

## Education

**Doctor of Philosophy:** Computer Science , Rensselaer Polytechnic Institute, Troy, NY (2014-2020)  
**Bachelor of Science:** Computer Science, Union University, Jackson, TN (2010-2014)  
**Bachelor of Science in Business Administration:** Management, Union University, Jackson, TN (2010-2014)

## Publications

### Journals and Conferences Proceedings:

#### **Models for Predicting Community-Specific Interest in News Articles**

The 37th Military Communications Conference (MILCOM) 2018

**Benjamin D. Horne**, William Dron, and Sibel Adali

#### **Multi-Domain Integration and Correlation Engine**

The 37th Military Communications Conference (MILCOM) 2018

William Dron, A. Hunter, A. Sydney, S. Pal, J. Hancock, L. Scott, T. Abdelzaher, J. Han, S. Adali, and **Benjamin D. Horne**

#### **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

**Benjamin D. Horne**, Sara Khedr, and Sibel Adali

#### **Assessing the News Landscape: A Multi-Module Toolkit for Evaluating the Credibility of News**

The 27th International Web Conference (WWW) 2018

**Benjamin D. Horne**, Will Dron, Sara Khedr, and Sibel Adali

#### **Identifying the Social Signals that Drive Online Discussions: A Case Study of Reddit Communities**

The International Conference on Computer Communications and Networks (ICCCN) 2017

**Benjamin D. Horne**, Sibel Adali, and Sujoy Sikdar

#### **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, RPI News, Fansided, SBNation, Vice Sports, Harvard Sports Analytics Blog

#### **Impact of message sorting on access to novel information in networks**

The International Conference on Advances in Social Networks Analysis and Mining (ASONAM) 2016

**Benjamin D. Horne**, Sibel Adali, and Kevin Chan

#### **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

#### **Exploring the Creative Destruction of 3D Printing Through an Analysis of Intellectual Property Issues**

TRUST Autumn Conference and Emerging Researcher National (ERN) Conference 2013

Stephanie M. Santoso, **Benjamin D. Horne**, and Stephen B. Wicker

#### **Extensions to the Descartes Specification Language for the Development of Real-Time Object Oriented Systems**

The International Conference on Computing, Networking, and Digital Technologies (ICCNDT) 2012

**Benjamin D. Horne**, Vinitha Hannah Subburaj, and Joseph E. Urban

#### **Formal Specification for Real-Time Object Oriented Systems with UML Design**

International Journal of Digital Information and Wireless Communications (IJDIWC) 2013

**Benjamin D. Horne**, Vinitha Hannah Subburaj, and Joseph E. Urban

### Peer-Reviewed Workshops and Other:

#### **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

#### **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

#### **Effects of Priming on Online Discussion Behavior** (Extended Abstract)

The Human Factors and Ergonomics Society (HFES) International Annual Meeting 2018

Hung-Tao Chen and **Benjamin D. Horne**

#### **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 - **\*RPI Outstanding Poster Award\***

**Benjamin D. Horne** and Sibel Adali

#### **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

## **Experience**

**Army Research Labs:** Adelphi, MD

(June 2017)

Rotational Visiting Researcher for Q3 NS-CTA

- Collaboration with ARL researchers in The Network Science Research Laboratory to transfer research into a automatic news analysis toolkit

**Rensselaer Polytechnic Institute:** Troy, NY

(2014-Present)

Research Assistant, Advisor: Sibel Adali

- Work in the area of information quality, credibility, and diversity
- Methodologies: Data analytics using Python on large Reddit and Twitter datasets, Natural Language Processing, Machine Learning, and Human behavior analysis

Teaching Assistant, Advisor: Mukkai Krishnamoorthy: Introduction to Algorithms

(Spring 2015)

**NSF GK-12 Fellow:** Troy, NY

(2015–2016)

Fellow/Teacher

- Albany High school collaborative teaching program in which I examined the potential relations between my STEM research and the social issues facing local low-income and minority communities to create engaging lessons for an AP Statistics class
- Designed year long module entitled "Media Bias and The Misuse of Statistics"

**Cornell University:** Ithaca, NY

(Summer 2013)

TRUST Undergraduate Researcher, Advisor: Stephen B. Wicker

- Research on the Creative Destruction of non-industrial 3D printing through an analysis of intellectual property issues, utilizing survey techniques and data analysis using IBM SPSS and Python.

**Texas Tech University:** Lubbock, TX

(Summer 2012)

NSF Undergraduate Researcher, Advisor: Joseph E. Urban

- Research in the area of specification languages; specifically on extending the Descartes Specification Language for the development of real-time object oriented systems, included trade-off analysis of UML and Descartes.

**Steele Martin Jones and Company, PLC:** Jackson, TN

(2011–2014)

Information Technology Administrator

- Redesigned internal network including building Linux Untangle appliance routing server; download speeds increased from 8Mb/s to 25Mb/s on average, internal ping latency reduced, increased VPN reliability

- Redesigned Website, optimized user experience and SEO
- Managed all technology infrastructure, primary decision maker in technology arena including purchasing

## Technical Skills

**Languages:** Python, R, Matlab, Java, C,C#, HTML, CSS, PHP

**Data Science:** Various machine learning and NLP toolkits (scikit-learn, tensorflow, scipy, mallet, nltk, Stanford parser, word2vec, autopharse, LIWC, etc.), Topic modeling, IBM SPSS, Weka, GPower, experience working with very large social network datasets, social network APIs, and web scraping

**Network Science:** Random network models, Agent-based simulation design, Subjective Logic, Epidemic models, Gephi, Python Networkx

**Web Systems:** Python Flask, NGINX, Unicorn, Linux web serving (systemctl)

## Community and Professional Service

**Program Committees/ Reviewer:** NECO 2017, AMCIS 2017, ACM TOIT 2017, MIS2 2018, NECO 2018, AMCIS 2018, OIR 2018

**Community Volunteer:** VLCC Worship Leading Team 2015-2019, RPI Graduate Christian Fellowship Vision Team 2015-2019, RPI Black Family Technology Day 2016, Union University Campus and Community Day Leader 2011-2013, Union University ACM Vice President 2012- 2014, Union University IT Committee Member 2013-2014