

Yunus Emre Tapan

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EDUCATION

Northeastern University Boston, MA
Ph.D. Candidate, Political Science; minor in Computational Social Science. Expected Spring 2027.

- Dissertation: *Three Essays on Attention Segregation in American Online Life.*
- Committee: Nick Beauchamp (chair), David Lazer, Risa Kitagawa.

Northeastern University Boston, MA
Graduate Certificate, Computational Social Science, 2022.

Kadir Has University Istanbul, Turkey
Doctoral coursework in International Relations (full scholarship), 2019–2021; left to begin the Ph.D. at Northeastern.

Middle East Technical University (METU) Ankara, Turkey
M.Sc., Middle East Studies, 2019.

Boğaziçi University Istanbul, Turkey
B.A., Economics, 2016.

RESEARCH INTERESTS

- **Substantively:** how political attention, affect, and identity fragment — across individuals, national publics, and elite networks.
- **Methodologically:** computational social science and political methodology, including text-as-data, network analysis, and the evaluation and interpretability of language models as measurement instruments.

WORKING PAPERS

- **Stance Is Not a Construct: LLM Validity Gaps in Annotation.** *Working paper.*
Language models increasingly serve as annotators, yet on layered constructs they capture surface stance while missing the theoretical structure beneath it — a construct-validity gap that prompting does not close, developed into a pre-deployment diagnostic.
- **The Political Geometry of Ideology in LLMs.** *Working paper.*
Uses sparse autoencoders and representation analysis to show that economic and social ideology occupy separable internal structure in open-weight models.
- **How Do Networks Respond to Shocks?** *Working paper.*
A state-space relational event model with impulse-response estimation, applied to a decade of U.S.–Turkey foreign-policy elite interactions and coded bilateral crises; crises briefly reorganize elite ties before the network settles back within about six weeks.
- **Who Talks to Whom among Transnational Epistemic Elites Online?** *Working paper.*
Relational-event analysis of 650,000 interactions among 1,933 Turkish and American foreign-policy elites; national identity outweighs expertise in structuring the network.
- **How Does Anti-Americanism Evolve in Turkish Social Media over Time?** With T. Ünlü Bilgiç and Z. E. Koç. *Working paper.*
LLM-assisted multi-label classification of ~96,000 Turkish tweets; anti-Americanism is overwhelmingly political rather than cultural, with a rising conspiratorial component.

WORKS IN PROGRESS

- **How Has Congress Framed Technology? Thirty Years of Floor Speeches.** With B. Magistro, S. Borwein, B. Bonikowski, and R. M. Alvarez. *In preparation*. A framing analysis over the full U.S. Congressional Record (1995–2025).
- **Anti-Westernism and Status-Seeking in World Leaders’ Speeches.** With E. Balta. *In preparation*. An LLM multi-label classification pipeline for ~13,700 speeches by Modi, Erdoğan, and Putin.
- **What Do Experts Mean by “Polycrisis”?** With S. Mark, S. Holder, D. Hoyer, R. Schoonover, and D. P. Aldrich. *In preparation*. A survey of 92 crisis professionals on how the field conceptualizes polycrisis.

PUBLICATIONS

- **Tapan, Y. E.** (2019). *Turkish Salafism on Twitter: A Social Network Analysis*. M.Sc. thesis, Middle East Technical University (advisor: Tuba Ünlü Bilgiç).
- Çolak, M. O., İ. E. Aksu, and **Y. E. Tapan** (2016). “Anti-communist Propaganda: The Example of the Büyük Doğu Journal.” Book chapter, Nobel Academic Publishing.

DATA & SOFTWARE

Published datasets (first author)

- *Geographical Infrastructure for the City of Boston*, v.2023. With D. Hatten, M. Zoorob, A. Ristea, S. Sheini, and D. T. O’Brien. Harvard Dataverse. doi:10.7910/DVN/KZEERJ.
- *2020 Census Geographies (Boston)*. With D. T. O’Brien. Harvard Dataverse. doi:10.7910/DVN/M9F1XY.
- *COVID-19 Twitter Database — Turkish Sample*. With B. Özturan. Zenodo, 2020. doi:10.5281/zenodo.3908982.

Software & open materials

- *tech-speech-congress* — pipeline for classifying framings in the U.S. Congressional Record.
- *LLMs for Social Scientists* — a hands-on book for social scientists, written in the open (in progress).
- *AIDE Summer Bootcamp* — open Python and machine-learning teaching materials.

RESEARCH EXPERIENCE

Research Fellow, Aldrich Resilience Lab, Northeastern University Jan–May 2026

- Studied social capital in disaster recovery with a three-wave panel of Marshall Fire survivors, finding social capital is not uniformly protective. Separately surveyed 92 disaster-and-crisis professionals on how the field conceptualizes “polycrisis.”

Data Consultant, Boston Area Research Initiative (Northeastern & Harvard) May 2023–Feb 2025

- Served the City of Boston, community organizers, and the Boston Children’s Museum; built reproducible data pipelines and interactive ArcGIS maps; mentored students from high school to master’s level; first-authored two published civic datasets.

Research Fellow, NULab for Digital Humanities & CSS May–Aug 2022

- Built text-analysis tooling for the Digital Integration Teaching Initiative (DITI) and the Women Writers Project.

Researcher, Turkish Foreign Policy Barometer on Twitter (German Marshall Fund) 2020–2021

- Recruited to build the barometer tracking elite foreign-policy discourse on Twitter.
- Presented results; delivered reports and a public dashboard.

Research Assistant, Center for Middle Eastern Strategic Studies (ORSAM), Ankara 2016–2018

- Conducted social-network analyses of online extremist communities on a U.S. Department of Homeland Security-funded project.
- Presented results at a NATO COE-DAT workshop, Ankara.

GRANTS, HONORS & FELLOWSHIPS

- GEBİP Ph.D. Fellowship, Turkish Academy of Sciences (TÜBA) — \$12,000 (2019–2021)
- ICPSR Scholarship for Political Science Research — \$5,000 (2020)
- SICSS Fellowship, Russell Sage Foundation — \$1,000 (2018)
- Northeastern Department of Political Science Travel Awards — \$4,000 total (2022–2026)
- APSA Political Methodology (PolMeth) Travel Award — \$1,000 (2024), \$750 (2026)
- APSA Political Communication “Sparks” Award — \$750 (2024)
- APSA Political Networks (PolNet) Travel Award (2026)
- NULab BLISS Grant — \$500 (2025); NULab Travel Grant — \$1,000 (2022)
- Stipended Graduate Assistantship, Northeastern (2021–present)
- 4th place, COVID-19 Datathon, TRIA AI (2020)

CONFERENCE PRESENTATIONS

2026

- “Stance Is Not a Construct: LLM Validity Gaps in Annotation.” MPSA; PolMeth (poster); APSA (scheduled).
- “The Political Geometry of Ideology in LLMs.” IC2S2 (poster).
- “How Do Networks Respond to Shocks?” NetSci (poster); PaCSS (scheduled).
- “Who Talks to Whom among Transnational Epistemic Elites Online?” ISA; MPSA.

2025

- “Stance Is Not a Construct: LLM Validity Gaps in Annotation.” PaCSS (poster).
- “How Does Anti-Americanism Evolve in Turkish Social Media over Time?” (with T. Ünlü Bilgiç and Z. E. Koç). ISA.

2024

- “Who Talks to Whom among Transnational Epistemic Elites Online?” PolNet (poster); PolMeth (poster).

2022

- “Twitter Opinion Barometer on Turkish–American Relations.” (with B. Özturan, Ş. Kardaş, and M. Kutlu). PaCSS (paper); IC2S2 (poster).

2020

- “Turkish Salafism on Twitter: Social Network Analysis and Computational Text Analysis.” IC2S2; PaCSS; PolNet (posters).

INVITED TALKS & GUEST LECTURES

- “Anthropology of Machines: From Black Box to White Box.” Guest lecture, SICSS-Istanbul, July 2026.
- “LLM Classification Strategies for Political Text.” NULab Critical Forum, Northeastern University, December 2025.
- “Using the Twitter API for Academic Research.” Twitter, Boston, August 2022.

TEACHING EXPERIENCE

AI Bootcamp Lead (Instructor), AIDE Summer Program

May–Sep 2025

The Ethics Institute, Northeastern University · 15 graduate students

- Led the AI bootcamp of the AIDE (AI + Data Ethics) Summer Program: twelve labs taking philosophy and CS graduate students from Python fundamentals to building with LLMs — supervised ML, algorithmic fairness (COMPAS, Fairlearn), differential privacy, transformers built by hand, LLM auditing with the logit lens, prompt engineering, and RAG.

Visiting Lecturer, Kadir Has University

2020–2021

- Taught *Computational Thinking* (Python-based) and *Civic Values*, undergraduate courses, with full

instructional responsibility — lectures, assessment design, and grading.

Teaching Assistant, Northeastern University

2021–present

Department of Political Science — eight course sections

- Graduate: Statistical Analysis (in R; 40 students).
- Undergraduate: Quantitative Techniques (30 students); Research Methods (two sections); Comparative Politics; Government & Politics in the Middle East; Globalization & International Affairs (two sections).

Instructor, SICSS-Istanbul

2019–2023

Two-week Summer Institute in Computational Social Science (graduate level); four editions (2019, 2020, 2021, 2023).

- Taught hands-on workshops in programming, digital data collection, and text analysis, and mentored participant teams through the institute’s project-based second week — from research design to final presentations.

SERVICE TO THE PROFESSION

- **Peer reviewer:** *International Studies Perspectives*; IC2S2.
- **Co-founder & Co-organizer, SICSS-Istanbul** (2019–2023): built the institute with M. Nelimarkka and A. Ünver; sponsored by the Russell Sage and Alfred P. Sloan Foundations; co-organized four editions.
- **Co-founder, BLISS — Boston LLMs Initiative for Social Sciences** (2025): secured NULab funding; convened a faculty panel and hands-on workshops.
- **Community Lead, Twitter Developers Community** (Istanbul–Boston, 2021–2023).
- Rapporteur, 6th U.N. Mediation Conference, Istanbul.

PUBLIC SCHOLARSHIP

- Data scientist (commissioned), **BBC News Türkçe**, December 2020: computational text analysis behind the newsroom’s 2020 year-in-review — a full year of coverage distilled into six themes with animated visualizations.
- “Disaster survivors need help remaining connected with friends and families and access to mental health care” (with D. P. Aldrich), *The Conversation*, February 2023.
- **The Social Computist** — essays on computational social science and AI (yemretapan.substack.com).

SKILLS & LANGUAGES

Programming: Python, R, SQL, Bash, Git, $\text{\LaTeX}$.

Methods: NLP and computational text analysis; LLM evaluation and mechanistic interpretability (sparse autoencoders, representation analysis, activation steering); Bayesian statistics; longitudinal and multilevel modeling; relational event models; impulse responses and local projections; information-theoretic measurement; causal inference.

Languages: Turkish (native), English (fluent), Arabic (intermediate, working proficiency), French (elementary).

REFERENCES

Nick Beauchamp — Associate Professor, Political Science & Network Science, Northeastern University
(dissertation chair) · n.beauchamp@northeastern.edu

David Lazer — University Distinguished Professor, Political Science & Computer Sciences, Northeastern University
(dissertation committee) · d.lazer@northeastern.edu

Risa Kitagawa — Associate Professor, Political Science & International Affairs, Northeastern University
(dissertation committee; teaching supervisor) · r.kitagawa@northeastern.edu

Daniel T. O'Brien — Professor, Public Policy & Urban Affairs, Northeastern University
(supervisor, BARI data consultancy, 2023–2025) · d.obrien@northeastern.edu

David Bau — Assistant Professor, Khoury College of Computer Sciences, Northeastern University
(instructor, graduate mechanistic-interpretability training) · d.bau@northeastern.edu