

Timeline

FOR PRESENTATION DEVELOPMENT

Please note that these dates are HARD deadlines. A failure to meet any of the above deadlines may result in incomplete or incorrect presentations available at the final event.

- June 6** Dry run #1 with initial presentation in template
- June 15** Dry Run #2 with presentation in template
- June 21** Presentation is sent to designer
VERSION CONTROL: no edits may be made by the presenter during this time without designer communication
- July 5** Designer sends back presentation
- July 7** Dry Run #3
- July 12** Final edits due to designer for compilation
R&A: please send your presentation through R&A at this time as designer will not be altering any content, and provide the designer with your SAND number when it is approved.
- July 18** Final edits returned to presenters
- July 19** Compile final presentations
- July 21** **SANDIA TALKS**

SANDIA TALKS



Sharing is caring:

The open data initiative
at Sandia Labs

opendata.sandia.gov (Sandia Open Data Access)

Tony Alberti, Org. 6376





What is open data?

Open data is data that can be freely used,
re-used and redistributed by anyone*



What is **Sandia** open data?

Open data is data that can be freely used,
re-used and redistributed by anyone **on the SRN**

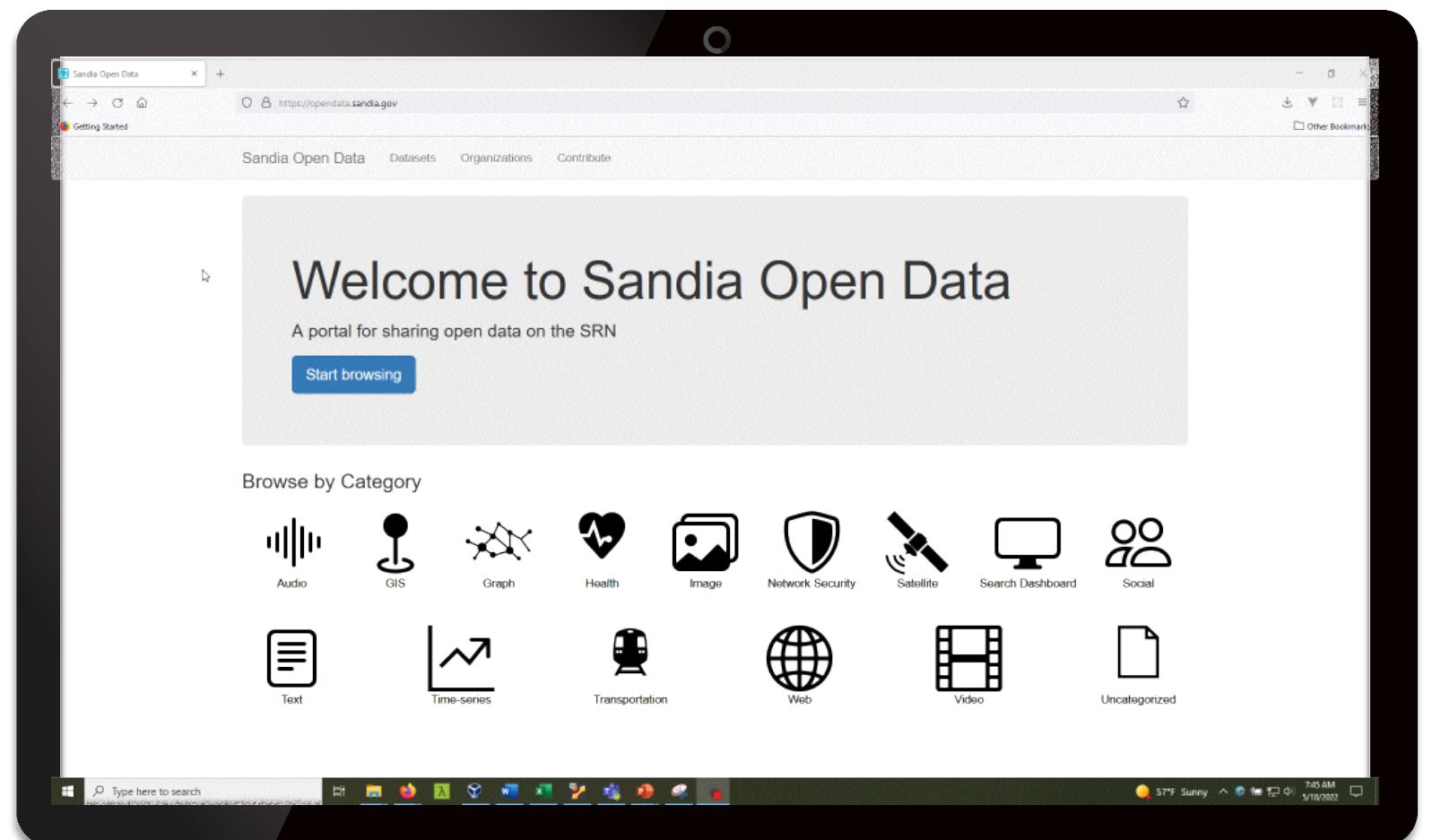
Shared Pain Points



Shared Pain Points



opendata.
sandia.gov

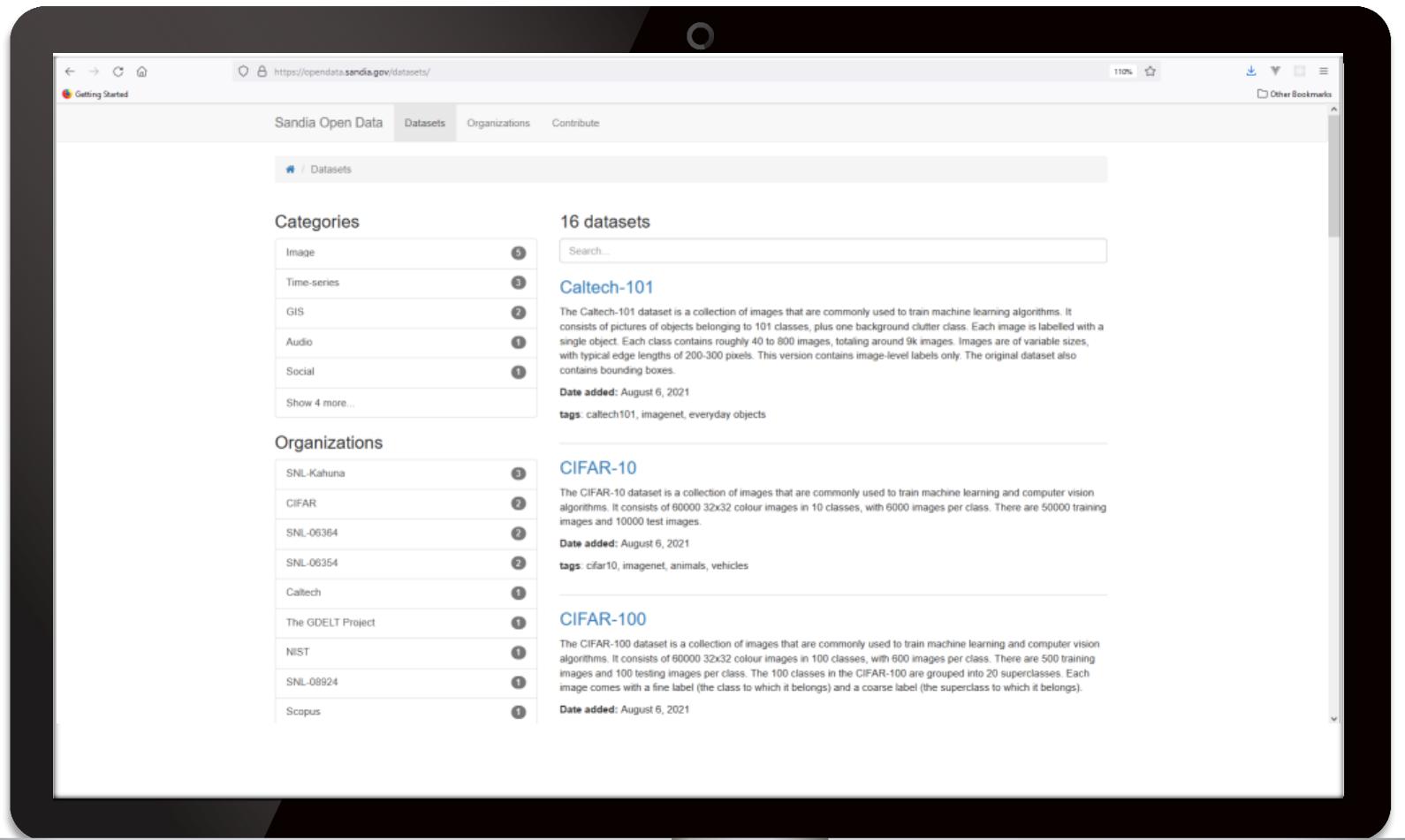


How did big tech address this?

- DataHub (LinkedIn)
- Amundsen (Lyft)
- Marquez (WeWork)
- Databook (Uber)
- Lexikon (Spotify)



Low Maintenance & Simplicity



Bettering the Platform

CONTINUED OUTREACH

Reaching out to potential users, **investigating** what users want in the platform, and **making informed decisions** on what we believe should be incorporated from those interviews



Bettering the Platform

CORPORATE STORAGE

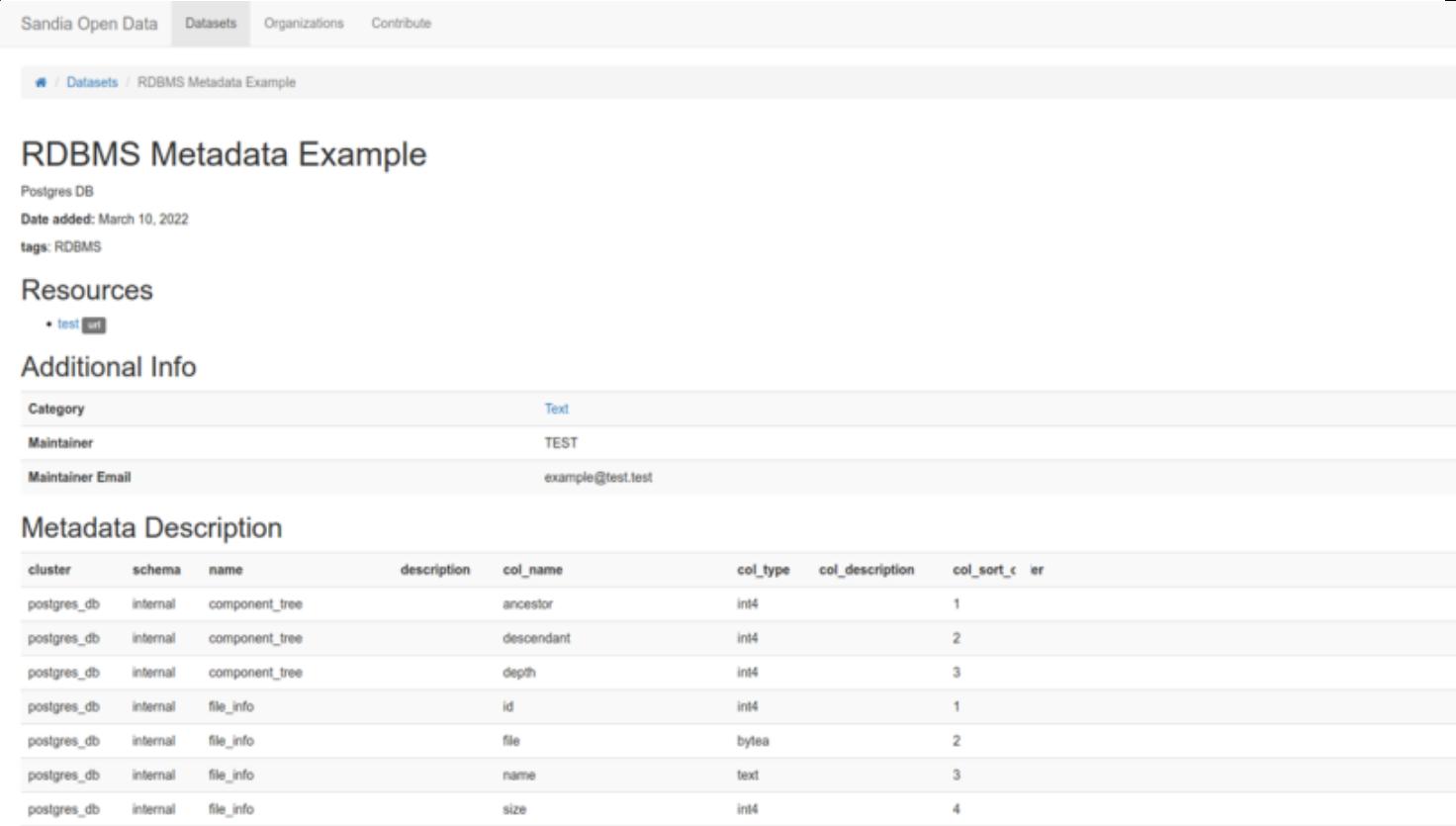
Corporate provided petabyte storage available.

Could be used as an option if people don't have a place to host their data.



Bettering the Platform

RDBMS METADATA



The screenshot shows a web page titled "RDBMS Metadata Example" under the "Datasets" section of the Sandia Open Data website. The page includes basic metadata (Postgres DB, March 10, 2022, RDBMS tag), a "Resources" section with a link to "test.sql", and an "Additional Info" section with maintainer and email information. The "Metadata Description" section contains a table of database schema details.

cluster	schema	name	description	col_name	col_type	col_description	col_sort_order
postgres_db	internal	component_tree		ancestor	int4		1
postgres_db	internal	component_tree		descendant	int4		2
postgres_db	internal	component_tree		depth	int4		3
postgres_db	internal	file_info		id	int4		1
postgres_db	internal	file_info		file	bytea		2
postgres_db	internal	file_info		name	text		3
postgres_db	internal	file_info		size	int4		4

Bettering the Platform

SYNTHETIC DATA GENERATION

Created by Sarah Ackerman

 **Splatter**  Project ID: 10122  [Request Access](#)

44 Commits 1 Branch 0 Tags 410 KB Files 410 KB Storage

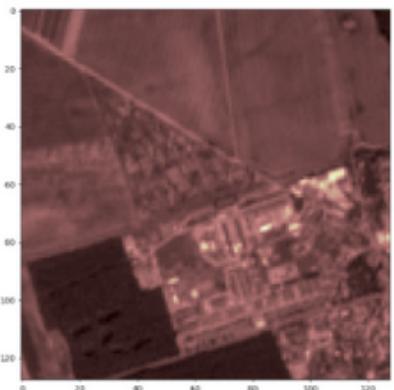
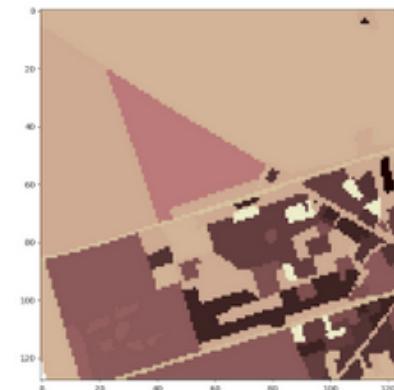
Generates a synthetic timeseriesdataset with four columns: timestep, is_target, value, and class_label from images of curves drawn in MS Paint or other software.

master  splotter /      

Created by Andy Lai and Dalton Cole

Generative Adversarial Networks for Satellite Data

Created by Andy Kenneth Lai, last modified by Don Lyons on Sep 11, 2021



Takeaways

Open data solutions **reduce friction in day-to-day work**, and a good way to implement one is to have a single entry point for finding all open data.

Takeaways

CONTINUED

Large tech companies have invested resources and formed entire teams coming up with solutions of how to best tackle this problem.

Bottom line: These pain points are shared from all organizations that depend on data to do their jobs.

Takeaways

CONTINUED

Having a **lightweight architecture** with **low barrier to entry** where users can **share open or even slightly access-controlled datasets** is how *opendata.sandia.gov* alleviates these pain points

We are **continuously searching for relevant data to add to the platform**. If you have:

- Unstructured data
- Processed/cleaned/labeled/derivative data from popular datasets
- A relational database you'd like to share metadata from
- Synthetic data generation tools
- Anything else that matches the decision tree from the *Contribute* page

Let us know!

<https://opendata.sandia.gov/contribute/>

SANDIA TALKS

THANK
YOU



Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.



SANDIA TALKS

NEXT TALK
WILL BEGIN AT

