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, RPI)

B.S. in Computer Science, 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 October 2022): 1144
H-Index (Google Scholar October 2022): 15
Dataset Downloads (Dataverse October 2022): 14,792

Notes: In computing, students are first authors, while the lab leader is last author.
* indicates UTK student authors at the time of submission

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
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
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
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
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
Benjamin D. Horne, Dorit Nevo, Sibel Adali, Lydia Manikonda, Clare Arrignton
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
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: The DATABASE for Advances in Information Systems (DATABASE) 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
Matthew C. Childs*, Milo Trujillo, Cody Buntain, and <u>Benjamin D. Horne</u>
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
Kenneth Joseph, <u>Benjamin D. Horne</u>, 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
Milo Trujillo, Mauricio Gruppi, Cody Buntain, and <u>Benjamin D. Horne</u>
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
The First IEEE Conference on Trust, Privacy and Security in Intelligent Systems (TPS) 2019
<u>Benjamin D. Horne</u>, 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
<u>Benjamin D. Horne</u>, 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
<u>Benjamin D. Horne</u>, 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) 2018
<u>Benjamin D. Horne</u>, 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
<u>Benjamin D. Horne</u>, 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 (MIT SSAC) 2017 - **Best Research Paper Award**
John F. Drazan, Amy K. Loya, <u>Benjamin D. Horne</u>, 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
<u>Benjamin D. Horne</u>, 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
<u>Benjamin D. Horne</u>, 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 <u>Benjamin D. Horne</u>

NCC2. Models for Predicting Community-Specific Interest in News Articles
The 37th Military Communications Conference (MILCOM) 2018
<u>Benjamin D. Horne</u>, 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, <u>B.D. Horne</u>

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, <u>Benjamin D. Horne</u>, 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 <u>Benjamin D. Horne</u>

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
<u>Benjamin D. Horne</u>, 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
<u>Benjamin D. Horne</u> 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, <u>Benjamin D. Horne</u>, 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
<u>Benjamin D. Horne</u> 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
<u>Benjamin D. Horne</u> 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, <u>Benjamin D. Horne</u>, 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
Benjamin D. Horne

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

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 <u>Benjamin D. Horne</u>

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 <u>Benjamin D. Horne</u>

O5. Effects of Priming on Online Discussion Behavior (Abstract)
The Human Factors and Ergonomics Society (HFES) International Annual Meeting 2018
Hung-Tao Chen and <u>Benjamin D. Horne</u>

FUNDING

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: <u>Benjamin Horne</u>, Suzie Allard, Alex Bentley, Michael Fitzgerald, Brandon Prins, Maureen Taylor
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
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 (3 x 2020 - 2022)
- INSC 594 Graduate Research Participation (4 x 2021 - 2022)
- INSC 493 Indep Project/Research (2 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, Data Science and Analytics, UTK (2021-2023)

Undergraduate Research Mentor

- Taylor Rogers, Computer Science, UTK (2022)

SERVICE

University Service

- UTK Data Science Faculty Committee (Intercollegiate Data Science 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:**
  - TREC CrisisFACTS with Cody Buntain (UMD), Amanda Hughes (BYU), Muhammad Imran (QCRI), Richard McCreadie (Glasgow), and Hemant Purohit (George Mason) (2023)
- **Program Committee Member or Reviewer:**
  - Journals*:*
    - 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)