



Data Science Community Newsletter

3 August 2020

Data Science Community Newsletter

Please let us ([Micaela Parker](#), [Steve Van Tuyl](#), [Laura Noren](#), [Brad Stenger](#)) know if you have something to add to next week's newsletter. We are grateful for the generous financial support from the [Academic Data Science Alliance](#) and to NYU's Center for Data Science.

Dear Readers,

Good news! The Data Science Community Newsletter is back! We have restructured the content a bit and, with deep apologies, shifted the responsibility for curating the newsletter content from Laura Norén to Steve Van Tuyl and myself, Micaela Parker, from the [Academic Data Science Alliance](#). Laura will continue to write a semi-regular "From the desk of Laura Noren" column where she will do an in-depth analysis of an important, trending topic, written with the wit you've come to love in our Newsletter. And Steve and I are excited to distill for you the latest news in the academic data science world, with some Editor's Picks and Research News added for fun. Best of all, we have Laura's first essay as the highlight of today's issue!

Please **drop us a note** if you have ideas for stories, want to contribute to our process, or have any concerns or criticisms. Kudos are nice too. :)

Enjoy!
Micaela

P.S. — We have moved the Jobs and Events sections to the ADSA website in the interest of Newsletter brevity. You can find those resources here:

<https://academicdatascience.org/jobs>

<https://academicdatascience.org/events>

From the desk of Laura Noren

Higher education is like a polar bear on a shrinking piece of ice. Many individual choices led to this bear getting stranded far from land on a piece of ice that continues to melt. COVID-19 and increasing political restrictions on the global flow of scholars and scholarship are turning up the heat.

A huge problem is that university budgets rely on tuition.

If rising freshmen and incoming masters student cohorts do not show up in the fall their absence will impact schools for the next five years and may do lasting damage to universities as organizations. The pressure to bring students back is existential for some universities. There is no way to effectively

protect such a large group of people, some of whom are seeking a college experience that is neither masked nor socially distant and estimate their risk of severe illness as very low.

In the end, this is not just a problem for universities. Opening schools will send CV19+ people back into homes and communities, perpetuating high rates of transmission that are sickening the US physically and economically. When universities reopen this fall, case counts will go up, and the entire country will suffer the writhing, agonized choices made by a polar bear trapped on an ice cube.

Read the entire essay at <https://medium.com/@laura.noren>.

Academic Data Science News

[UI College of Engineering uses artificial-intelligence to solve research\[sic\] problems across campus](#) (University of Iowa, The Daily Iowan, Lillian Poulsen)

[Bren School to Offer Master's Degree Program in Environmental Data Science](#) (Noozhawk.com, University of California-Santa Barbara)

[Penn State launches online master's degree in spatial data science](#) (EdScoop, Betsy Foresman)

[Virginia Tech launches data science academy](#) (Roanoke Times, Henri Gendreau)

[NYU Steinhardt Researchers Receive \\$8.1 Million From the Institute of Education Sciences](#) (New York University, News Release)

[Gallo Management School Proposal Moves Forward](#) (University of California-Merced, Newsroom)

[UA receives \\$194.7M Walton grant to boost research; part of funding to support Bentonville 'campus'](#) (Talk Business & Politics, Paul Gatling)

[At \\$23.7 million, largest NSF grant in university history to renew Brown's math institute](#) (Brown University, News from Brown)

[National Science Foundation awards \\$15.5M to launch math institute at UChicago](#) (University of Chicago, UChicago News)

[Danforth Center Scientist Receives \\$1.4M Grant To Develop Smart Farm Technology](#) (Donald Danforth Plant Science Center)

Editor's Picks

[What Numbers Can—and Can't—Tell Us About the Pandemic](#) (New York University, NYU News)

[CDC workers protest racism at agency](#) (Science, Meredith Waldman)

[Breakthrough in negotiations with large publishing houses](#) (Swiss National Science Foundation)

[How the Simulmatics Corporation Invented the Future](#) (The New Yorker, Jill Lepore)

[Why Do We Need a Climate School?](#) (Columbia University, Earth Institute, State of the Planet blog, Alex Halliday)

Research News

[These scientists are using machine learning to listen to nature \(literally\)](#) (Grist, Alexandria Herr)

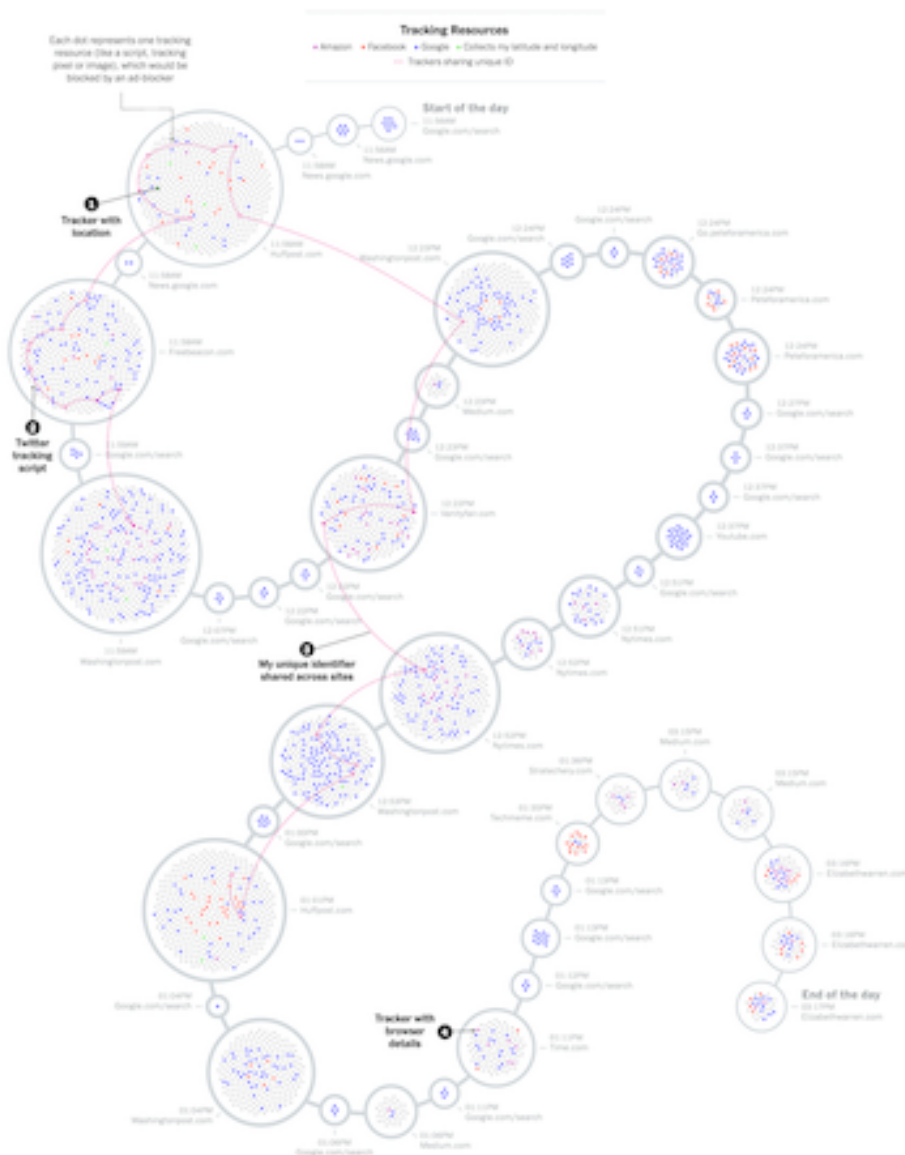
[Reading the Unreadable: Seales and Team Reveal Dead Sea Scroll Text](#) (University of Kentucky, UK Now)

[Customizable smart window technology could improve energy efficiency of buildings](#) (Argonne National Laboratory, Press Release)

- How small satellites are radically remaking space exploration (Ars Technica, Eric Berger)
- Low availability of code in ecology: A call for urgent action (PLOS Biology; Antica Culina , Ilona van den Berg, Simon Evans, Alfredo Sánchez-Tójar)
- Studying whales with high-tech tools (Stanford University, Stanford News)
- Deep learning–based cell composition analysis from tissue expression profiles (Science Advances; Kevin Menden, Stefan Bonn et al.)
- Researchers develop 3D hand-sensing wristband (Cornell University, Cornell Chronicle)

Data Visualization of the Week

Twitter, Nadieh Bremer from August 03, 2020



Tools & Resources

NSTM: Real-Time Query-Driven News Overview Composition at Bloomberg

arXiv, Computer Science > Computation and Language; Joshua Bambrick, Minjie Xu, Andy Almonte, Igor Malioutov, Guim Perarnau, Vittorio Selo, Iat Chong Chan from June 01, 2020

"Millions of news articles from hundreds of thousands of sources around the globe appear in news aggregators every day. Consuming such a volume of news presents an almost insurmountable challenge." ... "We realized that a new kind of summarization engine was needed, one that would condense large volumes of news into short, easy to absorb points."

new Python package to allow easy access to the NHANES data

GitHub - Russ Poldrack from July 07, 2020

"NHANES is the National Health and Nutrition Examination Survey, which is run by the US Centers for Disease Control. Every year, the study examines a representative sample of about 5000 individuals from across the United States, using a broad range of surveys, physiological measurements, and laboratory tests. These data are useful for many purposes --- the main interest of the developer is to use them in teaching introductory statistics. There is a R package that provides access to the NHANES dataset, and the present package is meant to provide similar access to python users."

Bookclub on Data Science Ethics

Teach Data Science, Hunter Glanz & Jo Hardin & Nick Horton from July 13, 2020

"The ethics of data science is no different than any other topic we would cover in our classes. The more compelling the case study, the more engaging the conversation around the ethical topic can be. In recent years, we have found ourselves awash in materials that provide excellent readings for classroom discussions or peer-to-peer bookclubs."

"Below, we provide a handful of suggestions for reading with your students or your colleagues. We then suggest different ways to continue the conversation by asking good questions."

Bringing an AI Product to Market

O'Reilly Radar; Justin Norman, Peter Skomoroch and Mike Loukides from July 28, 2020

"If you're an AI product manager (or about to become one), that's what you're signing up for. In this article, we turn our attention to the process itself: how do you bring a product to market?"

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