
Benjamin D. Horne

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ACADEMIC APPOINTMENTS

The University of Tennessee Knoxville, School of Information Sciences, Fall 2020 - present
Assistant Professor of Information Sciences

Rensselaer Polytechnic Institute, Computer Science, Fall 2014 - Spring 2020

Graduate Research Assistant - Fall 2014, Spring 2017 - Spring 2020

NSF GK-12 Teaching Fellow - Summer 2015 - Fall 2016

Graduate Teaching Assistant - Spring 2015

U.S. Army Research Laboratory, Network Science Research Laboratory, Summer 2017

Visiting Graduate Researcher

Cornell University, Information Sciences, Summer 2013

NSF Undergraduate Researcher

Texas Tech University, Computer Science, Summer 2012

NSF Undergraduate Researcher

INDUSTRY EXPERIENCE

Steele Martin Jones and Company, I.T. Administrator, Summer 2011 - Spring 2014

Home Medical Products Inc., I.T. Technician, Spring 2011 - Summer 2011

EDUCATION

Ph.D. in Computer Science, Rensselaer Polytechnic Institute, 2014 - 2020

DISSERTATION: Robust News Veracity Detection

COMMITTEE: Sibel Adali (CS, RPI; Chair), Lirong Xia (CS, RPI), Stacy Patterson (CS, RPI), Dorit Nevo (Business, RPI), and Tamar Gordon (Communications/Anthropology, RPI)

B.S. in Computer Science, Minor in Mathematics, Union University, 2010 - 2014

B.S. in Business Administration, Union University, 2010 - 2014

I.T. and Network Fundamentals, Vanguard-Sentinel Career & Technology Center, 2008 - 2010

PUBLICATIONS

Number of peer-reviewed, archived publications: 36

Total citations (Google Scholar December 2022): 1190

H-Index (Google Scholar December 2022): 15

Dataset Downloads (Dataverse December 2022): 16,120

Notes: In computing, students are first authors, while the lab leader is 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 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

Journals (peer-reviewed, archival):

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

AIIS Transactions on Human-Computer Interaction (THCI) 2022 (ABDC Rating: A)

Lydia Manikonda, Dorit Nevo, Benjamin D. Horne, Clare Arrington, and Sibel Adali

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 Adali, 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 Norregaard, and Sibel Adali

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 Adali, 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 Adali

Computing Conferences (peer-reviewed, archival):

Note: Conference proceedings are considered top-tier publication venues for computing

- CC1.** 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
- CC2.** 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
- CC3.** 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)
- CC4.** 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 Adali
- CC5.** 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 Norregaard, and Sibel Adali
- CC6.** 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 Adali
- CC7.** 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 Adali
- CC8.** 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 Adali, and Sujoy Sikdar
- CC9.** From Sports to Science: Using Basketball Analytics to Broaden the Appeal of Math and Science Among Youth
MIT Sloan Sports Analytics Conference (SSAC) 2017 - **Best Research Paper Award**
John F. Drazan, Amy K. Loya, Benjamin D. Horne, and Ron Eglash
Media Coverage: NBA Enrichment Program, Denver Stiffs Podcast, RPI News, Fansided, SB Nation, Vice Sports, Harvard Sports Analytics Blog
- CC10.** 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 Adali, and Kevin Chan
- CC11.** 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 Adali

Non-computing Conferences (peer-reviewed, archival):

- NCC1.** 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](#)
- NCC2.** Models for Predicting Community-Specific Interest in News Articles
The 37th Military Communications Conference (MILCOM) 2018
[Benjamin D. Horne](#), William Dron, and Sibel Adali
- NCC3.** The Multi-Domain Integration and Correlation Engine
The 37th Military Communications Conference (MILCOM) 2018
W. Dron, A. Sydney, J. Hancock, L. Scott, T. Abdelzaher, J. Han, S. Adali, [B.D. Horne](#)

Workshops (peer-reviewed, archival):

- 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 Adali
- W2.** From Tweeting About News to Creating News Around Tweets: Characterizing Tweets Embedded in News Articles
MEDIATE Workshop at ICWSM 2021
Mauricio Gruppi, Sibel Adali, 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 Adali
- 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 Adali
- 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 Adali
- W6.** 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 Adali
Media Coverage: Science News
- W7.** 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 Adali
- W8.** 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 (light peer-review, archival):

- D1.** A Psycho-linguistic Analysis of BitChute: A Metadata Supplement to The MeLa BitChute Dataset
Technical Report 2022

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

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D2. The MeLa BitChute Dataset

The 16th International Conference on Web and Social Media (ICWSM) 2022

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

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

D3. 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 Adali

D4. 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 Adali

D5. 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 Adali

D6. 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 Adali

D7. 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 Norregaard, Benjamin D. Horne, and Sibel Adali

D8. 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 Adali

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

O1. 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

O2. 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

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- O3.** 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
 - O4.** 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
 - O5.** 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

FUNDING

Note: Co-PIs at UTK unless stated otherwise

- F1.** Minerva Grant, United States Department of Defense, Office of Naval Research
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 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, O1, O2
Related Talks: T3, T6

AWARDS

- A1.** Robert McNaughton Prize for outstanding Ph.D. graduate in Computer Science 2020
- A2.** MIT Sloan Sports Analytics Conference Best Research Paper Award (\$10,000) 2017
- A3.** RPI Outstanding Research Poster Award 2017
- A4.** Union University Academic Excellence Medal in Computer Science (Highest GPA) 2014
- A5.** Union University Dr. Joe Tucker Scholarship 2013

INVITED TALKS, PANELS, and GUEST LECTURES

- T1.** Invited Speaker, Disinformation Countermeasures and Machine Learning (DisCoML) Workshop at ICML, 2022
- T2.** Invited Speaker, The UTK Pre-College Programs & Southern Appalachian Science and Engineering Fair, Virtual Science Club, 2022
- T3.** Invited Co-speaker with Dr. Catherine Luther, U.S. DoD Basic Research Forum, 2021
- T4.** Invited Speaker, iDRAMA Lab Seminar Series, 2021
- T5.** Invited Speaker, IDEA Institute for Artificial Intelligence, 2021
- T6.** Invited Co-speaker with Dr. Catherine Luther, U.S. Technology Leadership Council (USTLC), 2021

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- T7.** Co-Guest Lecture with Dr. Guy Harrison, CCI 620, Advice on the Academic Job Hunt, UTK, 2021
- T8.** Moderator, The Rise of Extremist Movements on Social Media, UTK CCI Social Media Week, 2021
- T9.** Guest Lecture, ECE 692 Adversarial Learning, UTK Tickle College of Engineering, 2021
- T10.** Panelist, Power of Information: Information Science Graduate Programs Fair, iSchool's Inc. 2020

TEACHING

University of Tennessee Knoxville:

- INSC 201 Foundations of Information Sciences (5 x 2020 - 2022)
- INSC 260 (formerly 360) Programming for Info. Apps. (3 x 2021 - 2023) - **Newly Created**
- INSC 484 Database Applications (2 x 2021 - 2022) - **Newly Created**
- INSC 591 Indep Project/Research (4 x 2020 - 2023)
- INSC 594 Graduate Research Participation (5 x 2021 - 2023)
- INSC 493 Indep Project/Research (3 x 2022-2023)

Rensselaer Polytechnic Institute:

- CSCI 2300 Introduction to Algorithms - *Graduate Teaching Assistant* (Spring 2015)

STUDENT MENTORING

PhD Advisor

- Namrita Varier, PhD Communications and Information, UTK

PhD Committee Member

- Katie Knight, PhD Communications and Information, UTK

Masters Research Mentor

- 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 College Scholars Mentor

- Diego Lourenco, College Scholars Program, UTK (2021-2023)

Undergraduate Research Mentor

- Taylor Rogers, Computer Science, UTK (2022)

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

- **Organizer:**
 - CrisisFACTS with Cody Buntain (UMD), Amanda Hughes (BYU), Muhammad Imran (QCRI), Richard McCreadie (Glasgow), and Hemant Purohit (George Mason) at The NIST Text Retrieval Conference (TREC) (2023)
- **Program Committee Member or Reviewer:**
 - Journals:
 - Springer Nature Scientific Reports (2022)
 - 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)
 - Conferences:
 - ICWSM (2019 - 2023)
 - ACM WebSci (2020 - 2023)
 - ICA Conference (2021)
 - ICIS (2021)
 - AMCIS (2017 - 2020)
 - ASONAM (2019)
 - Workshops:
 - MEDIATE Workshop at ICWSM (2022)
 - NECO Workshop at ICWSM (2017, 2018, 2020)
 - MIS2 Workshop at WSDM (2018)