

Benjamin D. Horne

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Education

Rensselaer Polytechnic Institute Ph.D. in Computer Science <i>Dissertation:</i> Robust News Veracity Detection <i>Committee:</i> Sibel Adalı, Lirong Xia, Stacy Patterson, Dorit Nevo, & Tamar Gordon	Troy, NY <i>Fall 2014 – Spring 2020</i>
Union University B.S. in Computer Science, Minor in Mathematics	Jackson, TN <i>Fall 2010 – Spring 2014</i>
Union University B.S. in Business Administration, Concentration in Management	Jackson, TN <i>Fall 2010 – Spring 2014</i>
Vanguard-Sentinel Career & Technology Center Information Technology Fundamentals	Fremont, OH <i>Fall 2008 – Spring 2010</i>

Academic and Research Appointments

University of Tennessee Knoxville Assistant Professor, School of Information Sciences	Knoxville, TN <i>Fall 2020 – Present</i>
Rensselaer Polytechnic Institute Graduate Research Assistant, Computer Science NSF GK-12 Teaching Fellow Graduate Teaching Assistant, Computer Science	Troy, NY <i>Fall 2014, Fall 2017 – Spring 2020</i> <i>Summer 2015 - Fall 2016</i> <i>Spring 2015</i>
U.S. Army Research Laboratory Visiting Graduate Researcher, Network Science Research Laboratory	Adelphi, MD <i>Summer 2017</i>
Cornell University NSF Undergraduate Researcher, Information Sciences	Ithaca, NY <i>Summer 2018</i>
Texas Tech University NSF Undergraduate Researcher, Computer Science	Lubbock, TX <i>Summer 2012</i>

Industry Experience

Steele Martin Jones and Company I.T. Administrator	Jackson, TN <i>Summer 2011 – Spring 2014</i>
Home Medical Products, Inc. I.T. Technician	Jackson, TN <i>Spring 2011 – Summer 2011</i>

Publications

Total citations (Google Scholar January 2023): 1233
H-Index (Google Scholar January 2023): 15
Dataset Downloads (Dataverse January 2023): 16,354

Notes: I publish across multiple disciplines, each with different practices in terms of author order and venue importance. For example, in computing, students are first authors, while the lab leader is the last author.

- * 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. 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
- J2. 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
- J3. The Reasoning Behind Fake News Assessments: A Linguistic Analysis
AIS Transactions on Human-Computer Interaction (THCI) 2022 (ABDC Rating: A)
Lydia Manikonda, Dorit Nevo, Benjamin D. Horne, Clare Arrington, and Sibel Adalı
- J4. 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
- J5. 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 A. Luther, Benjamin D. Horne, and Xu Zhang
- J6. 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 Arrington
[Media Coverage](#): IEEE Spectrum, RPI News, ACM TechNews, Electronics360, Tech Xplore, Scienmag, Newswise, The Next Web, Tech Monitor
- J7. 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
- J8. 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
- J9. Uncertainty-based False Information Propagation in Social Networks
ACM Transactions of Social Computing (TSC) 2019
Jin-Hee Cho, Scott Rager, John O'Donovan, Sibel Adalı, and Benjamin D. Horne
- J10. 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 refereed 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: 8%)
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: 17%)
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: 17%)
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
Benjamin D. Horne, Sibel Adalı, and Kevin Chan
- C10. Expertise in social networks: how do experts differ from other users?
The 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 and Demo Tracks (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
Benjamin D. Horne, Mauricio Gruppi, 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
- 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
<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
<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
<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
<https://doi.org/10.7910/DVN/ZCXSKG>
Benjamin D. Horne, Sara Khedr, and Sibel Adalı

Technical Reports and White Papers:

- TR1.** 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
- TR2.** 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
- TR3.** 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
- TR4.** 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.** 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
- c2.** 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
- c3.** 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
- c4.** 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
- c5.** 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
- c6.** 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
- c7.** Models for Predicting Community-Specific Interest in News Articles
The 37th Military Communications Conference (MILCOM) 2018
Benjamin D. Horne, William Dron, and Sibel Adalı
- c8.** The Multi-Domain Integration and Correlation Engine
The 37th Military Communications Conference (MILCOM) 2018
William 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 - 2023 *Note: I was added as a Co-PI in 2021*
Related Publications: J2. c2. c3.
Related Talks: T6. T3.

Awards & Honors

Robert McNaughton Prize Outstanding Ph.D. graduate in Computer Science at RPI	2020
Best Research Paper Award (\$10,000 prize) 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

Invited Talks, Panels, and Guest Lectures

- 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?
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 4 times between 2021 – 2023 [Newly Created](#)

INSC 484 Database Applications

Taught 2 times between 2021 – 2022 [Newly Created](#)

INSC 591 Indep Project/Research

Taught 4 times between 2020 – 2023

INSC 594 Graduate Research Participation

Taught 5 times between 2021 – 2023

INSC 493 Indep Project/Research

Taught 3 times between 2022 – 2023

Rensselaer Polytechnic Institute:

CSCI 2300 Introduction to Algorithms

Spring 2015 as a Graduate Teaching Assistant

Student Mentoring

PhD Advisor:

Namrita Varier, PhD Communications and Information, UTK

PhD Committee Member:

Katie Knight, PhD Communications and Information, UTK

Masters Research Mentor:

Myles Bowman, MS Information Sciences, UTK (2023)

Jeremy Horner, MS Information Sciences, UTK (2022)

Matt Childs, MS Information Sciences, UTK (2021 – 2022)

Denise Yewell, MS Information Sciences, UTK (2022)

Rohit Srivastava, MS Information Sciences, UTK (2021)

Nelia Koontz, MS Information Sciences, UTK (2021)

Summer Phillips, MS Information Sciences, UTK (2020 – 2022)

Undergraduate Research Mentor:

Taylor Rogers, Computer Science, UTK (2022)

Undergraduate College Scholars Program Mentor/Course Advisor:

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

Service

University Service:

UTK Data Science Faculty Committee (Intercollegiate Program) (2021 – 2023)

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

School and College Service:

SIS Undergraduate Program Committee (2020 – 2023)

SIS Faculty and Doctoral Student Affairs Committee (2022 – 2023)

CCI Social Media Week Ad-Hoc Committee (2021)

SIS Professor of Practice Search Committee (2020)

Academic Community Service:

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

Journal Reviewer: Nature Scientific Data (2023), Nature Scientific Reports (2022 – 2023), Digital Journalism (2022), Information Processing and Management (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)