



# Turkey Computational Social Sciences (TCSS) Conference 2024

May 2 – 3, 2024, @Koç Univ., Founders Hall

\* Please note that each presentation is allocated 20 minutes in total; 15 minutes for the presentation followed by 5 minutes for the Q&A session

#### May 2, Thursday

#### 09:00 - 09:30 | Registration and Welcome

09:00 – 09:15 | Registration

09:15 – 09:30 | Welcome by Erdem Yörük

#### 09:30 – 11:15 | Session 1 - Computational Methods in Conflict Analysis

Chair: Merih Angın (Koç Univ.)

#### 09:30-09:50 | 'Agent-based modelling of subnational violence: Microdynamics of the Rojava Conflict'

by Olivia Macmillan-Scott (Univ. College London), Akın Ünver (Özyeğin Univ.), and Mirco Musolesi (Univ. College London)

#### 09:50 – 10:10 | 'Who Gets to Be A 'Victim'? Comparing Ukrainian and Palestinian Narratives of Victimhood in Online News'

by Alina Ramazanova (Ozyegin Univ.)

# 10:10-10:30 | 'The micro dynamics of affective polarization: An agent based model to understand opinion formation in polarized environments'

by Emre Erdoğan (Istanbul Bilgi Univ.) and Pınar Uyan-Semerci (Istanbul Bilgi Univ.)

#### 10:30 – 10:50 | 'Blame Thy Neighbor: Terrorist Attacks and Anti-Refugee Sentiment'

by M. Tahir Kılavuz (Marmara Univ.), Ahmet Utku Akbiyik (Harvard Univ.), Omer Faruk Yalçın (Univ. of Massachusetts - Amherst), and Abdullatif Köksal (LMU Munich)

### 10:50 – 11:10 | 'Examining Determinants of Labor Protests in Turkey: An Empirical Analysis of Public Feelings and Mobilization'

by M. Fuat Kına (Marmara Univ.)

11:15 – 11:30 | Break

#### 11:30 – 12:50 | Session 2 -Textual Data Analysis in Social Sciences

Chair: M. Fuat Kına (Marmara Univ.)

# 11:30 – 11:50 | 'Voices and Influence in the Political Landscape: A Comprehensive Analysis of Female Members of the Turkish Parliament' by Ladin Toplu (Boğazici Univ.), Tuğçe Şahinyılmaz (Bogazici Univ.), and Didem

Gündoğdu (Bogazici Univ.)





#### 11:50 – 12:10 | 'Implementing Automatic Tagging Using Artificial Intelligence for Sentiment Analysis: Benefits and Applications'

by Hakan Mehmetcik (Marmara Univ.), Murat Can Ganiz (Marmara Univ.), Melih Koluk (Marmara Univ.), Galip Yüksel (Istanbul Univ.), Müslim Yılmaz (Marmara Univ.), Muhammed Mustafa Ince (Marmara Univ.), and Sinan Göçmen (Marmara Univ.)

### 12:10 – 12:30 | 'A comparative Analysis for Short-text Topic Modeling, Application of LDA and BerTopic on Product Questions'

by Şule Öztürk Birim (Manisa Celal Bayar Univ.) and Merve Gündüz Cüre (Manisa Celal Bayar Univ.)

#### 12:30 – 12:50 | 'PastPaths: Mapping Historical Trade from Text'

by Hitesh Goel (IIIT Hyderabad), Aniket Alam (IIIT Hyderabad), Easwar Balakrishnan (Shiv Nadar Univ.)

12:50 – 14:00 | Lunch Break

#### 14:00 – 15:30 | Session 3 - Social Media and Public Opinion Analysis

Chair: Erdem Yörük (Koç Univ.)

### 14:00 – 14:20 | 'TFPsocialmedia Dataset: A Social Media Dataset for Turkish Foreign Policy'

by Hakan Mehmetcik (Marmara Univ.)\*, Murat Can Ganiz (Marmara Univ.), Melih Koluk (Marmara Univ.), Galip Yüksel (Marmara Univ.), Müslim Yılmaz (Marmara Univ.), Muhammed Mustafa Ince (Marmara Univ.), and Sinan Göçmen (Marmara Univ.)

#### 14:20 – 14:40 | 'Mapping the Public Debate on Universal Basic Income: Evidence from Twitter Data'

by İbrahim Kuran (Istanbul Medeniyet Univ.)and Yasemin Hayırlı (Istanbul Medeniyet Univ.)

#### 14:40-15:00 | 'Mechanisms Driving Online Vaccine Debate During the COVID-19 Pandemic'

by Onur Varol (Sabanci Univ.)

# 15:00 – 15:20 | 'Analysis of Political Discourse and Online Communities on Ekşi Sözlük: The Case of 2023 Turkish General Elections' by Melih Can Yardı (Koc Univ.)

15:30 – 15:45 | Break

#### 15:45 – 16:45 | Session 4 - Social Media and Public Opinion Analysis (cont'd)

Chair: Sinemis Temel (Koç Univ.)

## 15:45-16:05 | 'Politus: how to measure public opinion from social media by minimizing representation and measurement errors'

by Erdem Yörük (Koç Univ.)

### 16:05-16:25 | 'Ideological Landscape of Labor Movement Mobilization in Turkey'

by H. Deniz Sert (Koç Univ.) and M. Fuat Kına (Marmara Univ.)

16:25 – 16:45 | 'Arab Users' Stances Toward Turkey within Turkish Twittersphere' by Şükrü Atsızelti (Koç Univ.)





#### 09:00 – 09:30 | Keynote by Albert Ali Salah (Utrecht Univ.)

## 09:30 – 11:30 | Session 5 - Large Language Models in Computational Social Sciences

Chair: Erdem Yörük (Koç Univ.)

09:30-09:50 | 'AI Historian: The Writing of the History of Economic Ideas in the Age of Large Language Models'

by Altug Yalcintas (Ankara Univ.), Özgür Kızılyurt (Bakırçay Univ.), and Kardelen Kaya Erman (Independent Researcher)

09:50 – 10:10 | 'A Generative Agent Framework for Studying Political Behavior' by Selim Yaman (American Univ.) and Mustafa Taha Koçyiğit (Bogazici Univ.)

10:10 – 10:30 | 'Transfer Learning to the Rescue! Cross-Lingual Transfer for **POS Tagging in an Endangered Language: Hamshetsnag'** by Onur Keleş (Bogazici Univ.) and Baran Günay (Bogazici Univ.)

10:30 – 10:50 | 'TurkishBERTweet: Language Model Trained for Social Media' by Ali Najafi (Sabanci Univ.) and Onur Varol (Sabanci Univ.)

# 10:50 – 11:10 | 'Decoding Political Narrative and Ideological Push of News Channels on YouTube Before Elections: Experimental Insights and Reflections Using Machine Learning Approaches'

by Sachin Kumar (Cluster Innovation Centre, Univ. of Delhi), Nikunj Saini (Cluster Innovation Centre, Univ. of Delhi) and Saransh Chopra (Cluster Innovation Centre, Univ. of Delhi)

### 11:10 – 11:30 | 'Digital Public Perception and Expectations of Economic Actors in Turkey: A Social Media Perspective'

by Melek K. Çetinel (Ozyegin Univ.) and Çağatay Savaşlı (Ozyegin Univ.)

11:30 – 11:45 | Break

#### 11:45 – 12:45 | Session 6 - Methodological and Theoretical Advances

Chair: Başak Taraktaş (Boğaziçi Univ.)

## 11:45 – 12:05 | 'Data Revolution and Social Research(ers): How Do Academics in Turkey View the Change in Data?'

by Yaser Koyuncu (Hacettepe Univ.)

### 12:05 – 12:25 | 'A Meta-Analysis On The DEA-ANN Approaches: Validity, Justification of The Motivations, and Improvements'

by Irmak Uzun Bayar (Ankara Bilim Univ.) and Mustafa Mehmet Bayar (Ankara Haci Bayram Veli Univ.)

12:25 – 12:45 | 'Metrizing The Hierarchy Concerns in Proctor Assignments' by Mustafa Mehmet Bayar (Ankara Haci Bayram Veli Univ.)

12:45 – 14:00 | Lunch Break





#### 14:00 – 15:30 | Session 7 - Geospatial Analysis and Urban Studies

Chair: M. Erdem Kabadayı (Koç Univ.)

#### 14:00 – 14:20 | 'Using mobile CDR to map social connectivity between cities for post-earthquake mobility prediction'

by Bilgeçağ Aydoğdu (Utrecht Univ.), Subhi Güneş (Turkcell Tech), and Albert Ali Salah (Utrecht Univ.)

#### 14:20 – 14:40 | 'Investigating neighborhood adaptability using mobility networks: A case study of the COVID-19 pandemic'

by Hasan A. Boz (Sabanci Univ.), Mohsen Bahrami (MIT - IDSS), Selim Balcısoy (Sabancı Univ.), Burcin Bozkaya (Sabancı Univ.), Nina Mazar (Boston Univ.), Aaron Nicholas (Boston Univ.), and Alex Pentland (MIT)

### 14:40 – 15:00 | 'Urban Mobility Dynamics in Cluj-Napoca, Romania: Activity Spaces, POI Accessibility, and Socio-Economic Integration'

by Vlad I. Alexe (Babes-Bolyai Univ.), Norbert Petrovici (Babed-Bolyai Univ.), and Camelia F Andor (Babeş-Bolyai Univ.)

#### 15:00 – 15:20 | 'Modelling Future Urban Contexts for Disaster Risk Informed Urban Development'

by Emin Yahya Menteşe (ANOFA) and Erdem Özer (ANOFA)

15:30 – 15:45 | Break

## 15:45 – 17:05 | Session 8 - Economic and Legal Data in Computational Analysis

Chair: Murat Koyuncu (Boğaziçi Univ.)

### 15:45-16:05 | 'Examining the Supreme Court's Interpretation of Environmental Law in India'

by Srijan Chakraborty (International Institute of Information Technology), and Radhika Krishnan (International Institute of Information Technology)

#### 16:05 – 16:25 | 'The Effect of Rental Prices on Student Mobility' by Merve B. Gökçe (Boğaziçi Univ.)

### 16:25-16:45 | 'A study of Field, Fruit Garden, Olive Garden price modelling with ilan.gov.tr data'

by Çağatay Ünal (Kadir Has Univ.)

#### 16:45-17:05 | 'Correcting downward bias in inequality estimates for Turkey with house price data'

by Fırat Cağlar Karabulut (Kadir Has Univ.) and Hasan Tekgüç (Kadir Has Univ.)

17:05 – 17:15 | Farewell