Datathon and Machine Learning Competition on Antisemitism Workshop 2 – Creating a Discourse Dataset from X

Presentation available at:

https://github.com/damieh1/datathon_2025/blob/main/workshop_2.pdf

What happened so far?

Workshop 1 Recap:

- Prof. Jikeli introduced patterns of antisemitism online
- Focus on dynamics before and after October 7

Conceptual and Theoretical Background:

Reach out to him with questions about content/context

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Günther Jikeli, Daniel Miehling, and Damir Cavar Research Lab *Social Media & Hat*e

Online Antisemitism Before and After October 7

Datathon & Machine Learning Competition

Missed it? His slides are available in the GitHub repo

Team formation:

- Most groups should be in place by now
- Team Communication & Responsibilities



Today's Session

- 1. Bright Data Introduction
- 2. Hands-on Session for Challenge #1
 - Work in your teams to collect, annotate, and prepare data
- 3. Q&A → Conceptual: Prof. Jikeli | Content: Dr. Miehling | ML: Prof. Cavar

Meet the Instructors



Workshop #1

Prof Günther Jikeli

gjikeli@iu.edu



Workshop #2

Dr Daniel Miehling

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Workshop #3

Prof Damir Cavar

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Workshop Schedule Overview

Date	Focus		Description
July 13	Workshop 1 – Kickoff	✓	Input on antisemitism online & team formation
July 20	Workshop 2 – Challenge #1		Scraping, annotating, exporting discourse data (Hands-On Session)
July 27	Workshop 3 – Challenge #2		Automated Content Detection: The Basics
August 5	Final Submission Deadline		Submit both challenge deliverables and documentation

Bright Data



https://www.youtube.com/watch?v=AGaiVApKfmc

Tutorial Challenge #1

Team Setup, Roles & Prerequisites

Each team should have:

- Data Manager → uses Bright Data for scraping
- **Portal Manager** → sets up the annotation project
- Annotation Team → annotates and reviews the content
- Discuss roles & workflow internally
- Don't forget to choose a team name or tag!

Access to Key Links

- Challenge Description (PDF)
- Annotation Portal
- GitHub Overview
- Colab Script for Preprocessing

Agenda & Objectives

Agenda

- 1. Working with X's Advanced Search
- 2. Scraping with Bright Data
- 3. Pre-Processing the Data
- 4. Annotations Portal Walkthrough

Objectives: What You'll Learn Today:

- How the Annotation Portal works
- How to approach the ML challenge
- Where to find tools and datasets
- How to succeed as a team

Prerequisites & Setup

Before You Start:



A computer with internet access



A X account



A Gmail account



Access to Google Colab (https://colab.research.google.com/)

Stop & Do Now:



Register on the Annotation Portal: https://annotate.osome.iu.edu



Check Github: https://github.com/AnnotationPortal/DatathonandHackathon.github.io/blob/main/README.md



Read Challenge Description: https://github.com/damieh1/datathon_2025/blob/main/Datathon_Challenge.pdf

Challenge #1

Subtasks include:

- 1. Define your scraping focus (hashtags, user groups, topics) and document your rationale and potential biases.
- 2. Use the <u>Bright Data</u> interface to scrape at least 100 relevant user-generated posts from <u>X.com</u>.
- 3. Annotate your data using a structured definition of antisemitism and hate speech.
- 4. Prepare a <u>X/Twitter dataset</u>, and include a dataset report with label definitions, distribution information, and annotation rationale.

Earn Bonus Points

Deliverables for Challenge #1

- Adapting and implementing an existing definition of antisemitism
- Reporting how the data was scraped and which guidelines were used to classify and annotate the data in a standardized way

Gain **+10 bonus points** by evaluating the consistency of your team's annotations using an interannotator agreement (IAA) metric.

This means:

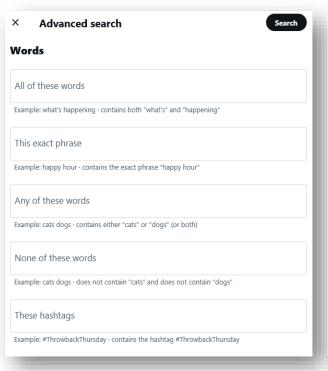
- Having at least two annotators label a shared subset of the data
- Calculating a formal agreement score, such as:
 - Cohen's Kappa (for binary or pairwise categorical annotation)
 - Krippendorff's Alpha (especially for multi-class or missing data)

Clearly report:

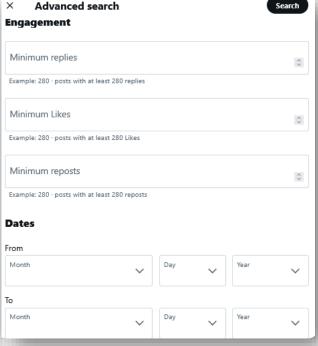
- Which subset was double-annotated
- Your score and a brief interpretation (e.g., "moderate agreement," "high agreement")

Working With X's Advanced Search Function

Top of the pop-up menu



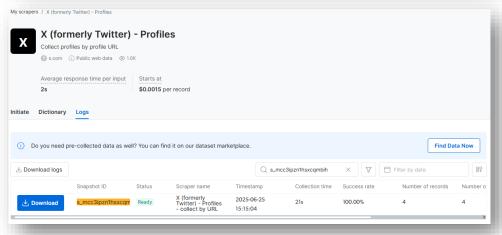
Bottom of the pop-up menu



- Go to: → X (Twitter) → https://x.com/search-advanced
- 2. Specify dates, e.g., May 8, 2024.
- 3. Click "Search."
- 4. Select posts with a minimum of 200 views.
- 5. Go to user profiles and copy URLs to a spreadsheet.
- 6. Goal: Find a wide range of users who engage in online discourse.

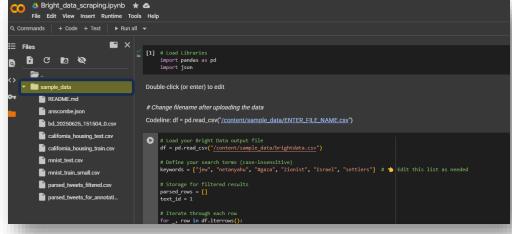
Working With Bright Data

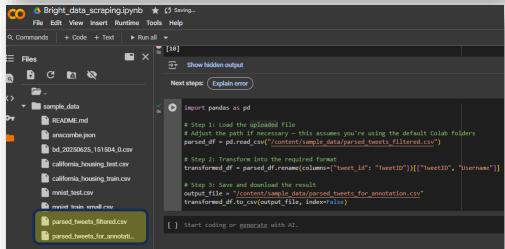




- Go to: Bright Data → Web Scrapes → X (Twitter) → Posts → Discover by URL → https://brightdata.com/cp/scrapers/no_code
- 2. Click: Add Inputs → https://x.com/RandomXUser
- 3. Specify Number of Posts → max. 250 per User
- 4. Start Collecting → Runes the Query
- 5. Download Output as .CSV

Working With Google Colab





- 1. Go to: Google Colab → https://colab.research.google.com
- 2. Upload: Bright Data Output .CSV
- 3. Parse Data
 - → Run Code on Colab
- 4. Prepare Data for Annotation Portal
 - → Run Code on Colab
- 5. Download compatible .CSV Output

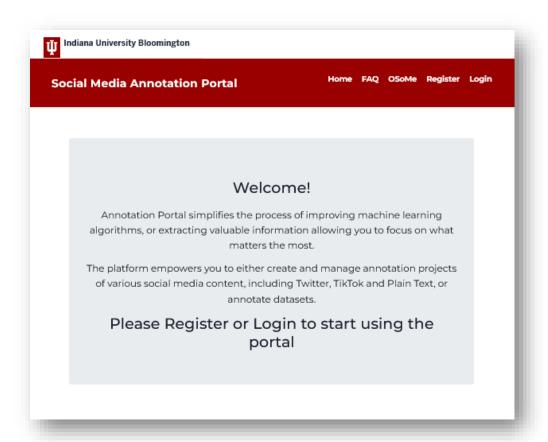




Annotation Portal Walkthrough

Use the Annotation Portal:

- 1. Create New Project
- 2. Create a Sample
- 3. Create Annotation Scheme and Questions
- 4. Important! Do not start annotating before the schema has been fully created.
- 5. Export when done



https://annotate.osome.iu.edu/

What's next?

- Work with your Team on Challenge #1
- iii Important Dates:
 - Workshop 1 July 13: Kick-Off & Introduction (Team Assignment & Communication)

- **✓**
- Workshop 2 July 20: Hands-On Session (Data collection, preprocessing & annotation)
- **~**
- Workshop 3 July 27: Introduction to Automated Detection (ML modeling & evaluation)
- Final submission deadline: August 5.
- All materials available at:
 - https://github.com/damieh1/datathon 2025
- Q&A We'll now open the floor for questions!

Thanks for your attention

Dr. Daniel Miehling

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