

Benjamin J. Radford

 benradford.com |  Google Scholar

Academic Appointments

Assistant Professor
University of Pittsburgh 2026–Present

Associate Professor <i>University of North Carolina at Charlotte</i>	
Joint Appointment, Public Policy Ph.D. Program	2019–2025
Joint Appointment, Political Science and Public Administration	2019–2025
Honors Faculty, Honors College	2022–2025
Affiliate, School of Data Science	2020–2024

Education

Ph.D. and M.A. in Political Science
Duke University Durham, NC 2016

B.A. in Mathematics and International Studies
University of North Carolina at Asheville Asheville, NC 2010

Refereed Publications

Citations: 886 | h-index: 11 | i10-index: 13

15. Liu, Howard and **Benjamin J. Radford** (2026). "Covert Assignments: Undercover Infiltration and the Repression of Protests". *International Studies Quarterly*.
14. Dai, Yaoyao, Jingjing Gao, and **Benjamin J. Radford** (2024). "From Fear to Hate: Sources of Anti-Asian Sentiment During COVID-19". *Social Science Quarterly*. DOI: <https://doi.org/10.1111/ssqu.13387>.
- Impact Factor:** 1.9. **H5 Index:** 104.
13. **Radford, Benjamin J.**, Yaoyao Dai, Niklas Stoehr*, Aaron Schein, Mya Fernandez†, and Hanif Sajid* (2023). "Estimating Conflict Losses and Reporting Biases". *Proceedings of the National Academy of Sciences* 120.34. DOI: 10.1073/pnas.2307372120.
- Reported on** by twelve news outlets including: *Kyiv Post*, *swissinfo.ch*, *watson.ch*, *RSI.ch*, *La Liberte*, *RTN.ch*, *MSN*, *Bluewin.ch*, *Radio Top*, *Sudostschweiz.ch*, *Cash.ch*, and *GMX.net*.
- Impact Factor:** 11.1. **H5 Index:** 268.
12. Stoehr, Niklas*, **Benjamin J. Radford**, Ryan Cotterell, and Aaron Schein (2023). "The Ordered Matrix Dirichlet for State-Space Models". *Proceedings of The 26th International Conference on Artificial Intelligence and Statistics*. Ed. by Francisco Ruiz, Jennifer Dy, and Jan-Willem van de Meent. Vol. 206. Proceedings of Machine Learning Research. PMLR, pp. 1888–1903.
- H5 Index:** 91.
11. Dai, Yaoyao, **Benjamin J. Radford**, and Andrew Halterman (2022). "Political Event Coding as Text-to-Text Sequence Generation". *Proceedings of the 5th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE)*. Abu Dhabi, United Arab Emirates (Hybrid). Association for Computational Linguistics, pp. 117–123.
10. Hürriyetoğlu, Ali, Osman Mutlu, Fırat Duruşan, Onur Uca, Alaeddin Gürel, **Benjamin J. Radford**, Yaoyao Dai, Hansi Hettiarachchi, Niklas Stoehr, Tadashi Nomoto, Milena Slavcheva, Francielle Vargas, Aaqib Javid, Fatih Beyhan, and Erdem Yörük (2022). "Extended Multilingual Protest News Detection - Shared Task 1, CASE 2021 and 2022". *Proceedings of the 5th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE)*. Abu Dhabi, United Arab Emirates (Hybrid). Association for Computational Linguistics, pp. 223–228.

9. **Radford, Benjamin J. (2022).** "High Resolution Conflict Forecasting with Spatial Convolutions and Long Short-Term Memory". *International Interactions* 48.4, pp. 739–758. doi: 10.1080/03050629.2022.2031182.
Impact Factor: 1.2.
8. Gao, Jingjing* and **Benjamin J. Radford (2021).** "Death by Political Party: The Relationship Between COVID-19 Deaths and Political Party Affiliation". *World Medical & Health Policy* 13, pp. 224–249. doi: 10.1002/wmh3.435.
Impact Factor: 4.1. **H5 Index:** 18.
7. Halterman, Andrew and **Benjamin J. Radford (2021).** "Few-Shot Upsampling for Protest Size Detection". *Findings of the Association for Computational Linguistics ACL-IJCNLP 2021*, pp. 3713–3720. doi: 10.18653/v1/2021.findings-acl.325.
6. **Radford, Benjamin J. (2021).** "Automated Dictionary Generation for Political Event Coding". *Political Science Research and Methods* 9.1, pp. 157–171. doi: 10.1017/psrm.2019.1.
Impact Factor: 5.2. **H5 Index:** 42.
5. **Radford, Benjamin J. (2021).** "CASE 2021 Task 2: Zero-Shot Classification of Fine-Grained Sociopolitical Events with Transformer Models". *Proceedings of the 4th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE 2021)*, pp. 203–207. doi: 10.18653/v1/2021.case-1.25.
4. **Radford, Benjamin J. (2021).** "Regressing Location on Text for Probabilistic Geocoding". *Proceedings of the 4th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE 2021)*, pp. 53–57. doi: 10.18653/v1/2021.case-1.8.
3. **Radford, Benjamin J. (2020).** "Seeing the Forest and the Trees: Detection and Cross-Document Coreference Resolution of Militarized Interstate Disputes". *Proceedings of AESPEN 2020, LREC 2020*, pp. 35–41.
2. **Radford, Benjamin J. (2019).** "Multitask Models for Supervised Protest Detection in Texts". *Working Notes of CLEF 2019* 2380.
Impact Factor: 3.2. **H5 Index:** 51.

*Graduate student coauthor.

[†]Undergraduate student coauthor.

Public Scholarship

1. **Radford, Benjamin J.**, Yaoyao Dai, Niklas Stoehr*, Aaron Schein, Mya Fernandez[†], and Hanif Sajid* (2023). "Estimating Troop Losses on Both Sides in the Russia-Ukraine War". *The Loop*. ECPR.

Other Publications (Not Refereed)

10. Das Purba, Moumita*, Arpita Ghosh*, **Benjamin J. Radford**, and Bill Chu (2023, Invited paper). "Software Vulnerability Detection using Large Language Models". *Proceedings of the 2023 IEEE International Workshop on Machine Learning for Signal Processing*. 33rd IEEE International Workshop on Machine Learning for Signal Processing. IEEE. (Editor reviewed).
9. Richardson, Bartley D., Shawn E. Davis, and **Benjamin J. Radford (2018).** "Sequence Aggregation Rules for Anomaly Detection in Computer Network Traffic". Presented at the 2018 ASA Symposium on Data Science and Statistics.
8. Richardson, Bartley D., **Benjamin J. Radford**, Shawn E. Davis, Keegan Hines, and David Pekarek (2018). "Anomaly Detection in Cyber Network Data Using a Cyber Language Approach". Presented at the 2018 ASA Symposium on Data Science and Statistics.

7. **Radford, Benjamin J.**, Leonardo Apolonio, Antonio Trias, and Jim A. Simpson (**2017**). "Network Traffic Anomaly Detection Using Recurrent Neural Networks". Presented at the 2017 MSS National Symposium on Sensor & Data Fusion.
6. Beger, Andreas, **Benjamin J. Radford**, and Michael D. Ward (**2015**). "Small-Scale Prediction of IEDs in Afghanistan Using Split-Population Duration Regression". Prepared for the Office of Naval Research.
5. Beger, Andreas, Joshua Cutler, Matthew Dickenson, Cassy Dorff, **Benjamin J. Radford**, and Michael D. Ward (**2013**). "Comparing GDELT and ICEWS Event Data". Published online.
4. **Radford, Benjamin J. (2010)**. "The Evolution of US Policy Towards Iran's Nuclear Program: Lessons for the Obama Administration". *UNC Asheville Journal of Undergraduate Research*.
3. **Radford, Benjamin J. (2008)**. "Iran Likely to Take Accusatory Stance at CWC Review Conference". *WMD Insights* April, pp. 39–43. (Editor reviewed).
2. **Radford, Benjamin J.** and Leonard Spector (**2008**). "Algeria, Emirates Plan Nonproliferation-Friendly Nuclear Programs; Egypt Keeps Fuel Cycle Options Open, Rejects Expanded IAEA Monitoring". *WMD Insights* June, pp. 2–7. (Editor reviewed).
1. **Radford, Benjamin J.** and Leonard Spector (**2008**). "Summary of Recent United Nations Security Council, European Union, and United States Sanctions Against Iran". *WMD Insights* April, pp. 44–50. (Editor reviewed).

External Grants

Co-PI. National Science Foundation. \$660,000. <i>Collaborative Research: Subnational Nonstate Actor Governance</i>	2025–2028
Co-PI. Office of the Director of National Intelligence. \$1,489,803. <i>UNC Charlotte Intelligence Community Center of Academic Excellence</i>	2019–2024
PI. National Security Agency. \$96,334. <i>Forecasting Security Updates to Identify Vulnerable Software</i>	2022–2024
Senior/Key Participant. National Science Foundation. \$1,000,000. <i>Building the Federalism Data and Advanced Statistics Hub (F-DASH)</i>	2019–2020

Internal Grants

Co-PI. UNC Charlotte Nexus Seed Grant. \$4,500. <i>How Social Scientists Learned to Stop Worrying and Love Immigration: A Big-data Analysis of Academic Articles Over the Past Century</i>	2024
PI. UNC Charlotte Junior Faculty Development Award for research leave. <i>Drawing Front Lines: Estimating the Distribution of Contestation and Control in Conflict Zones</i>	2024
PI. UNC Charlotte Faculty Research Grant. \$8,000. <i>Crowdsourcing Conflict Measurement: Modeling Latent Attributes of War from Text</i>	2024
Co-PI. UNC Charlotte School of Data Science. \$15,000. <i>The Evolution of Intellectual Elite's Immigration Attitudes</i>	2022
PI. UNC Charlotte Faculty Research Grant. \$8,000. <i>From Protest to Tragedy—Violence Escalation in Space and Time</i>	2022
Co-PI. UNC Charlotte 12-Month Planning Grant. \$25,000. <i>Peace And Conflict Innovations Laboratory to Study Computational Propaganda</i>	2020
Recipient. Duke University Graduate Studies Fellowship.	2011–2016
Recipient. Duke University Graduate School Conference Travel Fellowship.	2013, 14, 15

External Grant Submissions

Co-PI. NSF SAP. \$182,590 <i>Collaborative Research: Subnational Nonstate Actor Governance</i>	2024
Co-PI. NSF SAP. \$254,292 <i>Collaborative Research: Subnational Nonstate Actor Governance</i>	2023
Co-PI. NSF MMS. \$440,464. <i>Attributing Policies to Actors through Semantic Content Evaluation</i>	2023
Co-PI. Alfred P. Sloan Foundation. Budget not required. <i>How social scientists learned to stop worrying and love immigration</i>	2023
Co-PI. NSF AIB. \$405,720. <i>Attributing Policies to Actors through Semantic Content Evaluation</i>	2022
Co-PI. Russell Sage Foundation. \$50,000. <i>How social scientists learned to stop worrying and love immigration</i>	2022
Co-PI. DARPA. \$1,000,000. <i>CANA-Dip: Credibility-Aware Negotiation Agent for Diplomacy</i>	2021
Co-PI. NSF. \$1,000,000. <i>PIPP Phase I: Preventing Pre-Emergence of Zoonotic Pathogens: Detection, Evolution, Ecosystems, Social Behavior and Education</i>	2021
Co-PI. NSF. \$290,842. <i>The Language of Neighborhoods: A Predictive and Analytical Framework</i>	2021
Co-PI. DARPA. \$1,205,105. <i>eMPiRIC: Modeling Population Response to Information Campaigns</i>	2020
Co-PI. NSF. \$19,996,313. <i>'AI for All' Institute: Bringing Diversity in AI Workforce Readiness, Research, and Outreach</i>	2020
Co-PI. DoD. \$444,534. <i>TRISS: Task-Oriented Robust Intelligent Assistant for System Safety</i>	2020
Co-PI. William T. Grant Foundation. \$996,201. <i>Building the Federalism Data and Advanced Statistics Hub</i>	2020
Co-PI. NCSU Laboratory for Analytic Sciences. \$71,314. <i>Improving Translation Rigor via Reinforcement Learning and Machine Translation Quality Estimation</i>	2020
Co-PI. UNC System Research Opportunities Initiative RFP. Budget not required. <i>Machine Intelligence and Security Studies Lab (MISSL)</i>	2020
PI. DARPA Young Faculty Award. Budget not required. <i>Event Graph Inference from Text Corpora</i>	2019
Co-PI. DoD Basic Research Program for HBCU/MI. \$658,946. <i>Surveillance, Conflict, and Dissent: New Data, Methods, and Theory for the Information Era</i>	2019
Co-PI. UNC System Research Opportunities Initiative RFP. Budget not required. <i>Peace and Conflict Innovations Laboratory to Study Computational Propaganda</i>	2019
Co-PI. UNC Undergraduate Research Office. \$25,238. <i>Introduction to Open Science for Undergraduates: Teaching and Foundations of Transparent and Reproducible Research</i>	2019

Published Software

mmtsne

2017

A package for estimating *multiple maps t-distributed stochastic neighbor embedding* (multiple maps t-SNE) models in R. Open source and available on CRAN: <https://cran.r-project.org/package=mmtsne>

Working Papers

4. Atkinson, Mary Layton and **Benjamin J. Radford** (**Manuscript in preparation**). "Measuring the Ideology of Major Laws".
3. Halterman, Andrew and **Benjamin J. Radford** (**Manuscript in preparation**). "Latent Civil War: Improving Inference and Forecasting with a Civil War Measurement Model". *PolMeth Conference Paper*.
2. Liu, Howard and **Benjamin J. Radford** (**Under review**). "Undercover Policing of Protest: Evidence from Hong Kong".
1. Sajid, Hanif, **Benjamin J. Radford**, Yaoyao Dai, and Jason Windett (**Manuscript in preparation**). "Ideal Points of Large Language Models".

Patents Pending

A method of using artificial intelligence to predict the treatability of water
With Amir Younis Alansari and James E. Amburgey

Pending

Invited Talks	
University of Florida <i>Forecasting Political Violence</i>	2025
Pennsylvania State University <i>Large Language Models for Measuring Contested and Multi-dimensional Concepts</i> Center for Social Data Analytics	2024
University of Pittsburgh <i>Measuring and Forecasting Casualties of Political Violence</i>	2024
Trinity College, Dublin <i>Forecasting Conflict: New Data from Hong Kong</i> PaCE: Patterns of Conflict Emergence Workshop	2024
UNC Charlotte CyberDNA <i>Machine Learning Approaches for Cybersecurity Incident Measurement</i>	2021
Georgia Tech School of Electrical and Computer Engineering <i>Machine Learning Approaches for Cybersecurity Incident Measurement</i>	2019
DC Digital Analytics <i>Multilingual Text Classification with Multitask Neural Networks</i>	2018
Symposium on Data Science and Statistics, American Statistical Association <i>Network Traffic Anomaly Detection Using Recurrent Neural Networks</i>	2018
Conference on Applied Statistics in Defense, American Statistical Association <i>Cyberlanguage: Enhancing cybersecurity through statistical and natural language processing techniques</i>	2016

Conference Presentations

Annual Meeting of the American Political Science Association

Ideal Points of Large Language Models	2024
Measuring Territorial Control in Armed Conflict Using Open-Source Information	2024
Protest Policing and State Repression: Evidence from Hong Kong	2023
Better Human Annotation: Methods to Decrease Random and Systematic Errors	2023
Measuring the Ideology of Major Laws	2022
How Social Scientists Learn to Stop Worrying and Love Immigration	2022
What is Word Embedding and How Can it Be Useful for Social Science Research	2021
Identifying Party Families with Time Series Multilingual Word Embedding	2021
Automated Dictionary Generation for Political Event Coding	2018
Going Ballistic: Nuclear Bursts in North Korea and Outbursts on Twitter	2018
Improving Multilingual Comparability with Transfer Learning	2018
Big Data for the Dark Side: Mapping the Rebel Alliance	2015

Annual Meeting of the Society for Political Methodology

Large Language Models for Measuring Contested and Multi-dimensional Concepts (hybrid)	2023
Latent Civil War: Improving Inference and Forecasting with a Civil War Measurement Model	2023
How Social Scientists Learn to Stop Worrying and Love Immigration	2022
Towards Better Human Annotation	2022

Carolinias Conflict Consortium

The Russian Tank Problem	2023
Spatial Predictors of Protest Suppression Events	2020

CASE Workshop at EMNLP

Political Event Coding as Text-to-Text Sequence Generation	2022
Extended Multilingual Protest News Detection – Shared Task 1, CASE 2021 and 2022	2022

Annual Meeting of the International Studies Association

Why Do You Dress Like Us?	2022
High Resolution Conflict Forecasting with Spatial Convolutions and Long Short-Term Memory	2022
Tactics of Insurgency and the Micro-Dynamics of IED Use	2015

Annual Meeting of the Southern Political Science Association

From Fear to Hate: Anti-Asian Sentiment During COVID-19	2022
Spatial Predictors of Protest Suppression Events	2020
Multilingual Word Embedding for Zero-Shot Text Classification	2019
Primed for Defense: How I Learned to Start Worrying and Love the Bomb	2013

CASE Workshop at ACL-IJCNLP

Regressing Location on Text for Probabilistic Geocoding	2021
Few-Shot Upsampling for Protest Size Detection	2021
CASE 2021 Task 2: Zero-Shot Classification	2021

Violence Early Warning System (ViEWS) Prediction Competition.

High-Resolution Conflict Forecasting	2020
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Conference on Language Resources and Evaluation, AESPEN Workshop

Seeing the Forest and the Trees	2020
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Conference on New Directions in Analyzing Text as Data

2018

Military Sensing Symposium, National Symposium on Sensor & Data Fusion

2017

Annual Meeting of the Midwest Political Science Association

2013, 14, 15

Duke-UNC International Relations Workshop

2014

Courses Offered

Instructor of Record

University of North Carolina at Charlotte

- GRAD 6101 & 8101: *Linear Regression* Charlotte, NC
2020, 21, 22, 23, 24, 25
2022, 24
- POLS 3154: *Cyberspace & Politics* 2021, 22, 23, 25
- GRAD 6103 & 8103: *Classificatory Methods & Time Series* 2019, 20, 21, 23
- POLS 2220: *Political Science Research Methods* 2022, 23, 25
- PPOL 8101: *Data Management and Basic Analytics* 2025
- PPOL 8102: *Applied Research and Regression Analysis* 2020
- GRAD 6009 & 8009: *Data Science for Social Scientific Inquiry* 2022, 24
- PPOL 8800 & 8802: *Independent Study* 2021, 22
- POLS 3700: *Honors Research* 2022, 23
- POLS 4700: *Honors Thesis* 2020
- POLS 3800: *Independent Study*

Invited Lecture

George Mason University

- CSI 899: *Computational Research and Applications*

Arlington, VA

Nov. 2017

Teaching Assistant

Duke University

- POLSCI 130: *Introduction to Political Inquiry*

Durham, NC

2013

Professional Service

Section Chair , Annual Conference of the Southern Political Science Association	2027
Admin & Author , https://www.pandas-lab.com Provides a hub for students to publicize their research.	2024–Present
Admin & Author , https://www.benradford.com Summaries of research, replication archives, and article pre-prints.	2015–Present
Discussant , APSA Political Forecasting Methods: Challenges and Potential Solutions	2024
Discussant , Carolinas Conflict Consortium	2023
Organizing Committee Member , The 5th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE 2022).	2022
Program Committee Member , The 4th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE 2021) the Association for Computational Linguistics.	2021
Chair , UNC Charlotte Cybersecurity Symposium	2020
Program Committee Member , AESPEN LREC 2020	2020
Chair , SPSA New Approaches in the Study of Terrorism and Civil War	2020
Discussant , APSA Panel on Prediction	2015

Reviewer

- American Journal of Political Science (AJPS)
- Political Analysis (PA)
- Political Science Research and Methods (PSRM)
- British Journal of Political Science (BJPS)
- Journal of Peace Research
- Journal of Conflict Resolution
- Communication Studies
- Discover Artificial Intelligence
- International Studies Review
- International Interactions
- Journal of Forecasting
- Conflict Management and Peace Science (CMPS)
- Empirical Methods in Natural Language Processing (EMNLP) 2022
- Nonprofit and Voluntary Sector Quarterly
- American Journal of Preventive Medicine
- MDPI Systems
- IEEE/ACM Transactions on Networking
- IEEE Transactions on Network and Service Management
- iScience

University Service

Chair , Public Policy Brown Bag Committee (PPOL)	2023–2024
Department Representative , College Research Advisory Council	2023–2024
Department Representative (Alternate) , University Faculty Council	2023–2024
Committee Member , School-level Curriculum Committee, School of Data Science (SDS)	2023–2024
Co-PI , Security and Intelligence Program	2023–2024
Non-voting Junior Faculty Observer , Dept. Executive Committee	2022–2023
Author & Grader , Methods Exam Committee (PPOL)	2020, 21, 22, 23, 24
Author & Grader , Qualifying Exam Committee (Civil Engineering)	2022, 23
Non-voting Junior Faculty Observer , Dept. Review Committee (POLS)	2021–2022
Department Representative , Faculty Council (POLS)	2020–2021
Committee Member , Speakers Committee (SDS)	2021
Committee Member , Awards Committee (POLS)	2020–2021
Committee Member , International Relations Search Committee (POLS)	2020–2021
Committee Member , Curriculum Review Committee (PPOL)	2020–2021
Participant , New Faculty Learning Community	2019–2020
Participant , New Faculty Mentoring Program	2019–2020

Professional Memberships

American Political Science Association	2017, 18, 2021–25
Society for Political Methodology	2017, 18, 2021–25
Association for Computational Linguistics	2021, 23
Linguistic Data Consortium	2020, 21, 22
President <i>Radford Consulting, LLC</i>	Arlington, VA 2018–Present

President	Alexandria, VA
<i>LevelUp Research, LLC</i>	2018–Present
DARPA SafeDocs	2019–2022
DARPA Hybrid Fusion	2018–2019
Subject Matter Expert, Data Science	Arlington, VA
<i>Parenthentic.io, later Protagonist</i>	2023–Present
NCSU Laboratory for Analytic Sciences project	
Subject Matter Expert, Data Science	Arlington, VA
<i>Giant Oak, Inc.</i>	2022–2023
DARPA Influence Campaign Awareness and Sensemaking (INCAS)	
Principal Data Scientist	Arlington, VA
<i>Sotera Defense Solutions, later KeyW Corporation</i>	2016–2018
DARPA Unnamed cybersecurity attribution program	
Senior Data Scientist	Arlington, VA
<i>Caerus Associates, later Cybraics, Inc.</i>	2015–2016
DARPA Network Defense	