu Menekşe Room | |
| | |
| Yazar(lar) Author(s) | Bildiri başlığı Paper Title |
| Bilgehan ÖZBAY <i>Ankara Yıldırım Beyazıt University</i> Sıdıka BAŞÇI <i>Ankara Yıldırım Beyazıt University</i> Koray GÖKSAL <i>Ankara Yıldırım Beyazıt University</i> | E-Ticaret Yükselen Trendinin Belirleyicisi Pandemi mi yoksa Makroekonomik Değişkenler mi? |
| Ömer Faruk ACAR <i>Ankara Yıldırım Beyazıt University</i> Sıdıka BAŞÇI <i>Ankara Yıldırım Beyazıt University</i> Mert AKYÜZ <i>Ankara Yıldırım Beyazıt University</i> | 9-sonlu Fiyatların Tüketim Kararlarına Etkileri |

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| Aleyna YAŞAR <i>Ankara Yıldırım Beyazıt University</i> | 2008 Küresel Ekonomik Krizi ve Covid-19 Krizinin Makroekonomik Etkilerinin Karşılaştırmalı Analizi: Panel Veri Yaklaşımı |
| Yiğit YILDIZ <i>Presidency of the Tax Inspection Board</i> Mustafa Göktuğ KAYA <i>Presidency of the Tax Inspection Board</i> Perihan HAZEL KAYA <i>Selçuk University</i> | Vergiye Gönüllü Uyumu Sağlamada Hibrit Bir Model Önerisi: Veri Temelli Toplu Taşınmaz Değerleme |
| Deniz GÖKTAŞ <i>Bilecik Seyh Edebali University</i> Merve ÇELİK <i>Kilis 7 Aralık University</i> Reyhan BOZKURT <i>Necmettin Erbakan University</i> | Türkiye’de Tamamlayıcı Sağlık Sigortası Talebini Etkileyen Faktörlerin Makine Öğrenmesi Teknikleri ile Analizi |
| 15.30-15.45 Kahve Arası Coffee Break | |

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| 15.45-17.00 | |
| Oturum 7 Session 7: Artificial Intelligence and Various Topics | |
| Oturum Başkanı Session Chair: Assoc. Prof. Onur Akkaya, Ph.D. | |
| Büyük Konferans Salonu Grand Conference Hall | |
| Yazar(lar) Author(s) | Bildiri Başlığı Paper Title |
| Gülnur ACAR <i>Anadolu University</i> Deniz GÖKTAŞ <i>Bilecik Seyh Edebali University</i> | Socioeconomic determinants of diabetes in Türkiye: A Machine Learning Approach |
| Selman DAL <i>Central Bank of The Republic of Türkiye</i> | Ethical, Legal, and Regulatory Dimensions of AI |
| Salim SAIDY <i>Ibn Haldun University</i> Mahat Maalim İBRAHİM <i>Ibn Haldun University</i> | Informality as a Structural Trap in The Gambia: Explainable Machine Learning Evidence on Gender, Livelihood Strategies, and Spatial Inequality |
| Büşra AĞAN ÇELİK <i>OSTİM Technical University</i> Murat YÜLEK <i>OSTİM Technical University,</i> Serdar ÇELİK <i>OSTİM Technical University</i> | Measuring Economic Efficiency and Value Creation in the Age of AI: Metrics, AI Proxies, and Multi-Level Perspectives |
| Onur AKKAYA <i>Kilis 7 Aralık University</i> | AI-Based Early Warning Systems for Macroeconomic and Financial Crises: Evidence from Emerging Economies |

13 MAYIS ÇARŞAMBA | WEDNESDAY, MAY 13

10.00-11.30 Davetli Konuşmacı | **Keynote Speaker** (Çevrimiçi | **Online**)

Zoom Link: <https://us06web.zoom.us/j/85682950549?pwd=H8TafaOU4ECL0TCLrWfF162sl5b2ey.1>

Toplantı Kimliği | Meeting ID: 856 8295 0549

Parola | Password: 956534

Oturum Başkanı | Session Chair: Assoc. Prof. Dr. Sıdıka BAŞÇI, Ph.D.

Prof. Ángel López NİCOLÁS, Ph.D.

*Universidad Politécnica de Cartagena,
Spain*

Modelling the Impact of the European Union's Tobacco Tax Directive

11.45-13.00

Oturum 1 | Session 1: (Çevrimiçi | **Online**): Applied AI and Industrial Systems

Zoom Link: <https://us06web.zoom.us/j/87077482201?pwd=BCVBAxZjt0li6dGwWvT9LKRZbi7Ale.1>

Toplantı Kimliği | Meeting ID: 870 7748 2201

Parola | Password: 388984

Oturum Başkanı | Session Chair: Prof. Elif Uçkan Dağdemir, Ph.D.

Yazar(lar) | Author(s)

Bildiri başlığı | Paper Title

Selçuk BAYRACI

Borusan Otomotiv R&D Center

Garen BOZOĞLANOĞLU

*Borusan Otomotiv Data Analytics &
AI Unit*

A Dual-Model System for Vehicle Service Retention: Predictinchurn Prediction, Customer Retention, Demand Forecasting, Predictive Modeling, Lightgbm, Vehicle Service Centers Service Timing And Churn Probability

Hava TEMEL

Ankara Yıldırım Beyazıt

University

Furkan SOYSAL

Ankara Yıldırım Beyazıt

University

Development of a Data-Driven Digital Twin For State of Health Estimation of Li-Ion Batteries

Saliha Ergün TANRIVERDİ

Bahçeşehir University

Econometric Approaches to Assessing AI-Driven Efficiency

Selçuk BAYRACI

Borusan Otomotiv R&D Center

Oğulcan ÇİÇEK

*Borusan Otomotiv Data Analytics &
AI Unit*

Predictive Triage of Warranty Claim Settlement Outcomes: A Machine Learning Pipeline for Automotive Goodwill Claim Management

Elif UÇKAN DAĞDEMİR

Anadolu University

Insights of Agriculture 5.0: State of Play and Future Prospects

13.15-14.30

Oturum 2 | **Session 2: (Çevrimiçi | Online): AI and Economic Transformation**

Zoom Link: <https://us06web.zoom.us/j/86214816221?pwd=kHrJ2c4fiu7aTZX9ZuQKyT0VeizKWJ.1>

Toplantı Kimliği | Meeting ID: 862 1481 6221

Parola | Password: 258657

Oturum Başkanı | Session Chair: **Mehmet Gökhan Özdemir, Ph.D.**

| Yazar(lar) Author(s) | Bildiri Başlığı Paper Title |
|--|--|
| Hasibe AYSAN <i>Ostim Technical University</i> Mehmet Necati AYSAN <i>Radio and Television Supreme Council of Türkiye</i> | From Productivity Dip to Well-Being Dividend: Empirical Evidence of AI Integration in Higher Education (2020-2025) |
| Sibel Dinç AYDEMİR <i>Fatih Sultan Mehmet Vakıf Üniversitesi</i> Yusuf Sinan AKGÜL <i>Gebze Technical University</i> Barış ÖZCAN <i>ForInvest Software and Technology Services Inc.</i> Mine AKSU <i>Sabancı University</i> | Uncovering Turkish Audit Firms' Transparency Report Textual Attributes Through Computer Based Approaches and Linking Them to Audit Quality |
| Turalay KENÇ <i>The Inceif University</i> | The Future of AI-Driven Economies |
| Elif Korkmaz TÜMER <i>Ege University</i> Erol Türker TÜMER <i>Dokuz Eylül University</i> | Mapping Circular Economy Performance in the European Union: A Multidimensional Scaling Approach |
| Mehmet Gökhan ÖZDEMİR <i>Kırıkkale University</i> Mustafa Göktuğ KAYA <i>Karatay University</i> | Yapay Zeka ve Ekolojik Üretkenlik Paradoksu: OECD Ekonomilerinde Jevons Geri Tepme Etkisi ve Verimlilik Eşiği (2010-2022) |

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| 14.45-16.00 | |
| Oturum 3 Session 3: (Çevrimiçi Online): Finance, Fintech and Econometrics | |
| Zoom Link: https://us06web.zoom.us/j/81684521699?pwd=T0maw5fC8LM42mg0fadDVHWc6cdcrQ.1 | |
| Toplantı Kimliği Meeting ID: 816 8452 1699 | |
| Parola Password: 220340 | |
| Oturum Başkanı Session Chair: Assist. Prof. Fatma Özgü Serttaş, Ph.D. | |
| | |
| Yazar(lar) Author(s) | Bildiri Başlığı Paper Title |
| Mehir DASH <i>Alliance University</i> Rita S. | Portfolio Choice among Alternative Portfolio Selection Criteria using Multi-Criteria TOPSIS |
| İbrahim Musa ÜNAL <i>Qatar Financial Markets Authority</i> Ahmet Faruk AYSAN <i>Hamad bin Khalifah University</i> Fatma Nur AYSAN <i>Istanbul University</i> | AI in Finance and FinTech |
| Zeynep YUMUŞAK <i>TED University</i> | ESG Disclosure Tone and Stock Market Reactions: Evidence from STOXX Europe 600 |
| Merve Mert SARITAŞ <i>Çanakkale Onsekiz Mart University</i> | A Memory-Augmented Deep Learning Framework: Integrating Fractional Differentiation with LSTM Networks for DJIMTR Index Analysis |
| Damla SAĞIROĞLU <i>TED University</i> Halay KOCATÜRK <i>TED University</i> Alp ORHON <i>TED University</i> | The Effect of CBRT Monetary Policy Communication Tone on Foreign Government Bond Investor Flows |
| Fatma Özgü SERTTAŞ <i>Ankara Yıldırım Beyazıt University</i> | Modeling Stable Errors in Economics and Finance: Recent Developments and AI Techniques |

16.15-17.30

Oturum 4 | **Session 4: (Çevrimiçi | Online): Sustainability, Energy and Development**

Zoom Link: <https://us06web.zoom.us/j/86783823477?pwd=xVblbii1O6rxFXWQwzjxWnjDaLRrl.1>

Toplantı Kimliği | Meeting ID: 867 8382 3477

Parola | Password: 116599

Oturum Başkanı | Session Chair: Jorge Tavares Borges, Ph.D.

Yazar(lar) | Author(s)

Bildiri Başlığı | Paper Title

Büşra Ergün ŞAHİN

University of Bedfordshire

AI in Healthcare: Efficiency, Quality, and Value Creation

Nermin YAŞAR BAŞKARAAĞAÇ

Çankaya University

Digital Transformation and Nonlinear Current Account Adjustment: Evidence from Post-Soviet Economies

Mehdi GASİMLİ

Azerbaijan State University of Economics

The Impact of Regulatory Quality and Globalization on Economic Growth: A Comparative Analysis Across Dynamic Panel Estimation Approaches in European Countries

Yiğit AFŞAR

BOTAŞ

Güneş Enerji Santralinden Üretilen Hidrojenin Tuz Kavernalarında Depolanmasının Tekno-Ekonomik Analizi

Jorge Tavares BORGES

Ostim Technical University

Murat YÜLEK

Ostim Technical University

K. Ali AKKEMİK

Fukuoka University

Artificial Intelligence and The Transformation Of Economic Systems