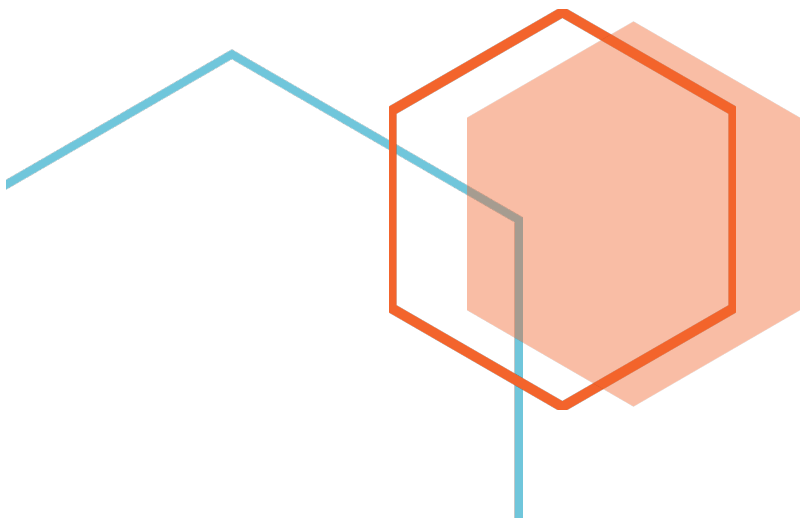


Tufts Analytics Without Borders 2020 Conference

CONFERENCE SUMMARY REPORT

This conference provided a single venue for interdisciplinary research, collaboration, and communication on applied data analytics in the fields of business, public health, nutrition, and the environment. We advanced a shared agenda to harness the power of data sciences to discuss the complexities of health and nutrition problems through the lens of data sciences. The conference showcased numerous opportunities for students including hands-on workshops on topics related to data sciences, panel discussions on topics ranging from business to health, and both oral and poster presentations for sharing research.

<https://sites.tufts.edu/naumovalabs/tawb2020>





Tufts Analytics Without Borders 2020 Conference

Conference Impact

An Interdisciplinary, Cross-University Initiative

Our conference included representation from all Tufts University Campuses across all disciplines. This network expanded to universities as near as Harvard, MIT, Emerson, Babson, Bryant, and Bentley to as far as Mississippi State and Northern Arizona. We engaged students spanning disciplines of business, economics, finance, nutrition, public health, and the environment around a common goal: utilizing data sciences and cross-disciplinary approaches to solving complex problems and challenges.

A Conference By Students, For Students

Our conference emphasized student needs from technical skills training to professional networking. We engaged students from all levels, ranging from secondary schools to doctoral and post-doctoral students affiliated with institutions from across the country. Through our professional networking luncheons, career panels, and research presentation opportunities, we assisted in connecting students to researchers, academics, practitioners, businesspersons, and government officials. This diversity of participants and presentations exposed students to learning technical skills in data analytics, visualizations, and communications necessary to become impactful future young professionals.

Targeting Data-Intensive Research

We challenged participants to apply analytical methods and data sciences techniques to transcend disciplinary boundaries. We complemented panel discussions on real-world applications of data analysis with technical workshops on best practices for collecting, managing, analyzing, visualizing, and communicating data science research. Overall, we hope that targeting data intensive research can help achieve our underlying goal: develop strong data science and data analytics skills to shape the next generation of nutrition, public health, and medical researchers and young professionals.

Our Data Bites



24 Sessions in
1.5 Days

37 Panelists &
Presenters

>200 Persons
Attending

18 Boston
Companies
& Institutions
Represented

>400 Alumni
& Companies
Contacted



Tufts Analytics Without Borders 2020 Conference

Achieving Our Conference Objectives

(1) Promoting Transdisciplinary Research

We challenged participants to apply analytical methods and data sciences techniques from differing research disciplines in their own works to transcend disciplinary boundaries. We met this objective by providing technical- and discussion-based workshops led by a collection of interdisciplinary speakers. For more information, please see our website.

(2) Broadening Interdisciplinary Collaboration

Participants perceive the complexities and intricacies of data sciences and analytics from a diversity of perspectives. This requires challenges in the biomedical sciences to be solved using different decision-making processes and analytical techniques. We broadened interdisciplinary collaborations by providing panel discussions with interdisciplinary speakers that emphasized applications, limitations, and the future potential of data sciences in a variety of fields.

(3) Encouraging Data Analytics Communication

We emphasized the importance of communicating data science research for policy actions digestible to a broad range of audiences. We encouraged participants to pay proper attention to the means and modes of communicating data-intensive research. We met this objective by 9 oral presentations (20-minute talks) and 5 poster presentations (with 5-minute lightning talks) as well as active discussion among participants attending these presentations.

4) Professional Networking for Students

We contacted over 400 nutrition, public health, and data sciences organizations and alums. We compiled a digital resume booklet of all participants' 2-page CVs/resumes to circulate this booklet to this vast network of companies and organizations to increase student exposure for potential internship or career hire.

Our Data Bites



14 Colleges & Universities Represented

Tufts
Harvard
MIT
Yale
Bentley
Bryant
Babson
UMass Lowell
Boston Uni.
Emerson
Northeastern
Mississippi St.
N. Arizona
Sao Paulo



Tufts Analytics Without Borders 2020 Conference

Conference Highlights

Tufts DISC Director Dr. Abani Patra provided Opening Remarks to begin the conference. He spoke about the shared aim of DISC and the Analytics Without Borders conference: to train students in data sciences and analytics to shape the next generation of young professionals.

9 Oral Presentations and 5 Poster Presentations took place across 6 sessions on Friday including undergraduate, graduate, and doctoral students as well as persons from private industry. Their presentations spanned a wide array of topics from nutrition to finance and stimulating lively and fruitful discussion on applications of statistical methods across disciplinary boundaries.

Technical Workshops taught an array of skills and software. *Kyle Monahan* and *Carolyn Talmadge* showed intricacies between statistical software and the importance of geospatial analyses in nutrition and public health, respectively. *Dr. Tania Alarcon Falconi* engaged a packed classroom of students to discuss important features and element of data visualizations. *Samuel Scarpino* showcased research on network sciences and their importance for tracking infectious diseases worldwide.

Discussion Workshops tackled questions related to enhancing the teaching of and joint research works on data sciences. *Mingfei Li*, *Kevin Mentzer*, and *Dr. Elena Naumova* led a joint discussion on techniques for project-based learning of data analytics to non-analytics students. *Ilana Cliffer*, *Ye Shen*, *Stacy Griswold*, and *Breanne Langlois* from the Food Aid Quality Review discussed with students and faculty the challenges and complexity of working on joint data analysis projects as a research group.

Panel Discussions, like *Understanding Data Applications for Food Policy*, *Data Analytics for Mitigating Health Disparities*, and *Perspectives on Environmental and Economic Costs to Food Security*, discussed applications of data sciences in fields across a spectrum of topic areas in nutrition and public health sciences.

Our Data Bites



>40 Attendees learned about Network Sci. & QGIS Software

~50 Attendees learned about stat. software

>50 Attendees learning data visualizations

3 Networking Receptions

0 Conference Food Waste

A Special Thank You

The 2020 Analytics Without Borders Conference hosted for the 1st time at the Tufts University Friedman School of Nutrition Science and Policy would not have been possible without the support of numerous partners and sponsors. **Bentley and Bryant University**, the founders of the Analytics Without Borders conference series, provided tremendous guidance and support in the planning process. Fiscal and in-kind sponsorship came from **Tufts Friedman Student Council, Tufts Institute of Environment, Tufts Data Intensive Studies Center, American Statistical Association, National Institute of Statistical Sciences**, and **Danshu**. We would also like to extend our thanks to the **New England Center and Home for Veterans** for accepting in-kind food donations to allow for zero conference food waste from our networking luncheons.

TUFTS ANALYTICS WITHOUT BORDERS CONFERENCE

FRIDAY & SATURDAY
FEBRUARY 28-29, 2020



@TuftsDataSummit



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Friedman School of
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