

# Benjamin D. Horne

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## Education

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<b>Rensselaer Polytechnic Institute</b>	Troy, NY
Ph.D. in Computer Science - <i>Dissertation</i> : Robust News Veracity Detection	<i>Fall 2014 – Spring 2020</i>
<b>Union University</b>	Jackson, TN
B.S. in Computer Science, Minor in Mathematics	<i>Fall 2010 – Spring 2014</i>
<b>Union University</b>	Jackson, TN
B.S. in Business Administration	<i>Fall 2010 – Spring 2014</i>
<b>Vanguard-Sentinel Career &amp; Technology Center</b>	Fremont, OH
I.T. and Network Fundamentals	<i>Fall 2008 – Spring 2010</i>

## Academic and Research Appointments

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<b>University of Tennessee Knoxville</b>	Knoxville, TN
Assistant Professor, School of Information Sciences	<i>Fall 2020 – Present</i>
<b>Rensselaer Polytechnic Institute</b>	Troy, NY
Graduate Research Assistant, Computer Science	<i>Fall 2014, Fall 2017 – Spring 2020</i>
NSF GK-12 Teaching Fellow	<i>Summer 2015 - Fall 2016</i>
Graduate Teaching Assistant, Computer Science	<i>Spring 2015</i>
<b>U.S. Army Research Laboratory</b>	Adelphi, MD
Visiting Graduate Researcher, Network Science Research Laboratory	<i>Summer 2017</i>
<b>Cornell University</b>	Ithaca, NY
NSF Undergraduate Researcher, Information Sciences	<i>Summer 2013</i>
<b>Texas Tech University</b>	Lubbock, TX
NSF Undergraduate Researcher, Computer Science	<i>Summer 2012</i>

## Industry Experience

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

## Publications

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**Total citations** (Google Scholar December 2022): 1206  
**H-Index** (Google Scholar December 2022): 15  
**Dataset Downloads** (Dataverse December 2022): 16,120

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
- 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*

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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*

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<b>Robert McNaughton Prize</b> Outstanding Ph.D. graduate in Computer Science at RPI	2020
<b>Best Research Paper Award (\$10,000 prize)</b> MIT Sloan Sports Analytics Conference	2017
<b>Outstanding Research Poster Award</b> RPI Graduate Research Symposium	2017
<b>Academic Excellence Medal in Computer Science</b> Highest GPA at graduation in Union University Computer Science	2014
<b>Dr. Joe Tucker Scholarship</b> Union University Math and Computer Science Departments	2013

## *Invited Talks, Panels, and Guest Lectures*

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- 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*

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#### **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*

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### **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*

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### **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), 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)