Benjamin D. Horne

School of Information Sciences - The University of Tennessee Knoxville 440B Communications Building - 1345 Circle Park, Knoxville TN 37996

Email: bhorne6@utk.edu I Phone: 865-974-6916 I Website: benjamindhorne.github.io

ACADEMIC/RESEARCH 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 2017 - Spring 2020 *Graduate Research Assistant*

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*

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

PUBLICATIONS

Number of peer-reviewed, archived publications: 36 (13 since joining UTK) **Total citations (Google Scholar August 2022):** 1075

H-Index (Google Scholar August 2022): 15

Dataset Downloads (Dataverse August 2022): 13,965

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

<u>Journals (peer-reviewed, archival):</u>

J1. Forking Paths of Cultural Complexity: A Case Study of Research Paradigms

Advances in Complex Systems (ACS) 2022

Joshua Borycz, <u>Benjamin D. Horne</u>, 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, <u>Benjamin D. Horne</u>, 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 Al 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 <u>Benjamin D. Horne</u>

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 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 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 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

The First IEEE Conference on Trust, Privacy and 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 Benjamin D. Horne, Jeppe Norregaard, and Sibel Adali

CC6. Rating Reliability and Bias in News Articles: Does Al Assistance Help Everyone?

The 13th International Conference on Web and Social Media (ICWSM) 2019

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) 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 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 (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 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 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, <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 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

<u>Published Datasets (light peer-review, archival):</u>

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

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

FUNDING

F1. Minerva Grant, United States Department of Defense

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

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 times between 2020 - 2022)

INSC 360 Programming for Info. Apps. (2 times between 2021 - 2022) - Newly Created

INSC 484 Database Applications (2 times between 2021 - 2022) - Newly Created

INSC 591 Indep Project/Research (3 times between 2020 - 2022)

INSC 594 Graduate Research Participation (4 times between 2021 - 2022)

INSC 493 Indep Project/Research (2 times between 2022-2023)

Rensselaer Polytechnic Institute:

CSCI 2300 Introduction to Algorithms - 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

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

Undergraduate Research Mentor

Taylor Rogers, Computer Science, UTK (2022)

SERVICE

University Service

Committees:

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

Initiatives:

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

School and College Service

Committees:

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)

Community Service

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 2022)
- 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)

OTHER TEACHING AND INDUSTRY EXPERIENCE

National Science Foundation GK-12, Teaching Fellow, Summer 2015 - Fall 2016

Rensselaer Polytechnic Institute, Computer Science Teaching Assistant, Spring 2015

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

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