Benjamin D. Horne

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Home Medical Products, Inc.

I.T. Technician

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Jackson, TN

Spring 2011 - Summer 2011

Research Focus

Media practices and influence, content moderation and interventions, computational social science My work seeks to answer questions related to safety in media spaces and resistance to strategic disinformation.

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Rensselaer Polytechnic Institute	Troy, NY
Ph.D. in Computer Science	Fall 2014 - Spring 2020
Dissertation: Robust News Veracity Detection - Robert McNaughton Prize Committee: Sibel Adalı, Lirong Xia, Stacy Patterson, Dorit Nevo, & Tamar	Gordon
Union University	Jackson, TN
B.S. in Computer Science, Minor in Mathematics	Fall 2010 - Spring 2014
Union University B.S. in Business Administration, Concentration in Management	Jackson, TN Fall 2010 – Spring 2014
Vanguard-Sentinel Career & Technology Center Information Technology Fundamentals	Fremont, OH Fall 2008 – Spring 2010
Academic and Research Appointments	
University of Tennessee Knoxville Assistant Professor (Joint), Data Science and Engineering, The Bredesen C Assistant Professor, School of Information Sciences	Knoxville, TN Center Fall 2023 – Present Fall 2020 – Present
Rensselaer Polytechnic Institute	Troy, NY
Graduate Research Assistant, Computer Science NSF GK-12 Teaching Fellow, Science and Technology Studies Graduate Teaching Assistant, Computer Science	Fall 2014, Fall 2017 – Spring 2020 Summer 2015 - Fall 2016 Spring 2015
U.S. Army Research Laboratory Visiting Graduate Researcher, Network Science Research Laboratory	Adelphi, MD Summer 2017
Cornell University NSF Undergraduate Researcher, Information Sciences	Ithaca, NY Summer 2013
Texas Tech University	Lubbock, TX
NSF Undergraduate Researcher, Computer Science	Summer 2012
Industry Experience	
Steele Martin Jones and Company	Jackson, TN
I.T. Administrator	Summer 2011 - Spring 2014

Total citations (Google Scholar May 2023): 1361

H-Index (Google Scholar May 2023): 16

Dataset Downloads (Dataverse May 2023): 17,687

Notes: I publish across multiple disciplines, each with different practices in terms of author order and venue importance. For example, traditionally in computing, students are first authors, while the lab leader is the last author. Whereas in iSchools, the faculty leader is often the first author. Below I have a legend for various contextual indicators:

- * indicates UTK student authors at the time of submission
- IF indicates Impact Factor of journal at the time of acceptance, if known
- AR indicates acceptance rate of conference, if known
- ABDC Rating indicates rating (A*, A, B, C) from Australian Business Deans Council, if applicable.

Book Chapters:

BC1. Fake News Starts with the Title

Chapter 9. "Language That Manipulates: Politics, Advertising, and Doublespeak" in Language Awareness: Readings for College Writers. 13th Edition by P. Eschholz, A. Rosa, and V. Clark. Macmillan Learning 2020 Benjamin D. Horne

Journal Publications (peer-reviewed):

J1. Generational effects of culture and digital media in former Soviet Republics Humanities and Social Sciences Communications (HSSCOMMS) 2023 (IF: 2.77) Benjamin D. Horne, Natalie Rice, Catherine Luther, Damian Ruck, Joshua Borycz, Suzie L. Allard, Michael Fitzgerald, Oleg Manaev, Brandon C. Prins, Maureen Taylor, R. Alexander Bentley Media Coverage: UTK Research News

- J2. Forking Paths of Cultural Complexity: A Case Study of Research Paradigms Advances in Complex Systems (ACS) 2022 (IF: 1.23) Joshua Borycz, Benjamin D. Horne, and R. Alexander Bentley
- J3. Monitoring event-driven dynamics on Twitter: A case study in Belarus Springer Nature Social Sciences (SNSS) 2022 Natalie M. Rice, Benjamin D. Horne, Catherine Luther, Joshua Borycz, Suzie L. Allard, Damian J. Ruck, Michael Fitzgerald, Oleg Manaev, Brandon C. Prins, Maureen Taylor, and R. Alexander Bentley
- J4. The Reasoning Behind Fake News Assessments: A Linguistic Analysis AIS Transactions on Human-Computer Interaction (THCI) 2022 (ABDC Rating: A) Lydia Manikonda, Dorit Nevo, <u>Benjamin D. Horne</u>, Clare Arrington, and Sibel Adalı
- J5. How Topic Novelty Impacts the Effectiveness of News Veracity Interventions Communications of the ACM (CACM) 2022 (ABDC Rating: A, IF: 4.65) Dorit Nevo and Benjamin D. Horne
- **J6.** Partisanship over security: Public narratives via Twitter on Foreign Interferences in the 2016 and 2020 U.S. Presidential Elections

First Monday 2021 (ABDC Rating: B, IF: 1.19)

Catherine Luther, Benjamin D. Horne, and Xu Zhang

- J7. Tailoring Heuristics and Timing AI Interventions for Supporting News Veracity Assessments Computers in Human Behavior Reports (CHB Reports) 2020 (ABDC Rating: A, IF: 6.83) Benjamin D. Horne, Dorit Nevo, Sibel Adalı, Lydia Manikonda, Clare Arrignton Media Coverage: IEEE Spectrum, RPI News, ACM TechNews, Electronics360, Tech Xplore, Scienmag, Newswise, The Next Web, Tech Monitor
- J8. Effects of Priming Messages to Decrease Negativity in Online Learning Environments APA Scholarship of Teaching and Learning in Psychology 2020 Hung-Tao Chen, Benjamin D. Horne, Dan Florrel, Megan Thomas
- J9. Robust Fake News Detection Over Time and Attack ACM Transactions on Intelligent Systems and Technology (TIST) 2019 (IF: 4.65) Benjamin D. Horne, Jeppe Nørregaard, and Sibel Adalı
- J10. Uncertainty-based False Information Propagation in Social Networks ACM Transactions of Social Computing (TSC) 2019 (IF: 1.60) Jin-Hee Cho, Scott Rager, John O'Donovan, Sibel Adalı, and Benjamin D. Horne
- J11. Recognizing Experts on Social Media: A Heuristics Based Approach ACM SIGMIS Database: The Database for Advances in Information Systems 2018 Benjamin D. Horne, Dorit Nevo, and Sibel Adalı

Refereed Computing Conferences (peer-reviewed):

Note: Conference proceedings are considered top-tier publication venues for computing. These conferences are heavily referred and highly selective venues for top archival research, often exceeding many journals in their selectivity, visibility, and impact.

C1. Characterizing YouTube and BitChute Content and Mobilizers During U.S. Election Fraud Discussions on Twitter

14th ACM Web Science Conference (WebSci) 2022 (AR: 32%)

Matthew C. Childs*, Milo Trujillo, Cody Buntain, and Benjamin D. Horne

Media Coverage: Reuters Special Report

- **C2.** Local News Online and COVID in the U.S.: Relationships among Coverage, Cases, Deaths, and Audience The 16th International Conference on Web and Social Media (ICWSM) 2022 (AR: 21%) Kenneth Joseph, Benjamin D. Horne, Jon Green, John P. Wihbey
- C3. What is BitChute? Characterizing the "Free Speech" Alternative to YouTube 31st ACM Conference on Hypertext and Social Media (HT'20) 2020 (AR: 29%) Milo Trujillo, Mauricio Gruppi, Cody Buntain, and Benjamin D. Horne Media Coverage: Mashable, Business Insider, YLE, Reuters Special Report Other: Cited on Wikipedia pages for Bitchute and WebTorrent (01/2021)
- C4. Trustworthy Misinformation Mitigation with Soft Information Nudging IEEE Conference on Trust, Privacy & Security in Intelligent Systems (TPS) 2019 Benjamin D. Horne, Mauricio Gruppi, and Sibel Adalı
- C5. Different Spirals of Sameness: A Study of Content Sharing in Mainstream and Alternative Media The 13th International Conference on Web and Social Media (ICWSM) 2019 (AR: 21%) Benjamin D. Horne, Jeppe Nørregaard, and Sibel Adalı
- C6. Rating Reliability and Bias in News Articles: Does AI Assistance Help Everyone?

 The 13th International Conference on Web and Social Media (ICWSM) 2019 (AR: 21%)

 Benjamin D. Horne, Dorit Nevo, John O'Donovan, Jin-Hee Cho, and Sibel Adalı
- C7. Identifying the Social Signals that Drive Online Discussions: A Case Study of Reddit Communities International Conference on Computer Communications and Networks (ICCCN) 2017 (AR: 30%) Benjamin D. Horne, Sibel Adalı, and Sujoy Sikdar

C8. From Sports to Science: Using Basketball Analytics to Broaden the Appeal of Math and Science Among Youth MIT Sloan Sports Analytics Conference (SSAC) 2017

John F. Drazan, Amy K. Loya, Benjamin D. Horne, and Ron Eglash

Best Research Paper Award (\$10,000 prize)

Media Coverage: NBA Enrichment Program, Denver Stiffs Podcast, RPI News, Fansided, SB Nation, Vice Sports, Harvard Sports Analytics Blog

C9. Impact of message sorting on access to novel information in networks Conference on Advances in Social Networks Analysis and Mining (ASONAM) 2016 (AR: 21%) Benjamin D. Horne, Sibel Adalı, and Kevin Chan

C10. Expertise in social networks: how do experts differ from other users?

The 10th International Conference on Web and Social Media (ICWSM) 2016 (AR: 17%)

Benjamin D. Horne, Dorit Nevo, Jesse Freitas, Heng Ji, and Sibel Adalı

Refereed Workshops, Demo Tracks, and Data Challenges (peer-reviewed):

W1. Tell Me Who Your Friends Are: Using Content Sharing Behavior for News Source Veracity Detection MEDIATE Workshop at ICWSM 2021

Mauricio Gruppi, Benjamin D. Horne, and Sibel Adalı

W2. From Tweeting About News to Creating News Around Tweets: Characterizing Tweets Embedded in News Articles

MEDIATE Workshop at ICWSM 2021

Mauricio Gruppi, Sibel Adalı, Matthew Salemi, and Benjamin D. Horne

W3. Do All Good Actors Look The Same? Exploring News Veracity Detection Across The U.S. and The U.K. ICWSM Data Challenge on Safety 2020

Benjamin D. Horne, Mauricio Gruppi, and Sibel Adalı

W4. An Exploration of Verbatim Content Republishing by News Producers
The International Workshop on News and Public Opinion (NECO) at ICWSM 2018
Benjamin D. Horne and Sibel Adalı

W5. An Exploration of Misinformation Classification in Brazil and The U.S. The International Workshop on News and Public Opinion (NECO) at ICWSM 2018

Mauricio Gruppi, Benjamin D. Horne, and Sibel Adalı

W6. Assessing the News Landscape: A Multi-Module Toolkit for Evaluating the Credibility of News The 27th ACM International Web Conference (WWW) Demo Track 2018
Benjamin D. Horne, Will Dron, Sara Khedr, and Sibel Adalı
Other: Cited on Wikipedia page for Occupy Democrats (01/2023)

W7. This Just In: Fake News Packs a Lot in Title, Uses Similar, Repetitive Content in Text Body, More Similar to Satire than Real News

The International Workshop on News and Public Opinion (NECO) at ICWSM 2017

Benjamin D. Horne and Sibel Adalı

Media Coverage: Science News

#4 Most Cited ICWSM Paper All Time (measured by Google Scholar in 2023)

W8. The Impact of Crowds on News Engagement: A Reddit Case Study
The International Workshop on News and Public Opinion (NECO) at ICWSM 2017
Benjamin D. Horne and Sibel Adalı

W9. Exploring the Creative Destruction of 3D Printing Through an Analysis of Intellectual Property Issues Emerging Researcher National (ERN) Conference 2013 Stephanie M. Santoso, Benjamin D. Horne, and Stephen B. Wicker

Published Datasets (peer-reviewed):

D1. The MeLa BitChute Dataset

The 16th International Conference on Web and Social Media (ICWSM) 2022 (AR: 64%)

https://doi.org/10.7910/DVN/KRD1VS

Milo Trujillo, Mauricio Gruppi, Cody Buntain, and Benjamin D. Horne

D2. NELA-Local: A Dataset of U.S. Local News Articles for the Study of County-level News Ecosystems The 16th International Conference on Web and Social Media (ICWSM) 2022 (AR: 64%) https://doi.org/10.7910/DVN/GFE66K

Benjamin D. Horne, Mauricio Gruppi, Kenneth Joseph, Jon Green, John P. Wihbey, and Sibel Adalı

D3. NELA-GT-2018: A Large Multi-Labelled News Dataset for the Study of Misinformation in News Articles The 13th International Conference on Web and Social Media (ICWSM) 2019 (AR: 52%)

https://doi.org/10.7910/DVN/ULHLCB

Jeppe Nørregaard, Benjamin D. Horne, and Sibel Adalı

D4. Sampling the News Producers: A Large News and Feature Data Set for the Study of the Complex Media Landscape

The 12th International Conference on Web and Social Media (ICWSM) 2018 (AR: 55%)

https://doi.org/10.7910/DVN/ZCXSKG

Benjamin D. Horne, Sara Khedr, and Sibel Adalı

Technical Reports and White Papers:

TR1. Examining the Production of Co-active Channels on YouTube and BitChute

Preliminary Findings Report 2023

https://arxiv.org/abs/2303.07861

Matthew C. Childs* and Benjamin D. Horne

TR2. NELA-GT-2022: A Large Multi-Labelled News Dataset for the Study of Misinformation in News Articles Technical Report 2023

https://doi.org/10.7910/DVN/AMCV2H

Mauricio Gruppi, Benjamin D. Horne, and Sibel Adalı

TR3. A Psycho-linguistic Analysis of BitChute: A Metadata Supplement to The MeLa BitChute Dataset Technical Report 2022

https://doi.org/10.7910/DVN/KRD1VS

Benjamin D. Horne

TR4. NELA-GT-2021: A Large Multi-Labelled News Dataset for the Study of Misinformation in News Articles Technical Report 2022

https://doi.org/10.7910/DVN/RBKVBM

Mauricio Gruppi, Benjamin D. Horne, and Sibel Adalı

TR5. NELA-GT-2020: A Large Multi-Labelled News Dataset for the Study of Misinformation in News Articles Technical Report 2021

https://doi.org/10.7910/DVN/CHMUYZ

Mauricio Gruppi, Benjamin D. Horne, and Sibel Adalı

TR6. NELA-GT-2019: A Large Multi-Labelled News Dataset for the Study of Misinformation in News Articles Technical Report 2020

https://doi.org/10.7910/DVN/O7FWPO

Mauricio Gruppi, Benjamin D. Horne, and Sibel Adalı

Other Conferences, Workshops, and Abstracts (lightly peer-reviewed):

- c1. War in Ukraine: Russian Propaganda and Geopolitical Attitudes in FSU (Abstract)
 American Political Science Association (ASPA) Annual Meeting 2023
 Natalie Rice, Oleg Manaev, Catherine Luther, Suzanne Allard, R. Alexander Bentley, Benjamin D. Horne,
 Damian Ruck, Joshua Borycz, Maureen Taylor, Michael Fitzgerald, Brandon Prins
- **c2.** Automated Parsing of Personal Identity Facets for a Collection of Visual Images International Conference on Dublin Core and Metadata Applications (DC) 2022 Brian Dobreski, Melissa Resnick, and Benjamin D. Horne
- c3. Russia Public Diplomacy Efforts to Influence Neighbors: Media Messaging Supports Hard Power Projection 72nd Annual International Communication Association Conference (ICA) 2022
 Maureen Taylor, Natalie Rice, Oleg Manaev, Catherine Luther, Suzie Allard, Michael Fitzgerald, Brandon Prins, Joshua Borycz, R. Alexander Bentley, and Benjamin D. Horne
- c4. Traditional and Social Media Usage and Pro-Russian versus Anti-Russian Attitudes in Belarus and Ukraine 72nd Annual International Communication Association Conference (ICA) 2022 Catherine Luther, Brandon Prins, Oleg Manaev, Natalie Rice, Maureen Taylor, Suzie Allard, Michael Fitzgerald, Benjamin D. Horne, R. Alexander Bentley, and Joshua Borycz
- c5. Role of Social Affinity on News Coverage of Disasters: Implications for Disaster Donations (Abstract) Decision Sciences Institute (DSI) Annual Conference 2021 Trilce Encarnacion, Jose Holguin-Veras, and Benjamin D. Horne
- c6. Hateful YouTube: Characterizing the Social Video-hosting Platform BitChute (Abstract) 6th International Conference on Computational Social Science (IC2S2) 2020 Milo Trujillo, Mauricio Gruppi, Cody Buntain, and Benjamin D. Horne
- c7. Effects of Priming on Online Discussion Behavior (Abstract) The Human Factors and Ergonomics Society (HFES) International Annual Meeting 2018 Hung-Tao Chen and Benjamin D. Horne
- c8. Models for Predicting Community-Specific Interest in News Articles The 37th Military Communications Conference (MILCOM) 2018 Benjamin D. Horne, William Dron, and Sibel Adalı
- c9. The Multi-Domain Integration and Correlation Engine The 37th Military Communications Conference (MILCOM) 2018 Willaim Dron, Andrew Hunter, Ali Sydney, Siddharth Pal, John Hancock, Lisa Scott, Tarek Abdelzaher, Jiawei Han, Sibel Adalı, and Benjamin D. Horne

Other Significant Research Dissemination (blogs, essays, op-eds, etc.):

- O1. Is Automated Content Moderation Going to Solve Our Misinformation Problems? Information Matters Vol. 3 Issue 1 2023
 Benjamin D. Horne
- O2. Fake News Starts with the Title Medium Post 2017 - Views: 3,500 Reads: 1,000 Benjamin D. Horne

Funding

Note: Co-PIs at UTK unless stated otherwise

External Funding:

F1. Minerva Grant, United States Department of Defense, Office of Naval Research

Title: Monitoring the Content and Measuring the Effectiveness of Russian Disinformation and Propaganda Campaigns in Selected Former Soviet Union States

PI: Catherine Luther

Co-PI: Benjamin D. Horne, Suzie Allard, Alex Bentley, Michael Fitzgerald, Brandon Prins, Maureen Taylor (University of Technology Sydney)

Funding: \$1.6 Million

Duration: 2019 - 2024 Note: I was added as a Co-PI in 2021

Related Publications: J1. J3. c1. c3. c4.

Related Talks: T3. T6.

Awards & Honors

Bonnie Carroll and Roy Cooper Faculty Enrichment Award (\$2,500)	
Annual research award in UTK's School of Information Sciences	2023
Robert McNaughton Prize	
Outstanding Ph.D. graduate in Computer Science at RPI	2020
Best Research Paper Award (\$10,000)	
MIT Sloan Sports Analytics Conference	2017
Outstanding Research Poster Award	
RPI Graduate Research Symposium	2017
Academic Excellence Medal in Computer Science	
Highest GPA at graduation in Union University Computer Science	2014
Dr. Joe Tucker Scholarship	
Union University Math and Computer Science Departments	2013

T1. Invited Speaker

Title: Learning News Outlet Veracity using Relationship Graphs + My thoughts on Future Directions Disinformation Countermeasures and Machine Learning (DisCoML) Workshop at ICML 2022

T2. Invited Speaker

Title: What is Machine Learning?

Invited Talks, Panels, and Guest Lectures

The UTK Pre-College Programs & Southern Appalachian Science and Engineering Fair, 2022

T3. Invited Co-speaker with Dr. Catherine Luther

Title: Exploring the Impact of Russian Propaganda and Disinformation on Russian-speaking populations in post-Soviet States

U.S. DoD Basic Research Forum, 2021

T4. Invited Speaker

Title: Tailoring Heuristics and Timing AI Interventions for Supporting News Veracity Assessments iDRAMA Lab Seminar Series, 2021

T5. Invited Speaker

Title: AI for Misinformation

IDEA Institute for Artificial Intelligence, 2021

T6. Invited Co-speaker with Dr. Catherine Luther

Title: Exploring the Impact of Russian Propaganda and Disinformation on Russian-speaking populations in post-Soviet States

U.S. Technology Leadership Council (USTLC), 2021

T7. Co-Guest Lecture with Dr. Guy Harrison

Title: Advice on the Academic Job Hunt

CCI 620 Communication and Information Professional Development Seminar, 2021

T8. Panel Moderator

Title: The Rise of Extremist Movements on Social Media

UTK CCI Social Media Week, 2021

T9. Guest Lecture

Title: Robust News Veracity Detection With Some Adversarial Attacks ECE 692 Adversarial Learning, UTK Tickle College of Engineering, 2021

T10. Panelist

Title: Power of Information: Information Science Graduate Programs iSchool's Inc. Information Science Graduate Programs Fair, 2020

Teaching

University of Tennessee Knoxville:

INSC 201 Foundations of Information Sciences

Taught 5 times between 2020 - 2022

INSC 260 (formerly 360) Programming for Information Applications

Taught 6 times between 2021 - 2023 Newly Created

INSC 484 Database Applications

Taught 3 times between 2021 – 2023 Newly Created

INSC 493 Independent Project/Research

Taught 7 times between 2022 – 2023

INSC 591 Independent Project/Research

Taught 5 times between 2020 - 2023

INSC 594 Graduate Research Participation

Taught 5 times between 2021 – 2023

CCI 697 Communication & Information Independent Study

Taught 1 time in 2023

Rensselaer Polytechnic Institute:

CSCI 2300 Introduction to Algorithms

Spring 2015 as a Graduate Teaching Assistant

Student Mentoring

PhD Advisor:

Rohit Gunti, PhD Communications and Information, UTK (co-advised with A. Rorissa) (2023 - present)

Namrita Varier, PhD Communications and Information, UTK (2022 – present)

PhD Committee Member:

Katie Knight, PhD Communications and Information, UTK (S. Allard, Chair) (2021 - present)

Masters Research Mentor:

Myles Bowman, MSIS, UTK (2023)

Jeremy Horner, MSIS, UTK (2022)

Matt Childs, MSIS, UTK (2021 – 2022) - First job: Booz Allen Hamilton

Denise Yewell, MSIS, UTK (2022) - First job: Somerville Fayette County Library

Rohit Srivastava, MSIS, UTK (2021) - First job: Oak Ridge National Laboratory

Nelia Koontz, MSIS, UTK (2021) - First job: University of Wyoming Libraries

Summer Phillips, MSIS, UTK (2020 - 2022) - First job: Carnegie Mellon University Libraries

Undergraduate Research Mentor:

Sawyer Smith, Information Sciences, UTK (2023)

Megan Rainwater, Information Sciences, UTK (2023)

Holly Liban, Information Sciences, UTK (2023)

Caleb Ellis, Haslam Scholars Program, Information Sciences, UTK (2023)

Diego Lourenco, College Scholars Program, Data Science and Analytics, UTK (2021 - 2023)

Taylor Rogers, Computer Science, UTK (2022) - First job: MLB's Texas Rangers Baseball Club

Service

University Service:

UTK Intercollegiate Data Science Program Faculty Committee (2021 – 2024)

UTK Proposal for Chancellor's Cluster Hiring Initiative: Data-Driven Society Team (2022)

School and College Service:

SIS Faculty and Doctoral Student Affairs Committee (2022 – 2024)

SIS Undergraduate Program Committee (2020 – 2023)

Proxy Member for UTK Undergraduate Council Curriculum Meeting (2023)

CCI Social Media Week Ad-Hoc Committee (2021)

SIS Professor of Practice Search Committee (2020)

Academic Community Service:

Co-Chair: AAAI ICWSM Dataset Track (2024)

Co-Organizer: NIST Text Retrieval Conference (TREC) CrisisFACTS Track (2023)

Journal Reviewer: Behaviour & Information Technology (BIT) (2023), European Journal of Information Systems (EJIS) (2023), EPJ Data Science (2023), Nature Scientific Data (2023), Nature Scientific Reports (2022 – 2023), Digital Journalism (2022 – 2023), Information Processing and Management (IPM) (2021), Harvard Kennedy School Misinformation Review (2020), International Journal of Communications (IJoC) (2019 – 2020), ACM Transactions on Internet Technology (TOIT) (2017)

Conference Program Committee Member: ICWSM (2019 – 2023), ACM WebSci (2020 – 2023), ICA Conference (2021), ICIS (2021), AMCIS (2017 – 2020), ASONAM (2019)

Workshop Program Committee Member: MEDIATE Workshop at ICWSM (2022), NECO Workshop at ICWSM (2017, 2018, 2020), MIS2 Workshop at WSDM (2018)