

Capturing the Web Today for Tomorrow

Innovations in capturing and analyzing social
media and websites for the new scholarly record



Nick Ruest (@ruebot)
Ian Milligan (@ianmilligan1)



The background of the image shows a library shelf filled with books. The books are arranged in rows, and their call numbers are visible on the spines. The call numbers include 372, 373, 374, and 375. The text is overlaid on this background.

We have a **problem
facing our
collective cultural
heritage.**

Welcome to GeoCities Home X

web.archive.org/web/19961220165813/http://www.geocities.com/

1,662 captures
27 Oct 96 - 4 Sep 97

FOR A BLAST FROM TV's PAST
Click here for a Blast from TV's past!

GEOCITIES YOUR HOME ON THE WEB

- ENTER HERE
- INFORMATION
- NEIGHBORHOODS
- WHAT'S NEW
- WHAT'S COOL
- WHAT IS GEOCITIES?

* Free Home Pages & Free Member Email Advertiser Information

GeoCities Daily Audio Update -- Sponsored by IBM VoiceType Simply Speaking

Today's Cool Homestead
Yosemite4273
Sunsets, coastal seagulls and flowers are part of the photographic fare at inetd's homepage.

GeoCities News of the Day - 12/20/96

GEOCITIES LIVE CHRISTMAS TREE!
ON CAMERA!

Building a home page for the holidays?
Submit your letters to Santa, favorite holiday recipes and other holiday cheer to our special NorthPole neighborhood. And share your holiday spirit with GeoCitizens around the world by helping us trim our [virtual holiday tree!](#)

Live at the GeoCities Mainstage

Check out our [schedule of events](#) and be a part of the next show...

Cigardude's Smoking Room - Netscape

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop

Bookmarks Location: <http://www.geocities.com/NapaValley/1070/>

The Smoking Room

Welcome to the Cigar Dude's Smoking Room

You are visitor number



since June 5, 1996

Your Choices

- [Cigars](#)
- [Wine](#)
- [Beer](#)
- [Links](#)
- [Home](#)

NETSCAPE Now!

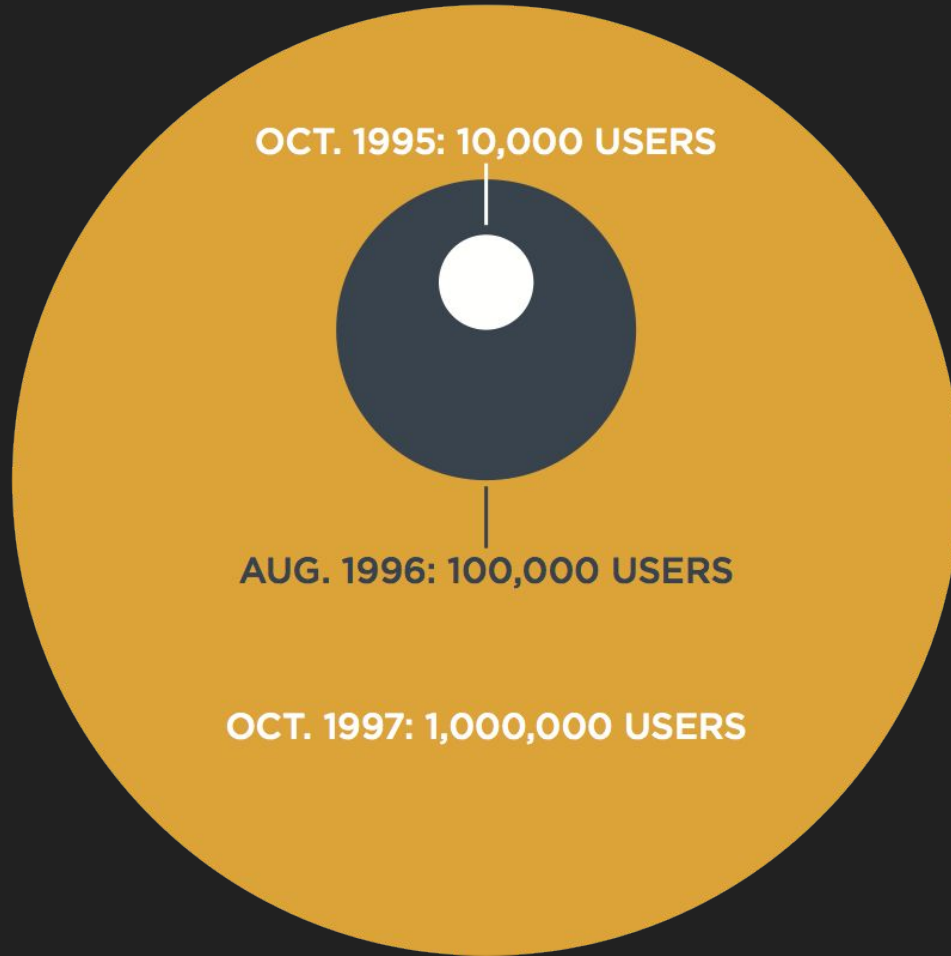
The main purpose of this page is to give me a forum to voice my views and opinions on cigars, good beer and fine wine. It's also a pretty good way for me to learn HTML. This page was first created on May 8, 1996 and will take some time to evolve, so if you are into cigars you might want to check back every once in a while to see what's up. It is always nice to know what other people

Welcome to my home page, devoted to some of the finer pleasures in life: good cigar

Start Cigardude's Smoking ...

00:36

GEOCITIES USERS:

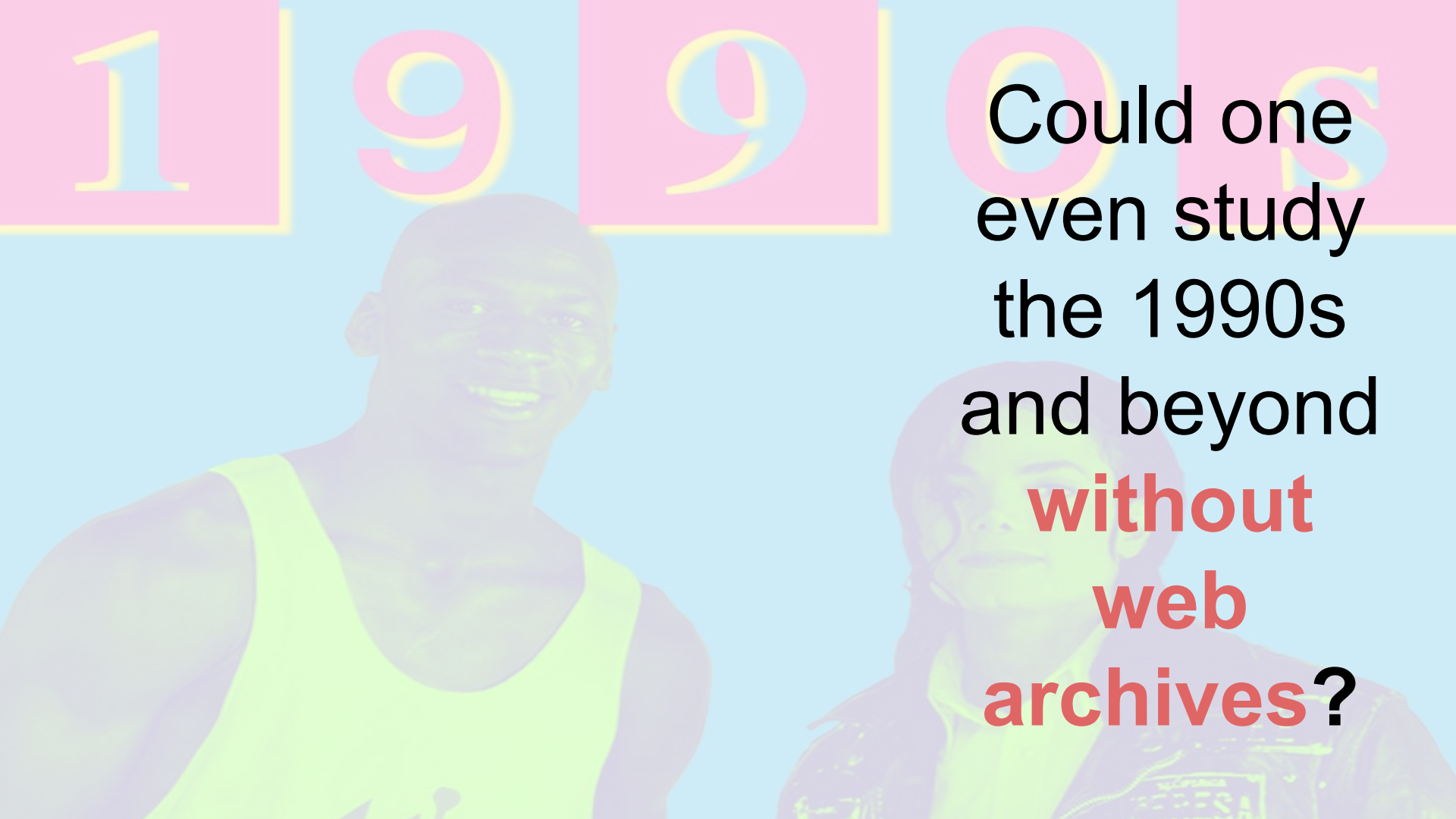


This is a scale that **boggles
the mind** – compare it to the
Old Bailey **197,745** trials
between 1674 and 1913)

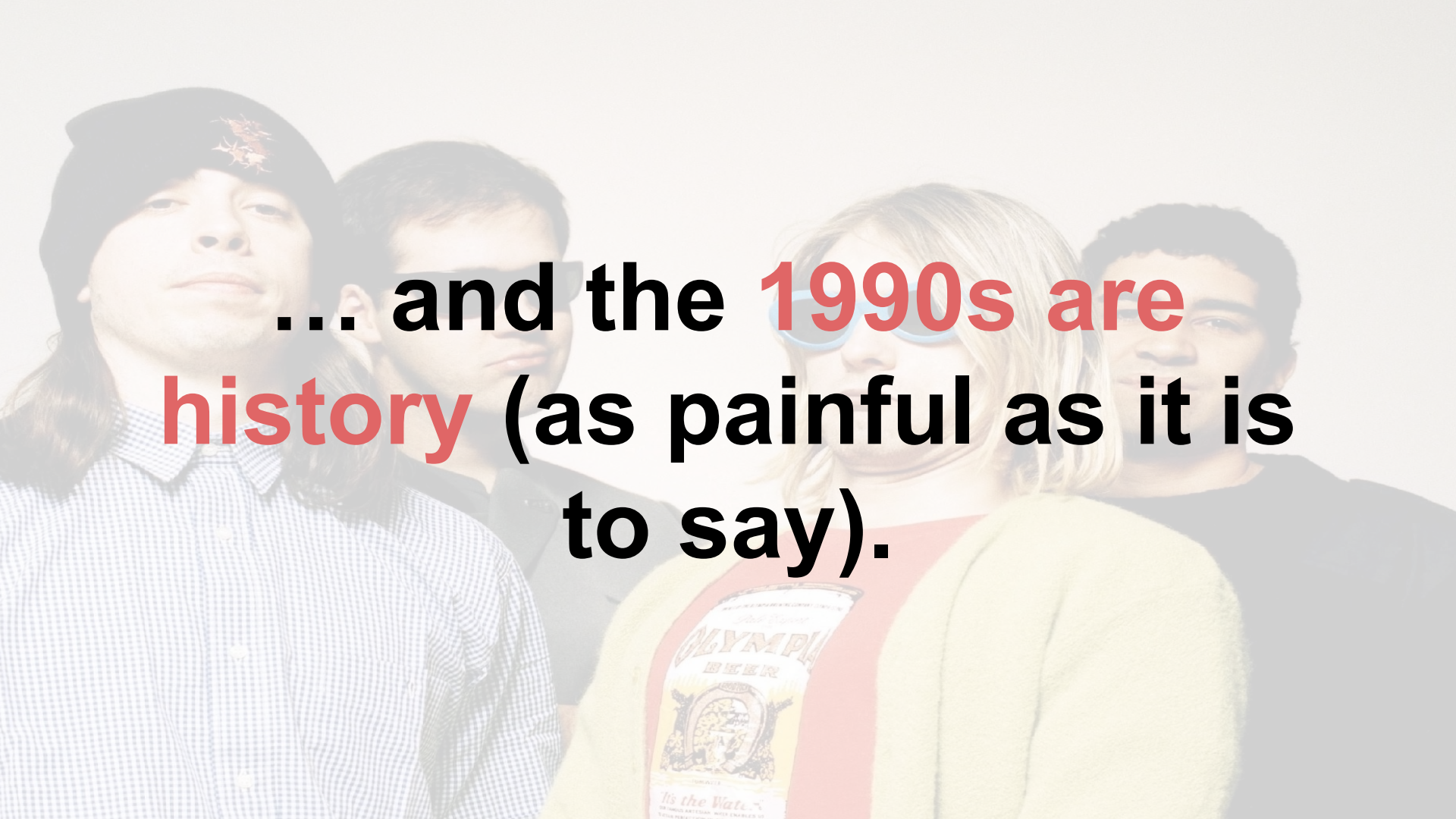
Scarcity

The background of the image shows a series of grey archival boxes arranged on shelves. Each box has a white label with black text. The labels are for 'CONGRESSIONAL ARCHIVES' and 'THOMAS P. O'NEILL PAPERS'. Some labels also mention 'Series V', 'PARTY LEADERSHIP / ADMINISTRATIVE FILES', 'Democratic Party', and 'BOX 30'. The boxes are numbered with small white labels, such as '370', '371', '373', and '375'.

Scarcity Abundance



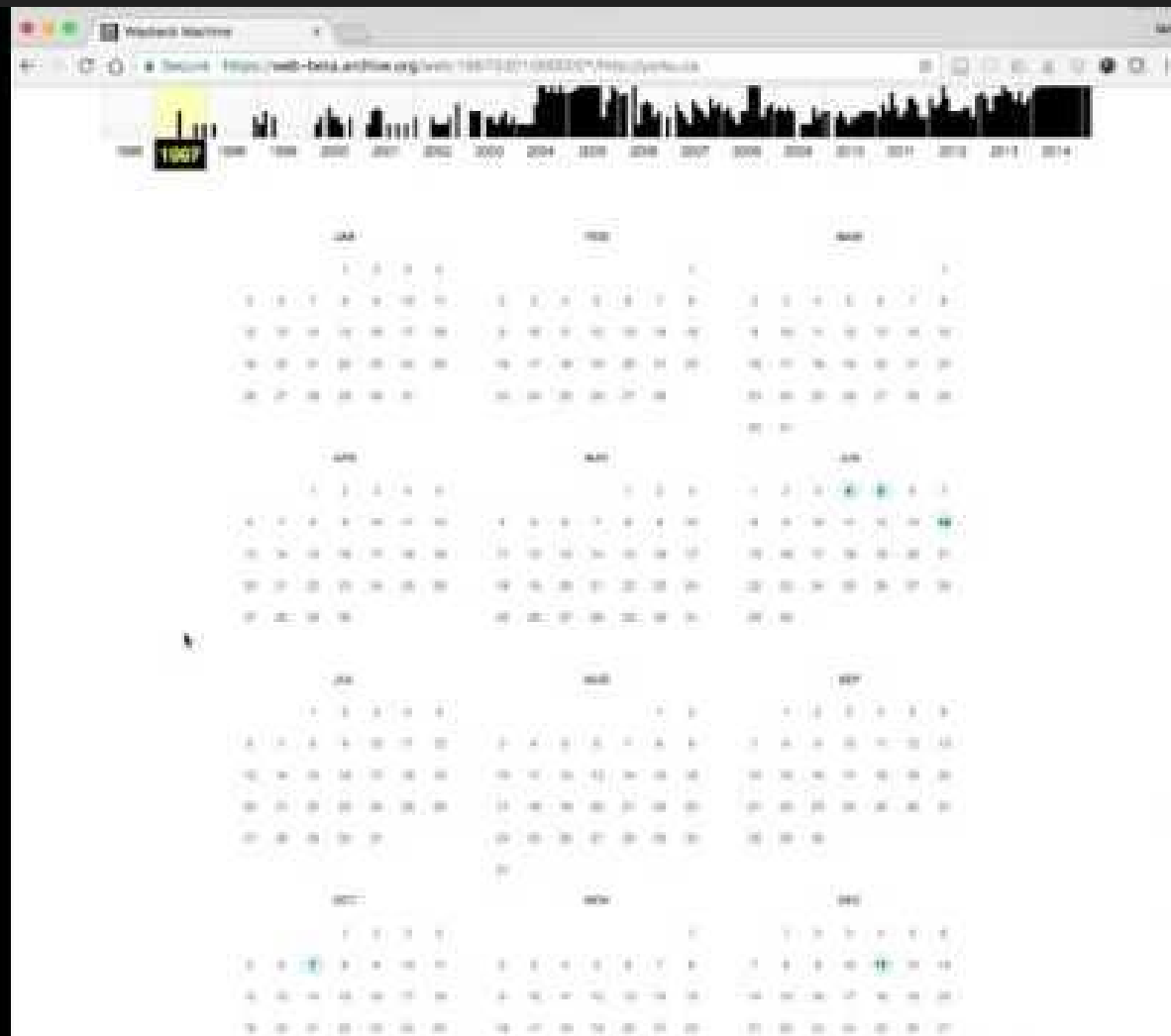
Could one
even study
the 1990s
and beyond
**without
web
archives?**



**... and the 1990s are
history (as painful as it is
to say).**

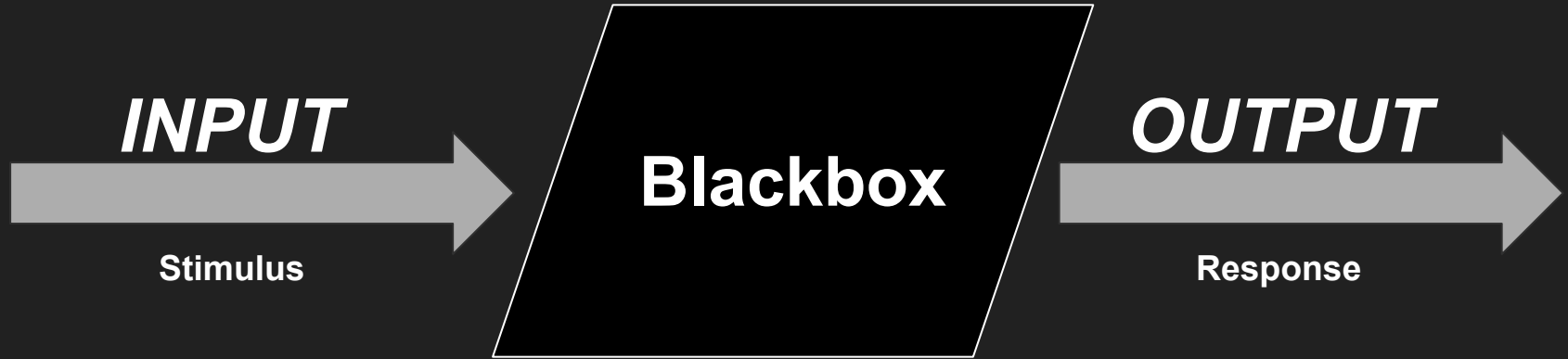
And we have fears...

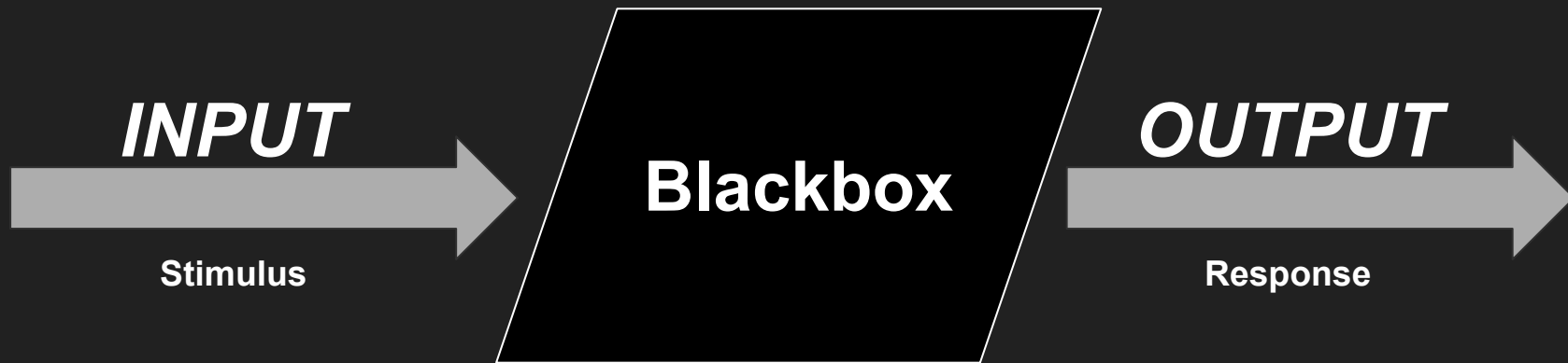
**The decisions we make
today will lay the
foundations for how we
work with born-digital
cultural heritage.**



**Won't be enough - we'll need search
engines and discovery tools.**

But what will our search engines look like?



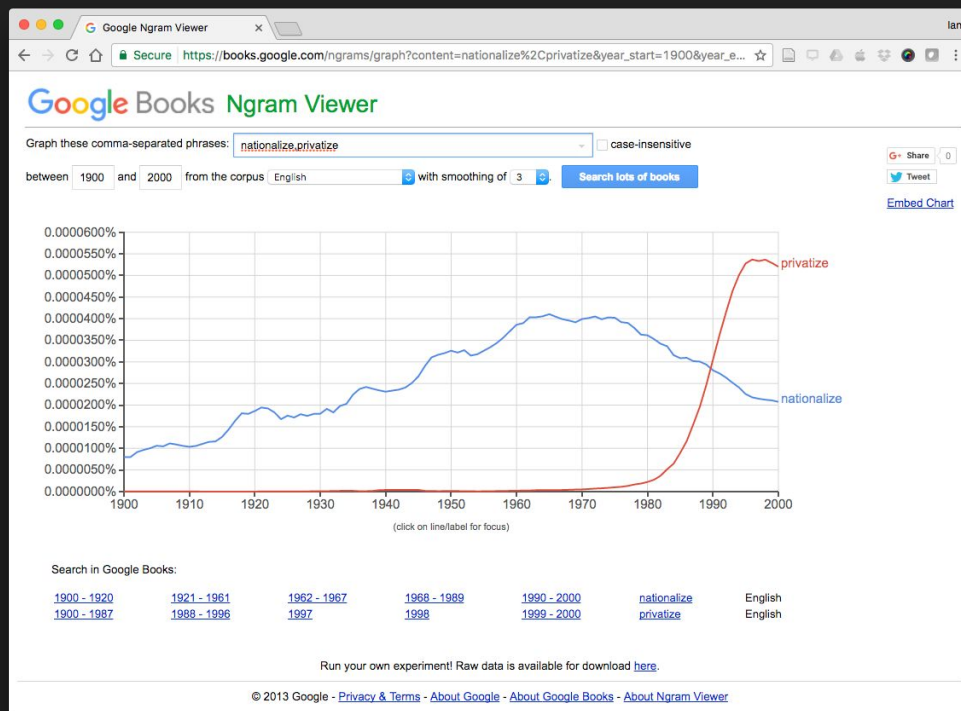


We can't let the Blackbox write our histories.

Our nightmare:

Historians rely uncritically on
date-ordered or algorithmically-ranked
keyword search results, putting them at
mercy of search algorithms they do not
understand.

Some disturbing trends in this area...



The historians who came to the meeting were **intelligent, kind, and encouraging**. But they didn't seem to have a good sense of how to wield quantitative data to answer questions, didn't have relevant computational skills, and didn't seem to have the time to dedicate to a big multiauthor collaboration. It's not their fault: these things don't appear to be taught or encouraged in history departments right now.

-Erez Leiberman Aiden and Jean-Baptiste Michel

We need
interdisciplinary
collaboration to
tackle this problem!



Social Sciences and
Humanities Research
Council of Canada

Conseil de recherches
en sciences humaines
du Canada

Canada



compute
canada

calcul
canada

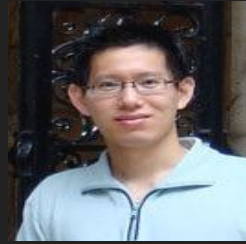
Team(s)

Web Archives for Historical Research

Historians



Computer Scientists



Librarians Archivists



Governance



Projects & Platforms

webarchives.ca

Shine

<https://github.com/ukwa/shine/>

Canadian Political Parties & Political Interest Group Collection (ARCHIVE-IT/Toronto)

- 50 Websites
 - All major political parties
 - Many minor political parties
 - Political interest groups
- Collected quarterly between 2005 and present

[HOME](#) [THE TEAM](#) [THE PARTY](#) [ISSUES](#) [MEDIA CENTRE](#) [YOUR RIDING](#) [DONATE](#)



ADDRESS BY PRIME MINISTER PAUL MARTIN

TAKE ACTION TODAY!



Your Excellencies, Honourable Members, Ladies and Gentlemen:

Let me begin by expressing, on behalf of all Canadians, our appreciation to the Right Honourable Adrienne Clarkson and John Ralston Saul. With warmth, intelligence, and wit, they have honoured this high office and made an indelible contribution to our nation.

Over the course of six years, Madame Clarkson recognized achievement, decorated bravery, bore witness to tragedy and grief, and encouraged the disadvantaged. She welcomed foreign visitors and eloquently explained before audiences abroad what it is that makes Canada special. She took great interest in our cities and towns, and especially the north. She traveled to more than 200 communities across Canada; in some of them, it was the first-ever visit by a representative of the Crown.

[Full Story](#)

Stay Informed

Top Stories

September 29, 2005
Statement by the Prime Minister on the retirement of John Hamm, Premier of Nova Scotia

September 28, 2005
Charity Barbecue Raises \$125,000 for Hurricane Katrina Victims

September 27, 2005
Address by Prime Minister Paul Martin at the installation of the new Governor General

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The Current Interface..

- **Very limited** - simple search engine, some advanced options; no facets
- **Great collection..** But nobody uses them.

HOMEEXPLORELEARN MORECONTACT US

The leading web archiving service
for collecting and accessing
cultural heritage on the web
Built at the Internet Archive



Explore >> University of Toronto >> Canadian Political Parties and Political Interest Groups



Canadian Political Parties and Political Interest Groups

Collected by: [University of Toronto](#)

Archived since: Oct, 2005

Description: Canadian Political Parties and Political Interest Groups will archive the websites of all of the national Canadian political parties, and a number of special interest groups across the political spectrum.

Subject: [Politics & Elections](#)

Collector: [University of Toronto](#)

Enter a search term on the right to search the text within the archived pages. Or for more search options, use the Advanced Search options below.

Advanced Search

Contains all of:

Exact phrase:

Not containing:

From the Host:

Results per host:

File format:

Capture date range:
From: To:

 Help with Search

Sites for this collection are listed below. Narrow your results at left, or enter a search query below to find a site, specific URL or to search the text of archived webpages.

The following results were found for the term(s): stephen harper

- No metadata results for stephen harper, but there are up to 1233056 matches within the page text.

Search Page Text

Page 1 of 61,653 (1,233,056 Total Results)

Sort By: [Best Match](#)

Stephen Harper | Facebook

URL: <http://www.facebook.com/pages/Stephen-Harper/9106562109>
This text was captured on May 02, 2009 [Show All Captures](#)
Stephen Harper | Facebook Remember Me Forgot your password? Sign Up Stephen Harper is on Facebook Sign up for Facebook to connect with Stephen Harper. Information Country: Canada Currently... Stephen Harper | Showing 10 photos Most Recent | Edit Pictures YouTube Box 10 of 13 See all PM on Wolf... the Prime Minister 11:28am Dec 22 | 30 Comments Create a Page Report Page Stephen Harper Wall Info Boxes Notes Stephen Harper + Fans Just Stephen Harper Just Fans Stephen Harper Celebrating... Stephen Harper Launched the Apprenticeship Completion Grant. \$2000 to eligible apprentices. <http://tinyurl.com/cqzyvy> April 9 at 11:47am Stephen Harper 'Lest we forget.' Statement on the 92nd anniversary of the battle of Vimy Ridge. <http://bit.ly/ERb1l> April 9 at 11:25am Stephen Harper Announced new...
Content: text/html Size: 108 KB
[More Results from facebook.com](#)

Stephen Harper (pmharper) on Twitter

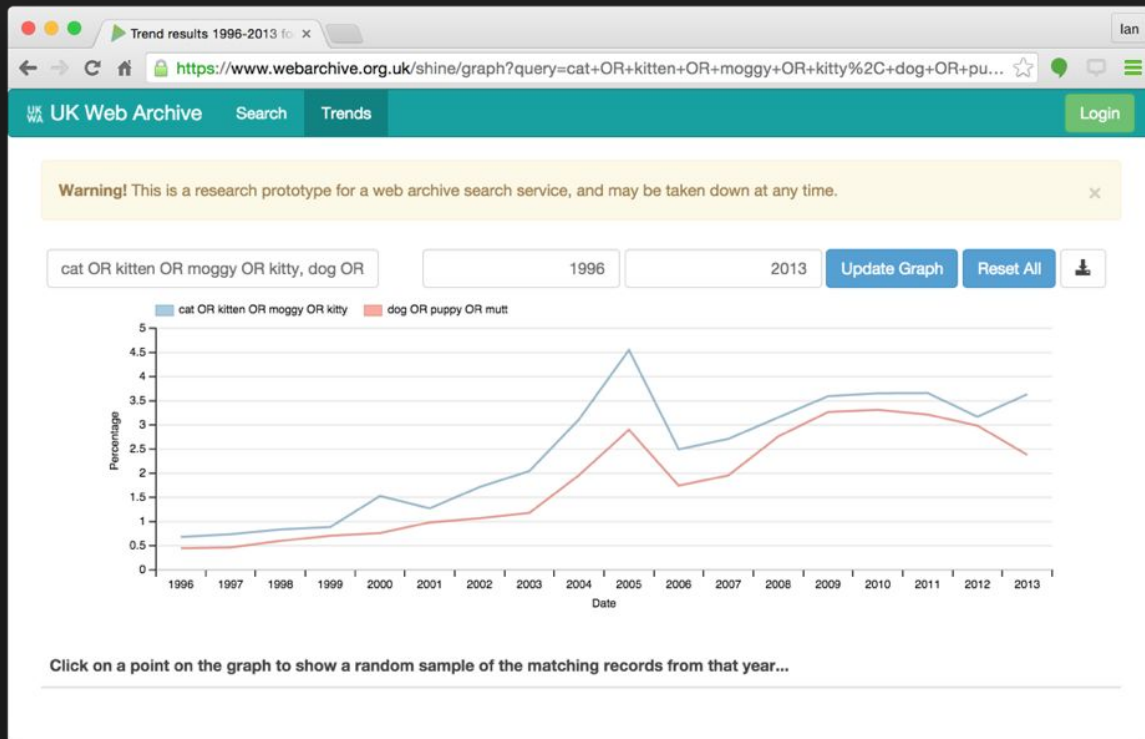
URL: <http://twitter.com/PMHarper>
This text was captured on Aug 03, 2010 [Show All Captures](#)
Stephen Harper (pmharper) on Twitter Skip past navigation On a mobile phone? Check out m.twitter.com ! Skip to navigation Skip to sign in form Have an account? Sign in Username or email Password Remember me Forgot password? Forgot username? Already using Twitter on your phone? Get short, timely messages from Stephen Harper. Twitter is a rich source of instantly updated information. It's easy to stay updated on an incredibly wide variety of topics. Join today and follow @pmharper. Get updates via SMS by texting follow pmharper to 40404 in the United States Codes for other countries Two-way (sending and receiving) short codes: Country Code For customers of Australia 0198089488 Telstra Canada... Account Name Stephen Harper Location Ottawa, Ontario Web <http://www.conser...> Bio Prime Minister of...
Content: text/html Size: 46 KB
[More Results from twitter.com](#)

The Walrus » The Man Behind Stephen Harper » Tom Flanagan » politics

URL: <http://www.walrusmagazine.com/articles/the-man-behind-stephen-harper-tom-flanagan/>
This text was captured on Aug 03, 2010 [Show All Captures](#)

14 Million Solr docs!

Shine





Twitter

twarc

docnow.io

Twitter Developer Documentation

[Docs](#) / [REST APIs](#) / The Search API

Products & Services

[Best practices](#)

[API overview](#)

[Websites](#)

[Cards](#)

[OAuth](#)

REST APIs

[API Rate Limits](#)

[Rate Limits: Chart](#)

[The Search API](#)

[The Search API: Tweets by Place](#)

[Working with Timelines](#)

[Collections](#)

[Media](#)

[Curator](#)

[Search](#)

[TON](#)

[Reference Documentation](#)

The Search API

The Twitter Search API is part of Twitter's REST API. It allows queries against the indices of recent or popular Tweets and behaves similarly to, but not exactly like the Search feature available in Twitter mobile or web clients, such as [Twitter.com search](#). The Twitter Search API searches against a sampling of recent Tweets published in the past 7 days.

Before getting involved, it's important to know that the Search API is focused on relevance and not completeness. This means that some Tweets and users may be missing from search results. If you want to match for completeness you should consider using a [Streaming API](#) instead.

A detailed reference on this API endpoint can be found at [GET search/tweets](#).

How to build a query

The best way to build a query and test if it's valid and will return matched Tweets is to first try it at [twitter.com/search](#). As you get a satisfactory result set, the URL loaded in the browser will contain the proper query syntax that can be reused in the API endpoint. Here's an example:

1. We want to search for Tweets referencing @twitterapi account. First, we run the search on [twitter.com/search](#)
2. Check and copy the URL loaded. In this case, we got: <https://twitter.com/search?q=%40twitterapi>
3. Replace "[https://twitter.com/search](#)" with "[https://api.twitter.com/1.1/search/tweets.json](#)" and you will get:
<https://api.twitter.com/1.1/search/tweets.json?q=%40twitterapi>
4. Execute this URL to do the search in the API

Please note that the API requires that the request be authenticated (check [Authentication & Authorization](#) documentation for more details on this). Also note that the search results at [twitter.com](#) may return historical results, while the Search API usually only serves Tweets from the past week.

Query operators

Twitter Developer Documentation

[Docs](#) / Streaming APIs

Products & Services

[Best practices](#)
[API overview](#)
[Websites](#)
[Cards](#)
[OAuth](#)
[REST APIs](#)
[Streaming APIs](#)
[Public streams](#)
[User Streams](#)
[Connecting](#)
[Processing](#)
[Reference](#)
[Ads API](#)
[Gnip](#)
[MoPub](#)
[Fabric](#)

Tools & Support

Streaming APIs

Overview

The Streaming APIs give developers low latency access to Twitter's global stream of Tweet data. A streaming client will be pushed messages indicating Tweets and other events have occurred, without any of the overhead associated with polling a REST endpoint.

If your intention is to conduct singular searches, read user profile information, or post Tweets, consider using the [REST APIs](#) instead.

Twitter offers several basic streaming endpoints, each customized to certain use cases.

Public streams	Streams of the public data flowing through Twitter. Suitable for following specific users or topics, and data mining.
User streams	Single-user streams, containing roughly all of the data corresponding with a single user's view of Twitter.
Site streams	The multi-user version of user streams. Site streams are intended for servers which must connect to Twitter on behalf of many users. Site Streams is a closed beta. Applications are no longer being accepted.

Access to higher volume, real-time data from Twitter is available commercially via [Gnip](#).

Differences between Streaming and REST

Connecting to the streaming API requires keeping a persistent HTTP connection open. In many cases this involves thinking about your application differently than if you were interacting with the REST API. For an example, consider a web


```
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One query: \u201cElectoral Reform.\u201d http://t.co/gw4UsR4RaC http://t.co/JZqDdBQ25d", "is_quote_status": false, "in_reply_to_status_id": null, "id": 628233440576557056, "favorite_count": 0, "source": "<a href='\"http://twitter.com/download/android\"' rel='\"nofollow\">Twitter for Android</a>", "retweeted": false, "coordinates": null, "entities": {"symbols": [], "user_mentions": [{"indices": [3, 16], "id_str": "255681367", "screen_name": "ianmilligan1", "name": "Ian Milligan", "id": 255681367}], "hashtags": [{"indices": [23, 30], "text": "elxn42"}], "urls": [{"url": "http://t.co/gw4UsR4RaC", "indices": [109, 131], "expanded_url": "http://webarchives.ca/graph?query=%22electoral+reform%22&year_start=2005&year_end=2015&action=update", "display_url": "webarchives.ca/graph?query=%22u2026\"}], \"media\": [{\"source_user_id\": 255681367, \"source_status_id_str\": \"628233440576557056\", \"expanded_url\": \"http://twitter.com/ianmilligan1/status/628233440576557056/photo/1\", \"display_url\": \"pic.twitter.com/JZqDdBQ25d\", \"url\": \"http://t.co/JZqDdBQ25d\", \"media_url_https\": \"https://pbs.twimg.com/media/CLFu_uWCAA-Fwo.png\", \"source_user_id_str\": \"255681367\", \"source_status_id\": 628233440576557056, \"id_str\": \"628233439066615808\", \"sizes\": {\"small\": {\"h\": 265, \"resize\": \"fit\", \"w\": 340}, \"large\": {\"h\": 799, \"resize\": \"fit\", \"w\": 1024}, \"medium\": {\"h\": 468, \"resize\": \"fit\", \"w\": 600}, \"thumb\": {\"h\": 150, \"resize\": \"crop\", \"w\": 150}}, \"indices\": [139, 140], \"type\": \"photo\", \"id\": 628233439066615808, \"media_url\": \"http://pbs.twimg.com/media/CLFu_uWCAA-Fwo.png\"}], \"in_reply_to_screen_name\": null, \"in_reply_to_user_id\": null, \"retweet_count\": 3, \"id_str\": \"628233440576557056\", \"favorited\": false, \"retweeted_status\": {\"contributors\": null, \"truncated\": false, \"text\": \"With #elxn42 underway, you can look backwards to 2005 here. 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        "source_user_id": 255681367,
        "source_status_id_str": "628233440576557056",
        "expanded_url": "http://twitter.com/ianmilligan1/status/628233440576557056/photo/1",
        "display_url": "pic.twitter.com/JZqbdBQ25d",
        "url": "http://t.co/JZqbdBQ25d",
        "media_url_https": "https://pbs.twimg.com/media/CLfu-uWCAA-Fwo.png",
        "source_user_id_str": "255681367",
        "source_status_id": 628233440576557000,
        "id_str": "628233439066615808",
        "sizes": {

```

```
},
"in_reply_to_screen_name": null,
"in_reply_to_user_id": null,
"retweet_count": 3,
"id_str": "628233440576557056",
"favorited": false,
"user": {
  "follow_request_sent": false,
  "has_extended_profile": false,
  "profile_use_background_image": true,
  "contributors_enabled": false,
  "id": 255681367,
  "verified": false,
  "profile_text_color": "C42D35",
  "profile_image_url_https": "https://pbs.twimg.com/profile_images/535079119696834560/epHn4Py0_normal.png",
  "profile_sidebar_fill_color": "C27222",
  "entities": {
    "url": {
      "urls": [
        {
          "url": "http://t.co/QdrsicBc2L",
          "indices": [
            0,
            22
          ],
          "expanded_url": "http://ianmilligan.ca",
          "display_url": "ianmilligan.ca"
        }
      ]
    },
    "description": {
      "urls": []
    }
  },
  "followers_count": 2530,
  "profile_sidebar_border_color": "919988",
  "location": "Waterloo, Ontario, Canada",
  "default_profile_image": false,
  "id_str": "255681367",
  "is_translation_enabled": false,
  "utc_offset": -10800,
  "statuses_count": 15421,
  "description": "Assistant professor of digital and Canadian history at @uWaterloo. Web archives, digital history, and textual analysis. Co-editor, @proghist.",
  "friends_count": 1420,
  "profile_link_color": "FA743E",
  "profile_image_url": "http://pbs.twimg.com/profile_images/535079119696834560/epHn4Py0_normal.png",
  "notifications": false,
  "geo_enabled": true,
  "profile_background_color": "5E4F49",
  "profile_banner_url": "https://pbs.twimg.com/profile_banners/255681367/1432589552",
  "profile_background_image_url": "http://pbs.twimg.com/profile_background_images/520587540/x3eb98c89e11038979bd2cb197af6269.jpg",
  "screen_name": "ianmilligan1",
  "lang": "en",
  "following": true,
  "profile_background_tile": true,
  "favourites_count": 947,
  "name": "Ian Milligan",
  "url": "http://t.co/QdrsicBc2L",
```


#elxn42

Search**Current Issue**

Issue 32, 2016-04-25

Previous Issues

Issue 31, 2016-01-28

Issue 30, 2015-10-15

Issue 29, 2015-07-15

Issue 28, 2015-04-15

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An Open-Source Strategy for Documenting Events: The Case Study of the 42nd Canadian Federal Election on Twitter

This article examines the tools, approaches, collaboration, and findings of the Web Archives for Historical Research Group around the capture and analysis of about 4 million tweets during the 2015 Canadian Federal Election. We hope that national libraries and other heritage institutions will find our model useful as they consider how to capture, preserve, and analyze ongoing events using Twitter.

While Twitter is not a representative sample of broader society – Few research shows in their study of US users that it skews young, college-educated, and affluent (above \$50,000 household income) – Twitter still represents an exponential increase in the amount of information generated, retained, and preserved from ‘everyday’ people. Therefore, when historians study the 2015 federal election, Twitter will be a prime source.

On August 3, 2015, the team initiated both a Search API and Stream API collection with [twarc](#), a tool developed by Ed Summers, using the hashtag [#elxn42](#). The hashtag referred to the election being Canada’s 42nd general federal election (hence ‘election 42’ or [elxn42](#)). Data collection ceased on November 5, 2015, the day after Justin Trudeau was sworn in as the 42nd Prime Minister of Canada. We collected for a total of 102 days, 13 hours and 50 minutes.

To analyze the data set, we took advantage of a number of command line tools, utilities that are available within [twarc](#), [twarc-report](#), and [jq](#). In accordance with the [Twitter Developer Agreement & Policy](#), and after ethical deliberations discussed below, we made the tweet IDs and other derivative data available in a data repository. This allows other people to use our dataset, cite our dataset, and enhance their own research projects by drawing on [#elxn42](#) tweets.

Our analytics included:

- breaking tweet text down by day to track change over time;
- client analysis, allowing us to see how the scale of mobile devices affected medium interactions;
- URL analysis, comparing both to Archive-It collections and the [Wayback Availability API](#) to add to our understanding of crawl completeness;
- and image analysis, using an archive of extracted images.

Our article introduces our collecting work, ethical considerations, the analysis we have done, and provides a framework for other collecting institutions to do similar work with our off-the-shelf open-source tools. We conclude by ruminating about connecting Twitter archiving with a broader web archiving strategy.

by Nick Ruest and Ian Milligan

Introduction

During the 2015 Canadian federal elections, we captured 3,918,932 tweets written using the [#elxn42](#) hashtag: thoughts on the nature and stature of political candidates or parties, live running commentary during leader debates, exhortations to vote, and witty ripostes or jokes to liven up the long campaign. Political scientists, journalists, and other researchers can use these tweets as evidence of sentiment amongst a

[illegible][illegible][illegible]

1,203,867 #elxn42 images

Dataset is available [here](#). | Original 32G png available [here](#). | Tiled with [deepzoom.py](#).



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[Nick Ruest](#), [Web Archives for Historical Research](#)

#elxn42 tweets (42nd Canadian Federal Election)

Ruest, Nick; Library and Archives Canada, 2015, "#elxn42 tweets (42nd Canadian Federal Election)",
hdl:10864/11311, Scholars Portal Dataverse, V2

☰ Cite Data ▾

📘 Learn about [Data Citation Standards](#).

Description

Tweet ids for #elxn42 tweets. Tweets can be "hydrated" with Ed Summers' twarc (<https://github.com/edsu/twarc>). `twarc.py --hydrate elxn42-tweet-ids.txt > elxn42-tweets.json`. Hydrating will recreate the original tweet(s) in json format, provided the content is still available on Twitter. This dataset is the combination of hydrated <http://hdl.handle.net/10864/11310> tweet ids, and <http://hdl.handle.net/10864/11270>.

Subject

Other

Related Publication

Ruest, Nick, Milligan, Ian. "An Open-Source Strategy for Documenting Events: The Case Study of the 42nd Canadian Federal Election on Twitter" *Code4Lib Journal*. 32 (2016)

Notes

Type: License Notes: CC BY 2.0 CA <https://creativecommons.org/licenses/by/2.0/ca/>;

Files

Metadata

Terms




Versions

Search this dataset...

🔍 Find

5 Files

📄 Download

<input type="checkbox"/>		
<input type="checkbox"/>	<div>elxn42-tweet-ids.txt Plain Text - 71.0 MB - Dec 6, 2015 - 29 Downloads MD5: 98b204a8fc0dbae70e5480c5d4a40a50; line-oriented #elxn42 tweet ids</div>	<div>📄 Download</div>
<input type="checkbox"/>	<div>elxn42-tweet-tags.txt Plain Text - 1016.1 KB - Jan 25, 2016 - 7 Downloads MD5: 59b8161616ddd122ff844dd82a8eb4d9; #elxn42 hashtags with counts</div>	<div>📄 Download</div>
<input type="checkbox"/>	<div>elxn42-tweets-images.txt Plain Text - 54.9 MB - Jan 25, 2016 - 5 Downloads MD5: 79376146858835c268cec312c47d945;</div>	<div>📄 Download</div>

[Advanced search](#)

Username *

Password *

[Collections](#) / [Web Archives for Historical Research](#) / [#elxn42](#) / [#elxn42 web crawl](#)

#elxn42 web crawl

Description

Consists of a web crawl of unique URLs tweeted with the #elxn42 hashtag. #elxn42 collection took place from August 3, 2015 - November 5, 2015. Unique URLs were extracted from the dataset, and harvested with Heritrix on January 29, 2016 - February 8, 2016.

Download

- warc: [#elxn42 web crawl.gz](#)
- cdx: [#elxn42 web crawl.cdx](#)
- wat: [#elxn42 web crawl.wat.gz](#)
- Seed list: [#elxn42 web crawl.txt](#)
- Heritrix configuration: [crawler-beans.xml](#)

In collections

- [#elxn42](#)

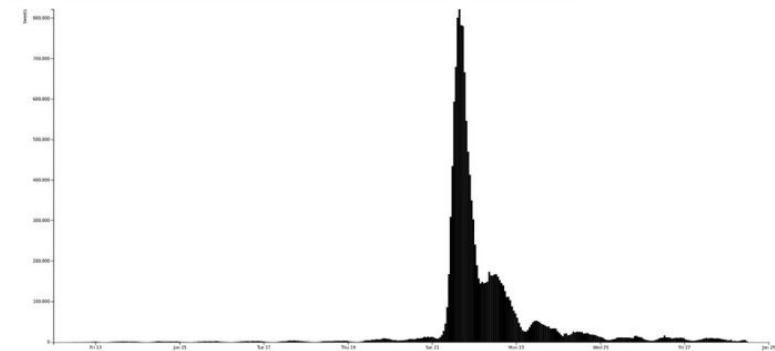
Details

Title:	#elxn42 web crawl
Creator(s):	Nick Ruest
Note:	Tweet ids: http://hdl.handle.net/10864/11311
Identifier (local):	WEB-20160208134917869-00013-3991~rho.library.yorku.ca~9191-ELXN42
Identifier (md5):	63d707352a6fb45a62889c448154610f
Type:	Website
Subject(s):	#elxn42 Canadian federal election, 2015 Canadian politics Federal politics Canada
Date captured:	2016-01-29
Size:	13GB
File size:	12972947583
PUID:	x-fmt/266
Funding	This research was supported by a research grant -- 435-2015-0011 -- Issued by Social Sciences and Humanities Research Council.
Rights:	Use of this resource is governed by the terms and conditions of the Creative Commons "Attribution" License (http://creativecommons.org/licenses/by/2.0/)

#WomensMarch

the time I stopped collecting a week later, we'd amassed 14,478,518 unique tweet ids from 3,582,495 unique users, and at one point hit around 1 million tweets in a single hour.

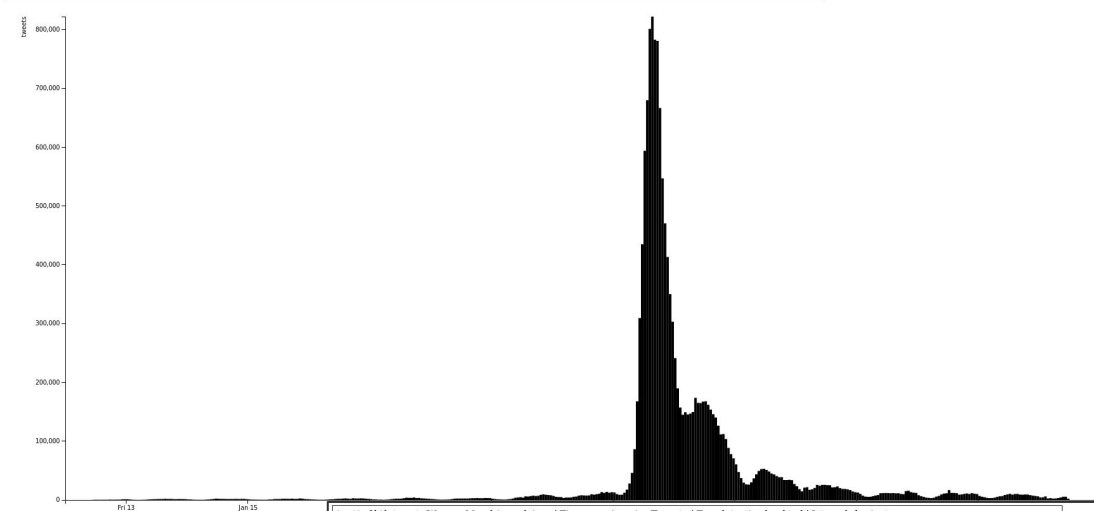
#WomensMarch tweet volume, by hour, January 12-28, 2017
Timezone: America/Toronto | Template: timebar.html | Interval: 1 hour
14478518 tweets from 3518887 users, including 12468300 retweets (86.12%), and 21842 with geo (0.15%); 2017-01-12 10:31:36 EST to 2017-01-28 11:22:04 EST



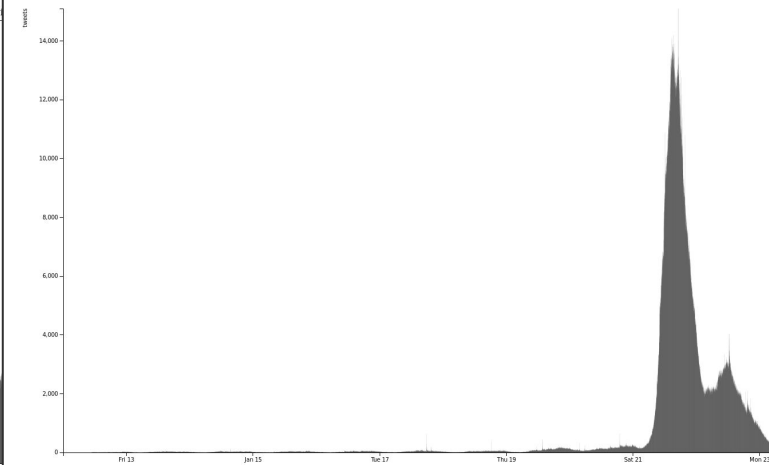
(Generated with [Peter Binkley's twarc-report](#))

This put #WomensMarch well over 1% of the overall Twitter stream, which causes dropped tweets if you're collecting from the Filter API, so I used the strategy of using both the Filter and Search APIs for collection. (If you're curious about learning more about this, check out Kevin Driscoll and Shav Walker's "[Big Data, Big Questions | Working Within a Black Box: Transparency in the Collection and Production of Big Twitter Data](#)", and Jiaul H. Paik and Jimmy Lin's "[Do Multiple Listeners to the Public Twitter Sample Stream Receive the Same Tweets?](#)"). I've included the search and filter logs in the [dataset](#). If you `grep "WARNING" WomensMarch_filter.log` or `grep "WARNING" WomensMarch_search.log | wc -l` you'll get a sense of the scale of dropped tweets. For a number of hours on January 22, I was seeing around 1.6 million cumulative dropped tweets!

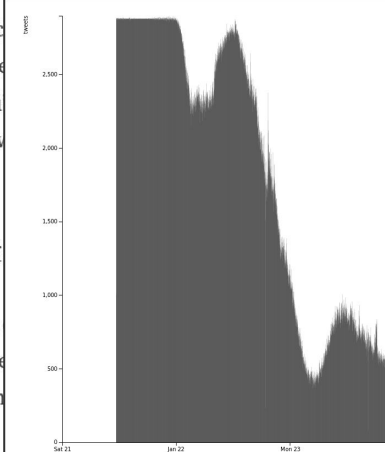
#WomensMarch tweet volume, by hour, January 12-28, 2017
Timezone: America/Toronto | Template: timebar.html | Interval: 1 hour
14478518 tweets from 3518887 users, including 12468300 retweets (86.12%), and 21842 with geo (0.15%); 2017-01-12 10:31:36 EST to 2017-01-28 11:22:04 EST



/mnt/vol1/data_sets/WomensMarch/search.json | Timezone: America/Toronto | Template: timebar.html | Interval: 1 minute
13000953 tweets from 3255300 users, including 11452658 retweets (88.09%), and 0 with geo (0.00%); 2017-01-12 10:31:36 EST to 2017-01-26 10:16:54 EST



#WomensMarch Filter API tweet volume
Timezone: America/Toronto | Template: timebar.html | Interval: 1 minute
7603739 tweets from 2608813 users, including 6501221 retweets (85.50%), and 0 with geo (0.00%); 2017-01-12 10:31:36 EST to 2017-01-26 10:16:54 EST



#WomensMarch crawl; January 29-February 25, 2017

Description

Consists of a web crawl of unique URLs tweeted with the #WomensMarch hashtag. #WomensMarch collection took place from January 21-28, 2017. Unique URLs were extracted from the dataset, and harvested with Heritrix on January 29-February 25, 2017.

In collections

- [#WomensMarch](#)

Details

Title:	#WomensMarch crawl; January 29-February 25, 2017
Creator:	Nick Ruest
Note:	Tweet ids: http://dx.doi.org/10.5683/SP/ZEL1Q6
Identifier (local):	WEB-20170225184434201-00029-22858~rho.library.yorku.ca~9191-WomensMarch
Identifier (md5):	7d44ff2511a460d72dd34cfe414cecd
Type:	Website
Subject(s):	#WomensMarch politics activism
Date captured:	2017-01-29
File size:	89885679831
Funding:	This research was supported by a research grant -- 435-2015-0011 -- Issued by Social Sciences and Humanities Research Council.
Rights:	Use of this resource is governed by the terms and conditions of the Creative Commons "Attribution" License (http://creativecommons.org/licenses/by/2.0/)



527303/527350	submitted to Internet Archive
527304/527350	submitted to Internet Archive
527305/527350	submitted to Internet Archive
527306/527350	submitted to Internet Archive
527307/527350	submitted to Internet Archive
527308/527350	submitted to Internet Archive
527309/527350	submitted to Internet Archive
527310/527350	submitted to Internet Archive
527311/527350	submitted to Internet Archive
527312/527350	submitted to Internet Archive
527313/527350	submitted to Internet Archive
527314/527350	submitted to Internet Archive
527315/527350	submitted to Internet Archive
527316/527350	submitted to Internet Archive
527317/527350	submitted to Internet Archive
527318/527350	submitted to Internet Archive
527319/527350	submitted to Internet Archive
527320/527350	submitted to Internet Archive
527321/527350	submitted to Internet Archive
527322/527350	submitted to Internet Archive
527323/527350	submitted to Internet Archive
527324/527350	submitted to Internet Archive
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527326/527350	submitted to Internet Archive
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527328/527350	submitted to Internet Archive
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527333/527350	submitted to Internet Archive
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527337/527350	submitted to Internet Archive
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527346/527350	submitted to Internet Archive
527347/527350	submitted to Internet Archive
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527349/527350	submitted to Internet Archive
527350/527350	submitted to Internet Archive

Tweet ID Datasets

Twitter's [terms of service](#) don't allow tweet datasets to be published on the web, but they do allow tweet identifier datasets to be shared. This speaks to content creators' right to be forgotten, while also allowing researchers to share their data with others.

This site is a catalog of datasets that are publicly available on the web. If you would like to turn these tweet identifier datasets back into the original JSON first download the dataset and then use the [Hydrator](#) desktop application, or [Twarc](#) if you are comfortable working at the command line.

You can add your own datasets to the catalog by following [these instructions](#). If you'd like updates when datasets are added please subscribe to the [RSS feed](#).

Women's March Tweet Ids

Creator: Justin Littman, Soomin Park

Tweets: 7,275,228

Published: 2017-02-03

Date Coverage: 2016-12-19 - 2017-01-23

Tags: WomensMarch, activism, politics

► Description

This *a* future of collection development

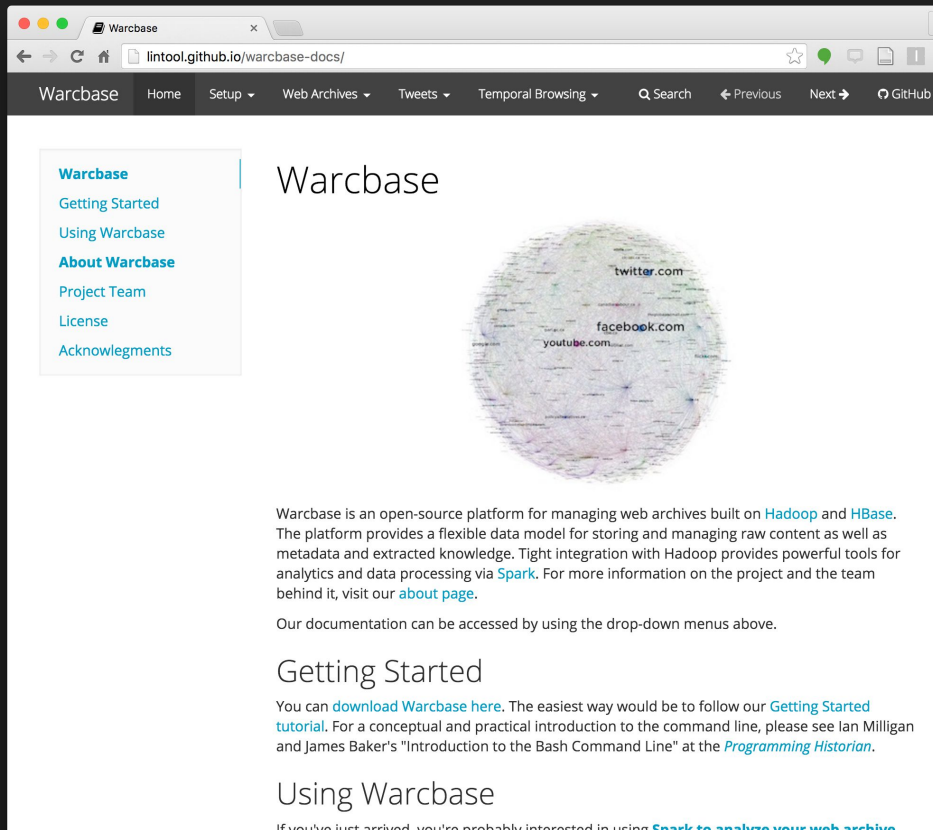
Institutional Collecting & Research Data

Warcbase

(Or, how can we work with web archives at scale?)

Warcbase

- **Jimmy Lin** (main developer, CS/lead), **Ian Milligan** (co-lead, history), **Jeremy Wiebe** (history/PhD), **Alice Zhou** (computer science, undergrad), **Youngbin Kim** (computer science, undergrad), **Nick Ruest** (librarian)
- Currently using it on the GeoCities and Canadian Politics web archives



The screenshot shows a web browser window with the URL `lintool.github.io/warcbase-docs/`. The page has a navigation bar with links: Warcbase, Home, Setup, Web Archives, Tweets, Temporal Browsing, Search, Previous, Next, and GitHub. A sidebar on the left contains a list of links: Warcbase, Getting Started, Using Warcbase, About Warcbase, Project Team, License, and Acknowledgments. The main content area features the title "Warcbase" above a circular network graph. The graph shows a dense web of nodes and edges, with labels for "twitter.com", "facebook.com", and "youtube.com". Below the graph, the text describes Warcbase as an open-source platform for managing web archives, built on Hadoop and HBase, and provides links to the Getting Started tutorial and the about page.

Warcbase

Warcbase is an open-source platform for managing web archives built on [Hadoop](#) and [HBase](#). The platform provides a flexible data model for storing and managing raw content as well as metadata and extracted knowledge. Tight integration with Hadoop provides powerful tools for analytics and data processing via [Spark](#). For more information on the project and the team behind it, visit our [about page](#).

Our documentation can be accessed by using the drop-down menus above.

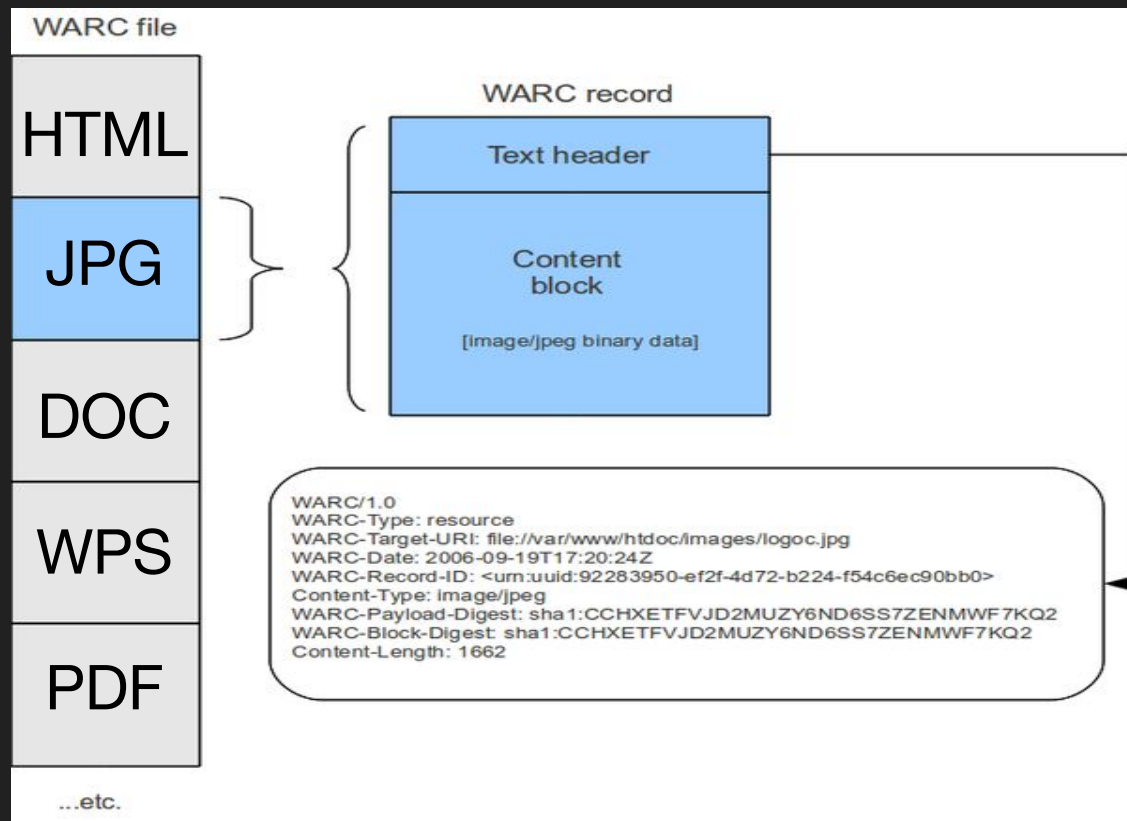
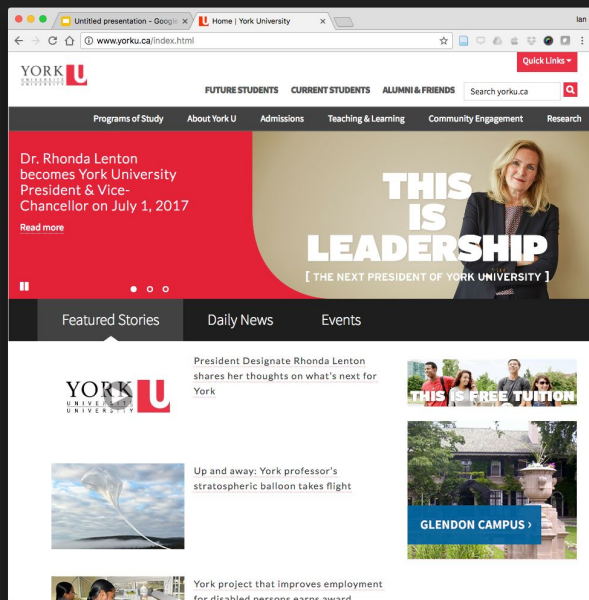
Getting Started

You can [download Warcbase here](#). The easiest way would be to follow our [Getting Started tutorial](#). For a conceptual and practical introduction to the command line, please see Ian Milligan and James Baker's "Introduction to the Bash Command Line" at the [Programming Historian](#).

Using Warcbase

If you've just arrived, you're probably interested in using [Spark to analyze your web archive](#).

Why Warcbase



Warcbase (warcbase.org)

Two main facets

- A flexible data store: your own Wayback Machine
- **Scriptable analytics and data processing**

Funded by **Mellon**, **SSHRC**, **NSERC**, and **Government of Ontario**.

The screenshot displays the Warcbase website interface. At the top, a browser window shows the URL wayback.archive-it.org/227/20090802164112/http://www.conservative.ca/EN/1004/109502. Below the browser window, a banner image features Prime Minister Stephen Harper with the text "STAND UP FOR CANADA". The main content area is titled "JOINT STATEMENT BY PRESIDENT OBAMA AND PRIME MINISTER HARPER ON UNITED STATES-CANADA SUPPORT FOR GENERAL MOTOR" dated "JUNE 01, 2009". The text of the statement is visible, discussing the restructuring of General Motors and its subsidiaries. To the right of the main text is a "VIDEO" section with a thumbnail image. At the bottom of the screenshot, a network graph visualization is shown, with nodes representing various websites and connections between them. The graph includes labels for "elections.ca", "facebook.com", "ndp.ca", and "youngbudd.com". A sidebar on the left of the graph shows a "Force Atlas" visualization with a list of parameters: Inertia (0.1), Repulsion strength (2.008), Attraction strength (10.0), Maximum displacement (10.0), Auto stabilize function (checked), Autoclab Strength (80.0), Autoclab sensitivity (0.2), Gravity (30.0), Attraction Distrib. (checked), Adjust by Sizes (checked), and Speed (1.0).

Warcbase

- Scalable
 - From Raspberry Pi to Desktop Computer to Server to Cluster, **all with same scripts and commands**
- Potentially very powerful
 - **Trantor**: 1.2PB of disk, 25 compute nodes (each w/ 128GB memory, 2×6-core Intel Xeon E5 v3 = 3.2TB memory and 300 current-generation Intel cores)
- In active development, led by **Jimmy Lin**, collaborator at the University of Waterloo



docs.warcbase.org

The screenshot shows a web browser window with the URL `lintool.github.io/warcbase-docs/Spark-Extracting-Domain-Level-Plain-Text/`. The page has a dark navigation bar with links: Warcbase, Home, Setup, Web Archives, Tweets, Temporal Browsing, Search, Previous, Next, and GitHub. A sidebar on the left lists navigation options under the heading 'Extracting Domain Level Plain Text': All plain text, Plain text by domain, Plain text by URL pattern, Plain text minus boilerplate, Plain text filtered by date, Plain text filtered by language, and Plain text filtered by keyword. The main content area has the title 'Extracting Domain Level Plain Text' and a sub-header 'All plain text'. It contains a paragraph explaining the script's purpose, a code block for Spark, and explanatory text about using the script on local data and in a Spark Notebook.

Warcbase Home Setup Web Archives Tweets Temporal Browsing Search Previous Next GitHub

Extracting Domain Level Plain Text

All plain text

This script extracts the crawl date, domain, URL, and plain text from HTML files in the sample ARC data (and saves the output to `out/`).

```
import org.warcbase.spark.rdd.RecordRDD._
import org.warcbase.spark.matchbox.{RemoveHTML, RecordLoader}

RecordLoader.loadArchives("src/test/resources/arc/example.arc.gz", sc)
  .keepValidPages()
  .map(r => (r.getCrawlDate, r.getDomain, r.getUrl, RemoveHTML(r.getContentString)))
  .saveAsTextFile("out/")
```

If you wanted to use it on your own collection, you would change `"src/test/resources/arc/example.arc.gz"` to the directory with your own ARC or WARC files, and change `"out/"` on the last line to where you want to save your output data.

Note that this will create a new directory to store the output, which cannot already exist.

If you want to run it in your Spark Notebook, the following script will show in-notebook plain text:

```
val r = RecordLoader.loadArchives("/path/to/warcs", sc)
  .keepValidPages()
  .map(r => {
```

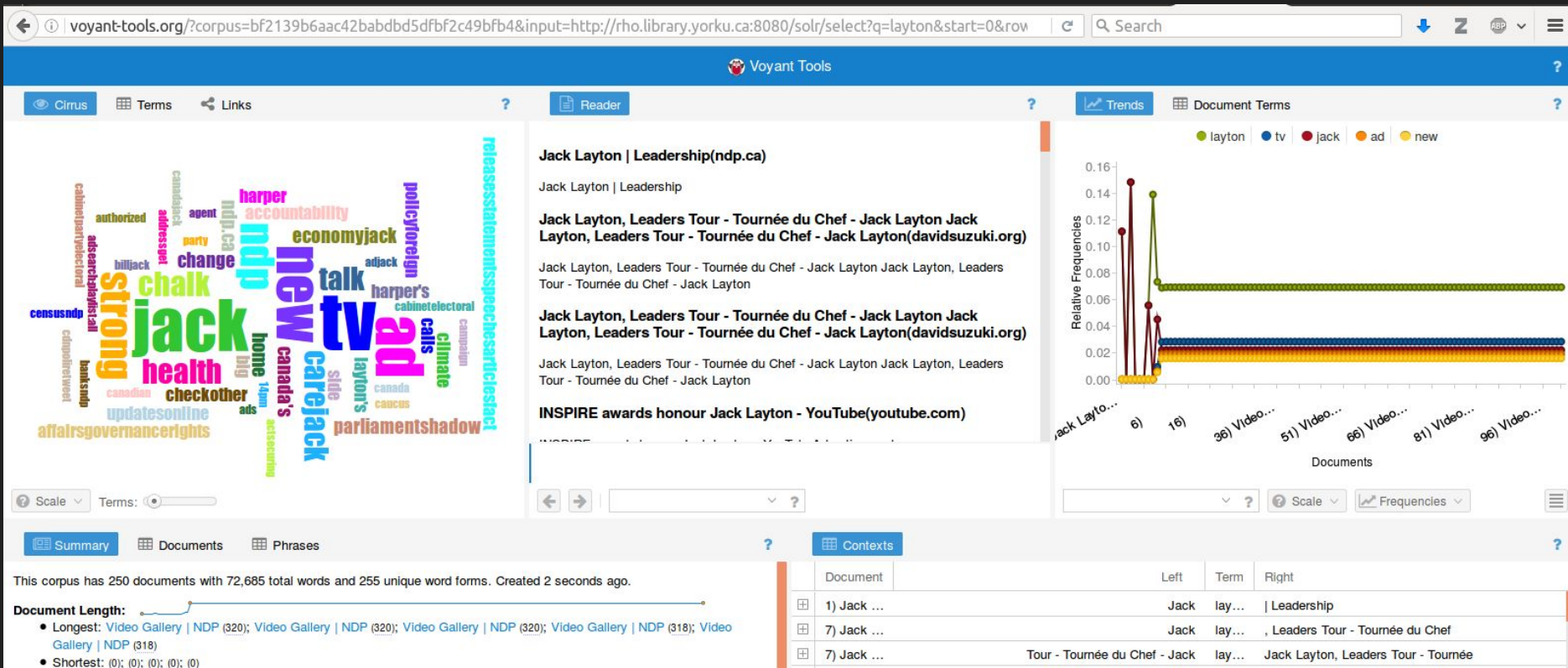
Extract all Text

```
1. i2millig@rho: ~/derivatives/cpp.all.plaintext (ssh)

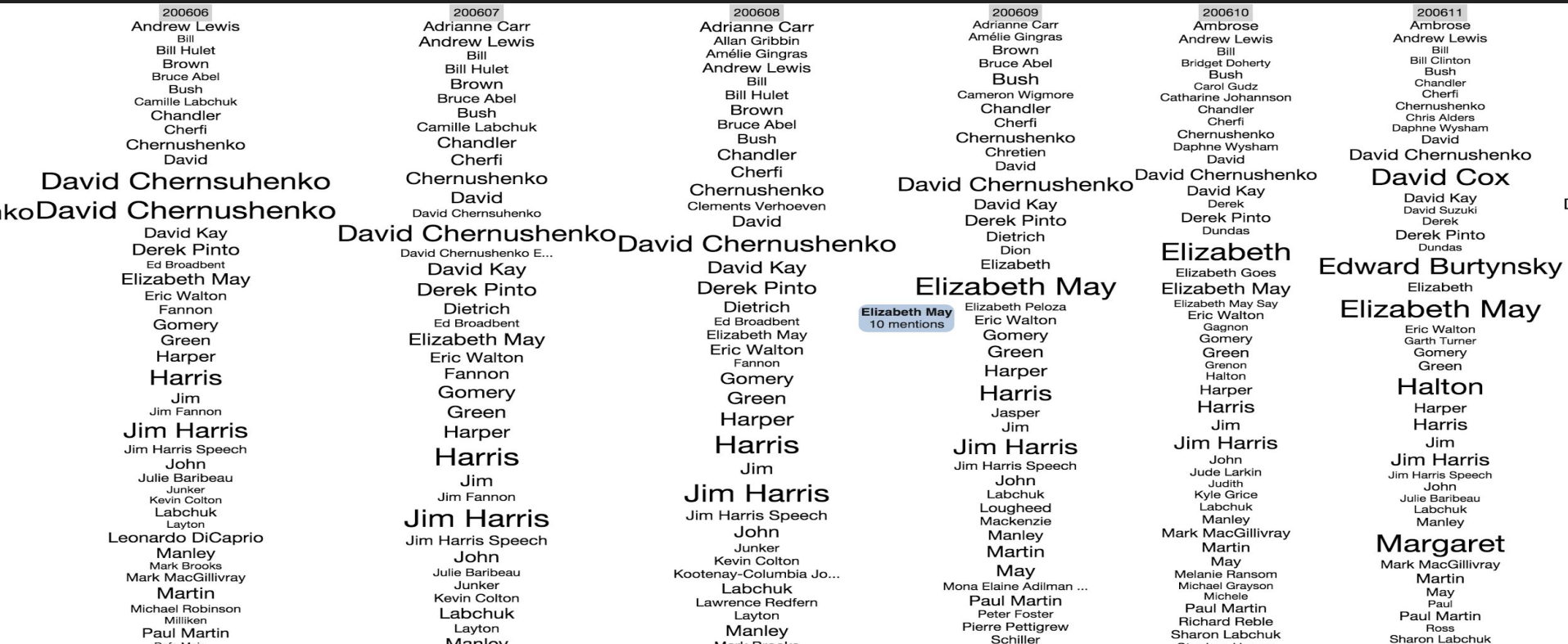
Python      bash      bash      bash      i2millig@rho:...  i2millig@rho:...  bash

(20060222,liberal.ca,http://liberal.ca/bio_e.aspx?&id=35049,Liberal Party of Canada HOME THE TEAM THE P
ARTY MEDIA CENTRE COMMISSIONS YOUR RIDING Omar Alghabra www.omaralghabra.com Home > Mississauga--E
rindale Riding Map (PDF) Omar Alghabra came to Canada at a very young age, and immediately knew Canada
was his home. He is was first elected 2006 as the Member of Parliament for Mississauga-Erindale. Mr. Al
ghabra is an experienced entrepreneur. For the past six years, he has worked for a large multinational
corporation, carrying out different responsibilities including quality assurance, project management, s
ales, contract management and management of a complete department handling a global mandate. Mr. Alghab
ra is an active member of his community. He is the former National President of the Canadian Arab Feder
ation (2004-2005) and a former member of the Community Editorial Board for the Toronto Star. (2003-2004
). Mr. Alghabra is currently a member of the Diversity Council for General Electric Canada and is activ
e in Junior Achievement for the Toronto Region. He was a member of the Multicultural Inter-Agency of Pe
el from 2001 to 2002. Mr. Alghabra has a degree in Mechanical Engineering from Ryerson University and a
Masters in Business Administration (MBA) from York University. Omar Alghabra 790 Burnamthorpe West,
Unit 10 905-276-2806 info@omaralghabra.ca Riding President Elias Hazineh Send an email
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ENTRE COMMISSIONS YOUR RIDING Celebrating our National Flag February 15, 2006 February 15 is Nationa
l Flag Day in Canada, which marks the 41st anniversary of the first raising of the maple leaf flag on P
arliament Hill. Today is a celebration of our shared values, common citizenship and sense of pride in t
his great country we call home. The Canadian flag is one of the most recognizable symbols in the world
and flies proudly to remind us all of who we are and where we come from. The maple leaf's symbolic orig
ins date back to the beginning of our nation's history, while the red and white bars on the flag repres
ent strength and unity. Canada's flag was adopted in 1964 under the courageous leadership of Liberal Pr
ime Minister Lester B. Pearson. The idea of changing the Red Ensign which featured the Britain's Union
Jack, was very controversial at the time, with the Conservative Party strongly opposed to changing the
status quo. Facing strong Conservative resistance in the House of Commons, Pearson's minority governme
nt fought hard in the name of national unity and Canada's multicultural future to make the new flag a r
eality. In an impassioned speech to the House of Commons, Pearson said: "Mr. Speaker, it is for this g
eneration, for this Parliament, to give them and to give us all a common flag; a Canadian flag which, w
hile bringing together but rising above the landmarks and milestones of the past, will say proudly to t
he world and to the future: I stand for Canada." Thanks to Pearson's courageous leadership, Canadians a
cross this great nation celebrate our flag and what it stands for – a country and a citizenship that ar
e the envy of the world.
Home | News | Your Riding | Contact Us | fran
çais This website is the property of the Liberal Party of Canada and may not be reproduced in whole or
```

Extract all Text



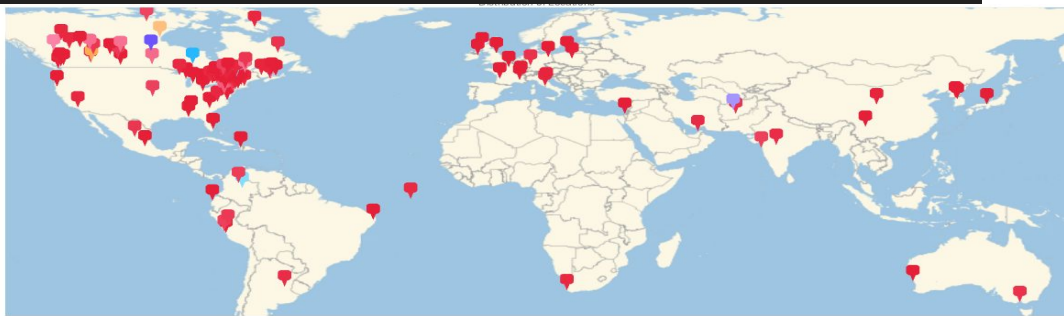
Extract Entities



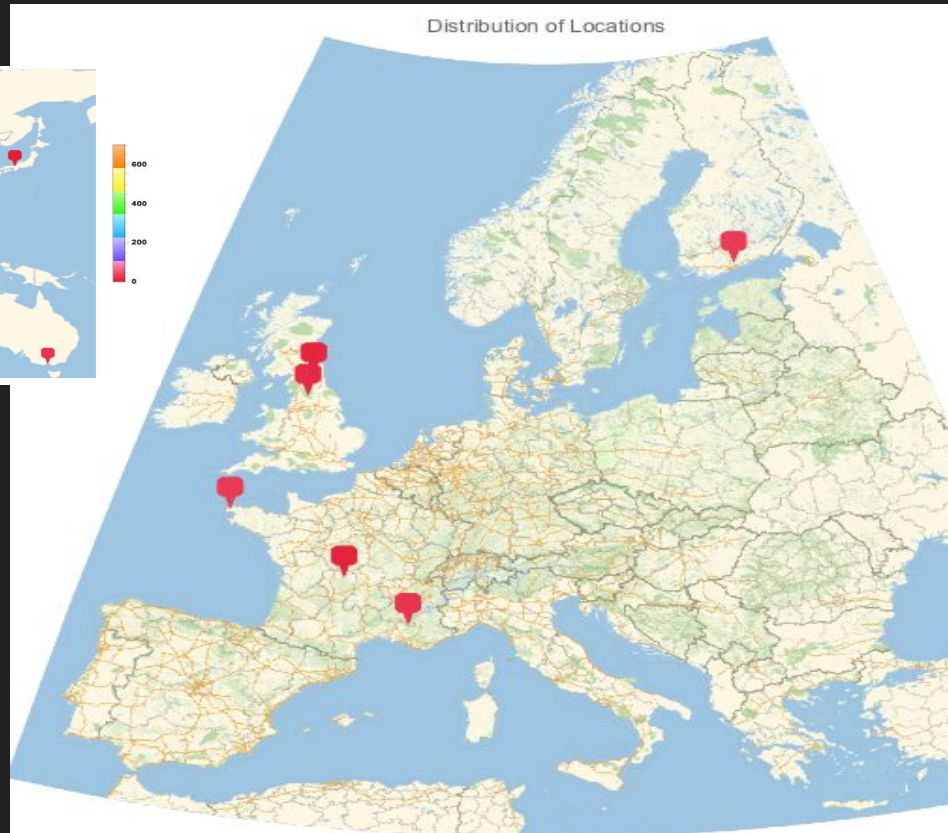
Extract Entities



Extract Entities



```
In[95]: int = SemanticInterpretation[#] & /@processedfreq[All, 1]]
Out[95]: {Canada, Calgary, Colombia, Montreal, $Failed, Ontario, Canada, Afghanistan,
Ottawa, Manitoba, Canada, British Columbia, Canada, Toronto, Nova Scotia, Canada,
Saskatchewan, Canada, Quebec, Canada, Alberta, Canada, Winnipeg, Washington,
Canada, Nunavut, Canada, White Horse, United States, Petawawa, Mumbai,
Lima, The Americas, Saskatoon, Peru, Edmonton, Mexico, Chicoutimi-Jonquiere,
New Brunswick, Canada, United States, Newfoundland and Labrador, Canada, Qandahar,
$Failed, Asia-Pacific, Newfoundland and Labrador, Canada, Victoria, United States,
Quebec City, India, $Failed, Atlantic Ocean, St. Germain, Durham, Battle of Waterloo, }
```



**And a move away from content and
towards structured metadata...**

An Example

To: Tony Smith <tsmith@yorku.ca>

From: Ian Milligan
(i2millig@uwaterloo.ca)

Re: Lunch

Date: 6 March @ 1034 GMT

Hi Tony -

See you after class?

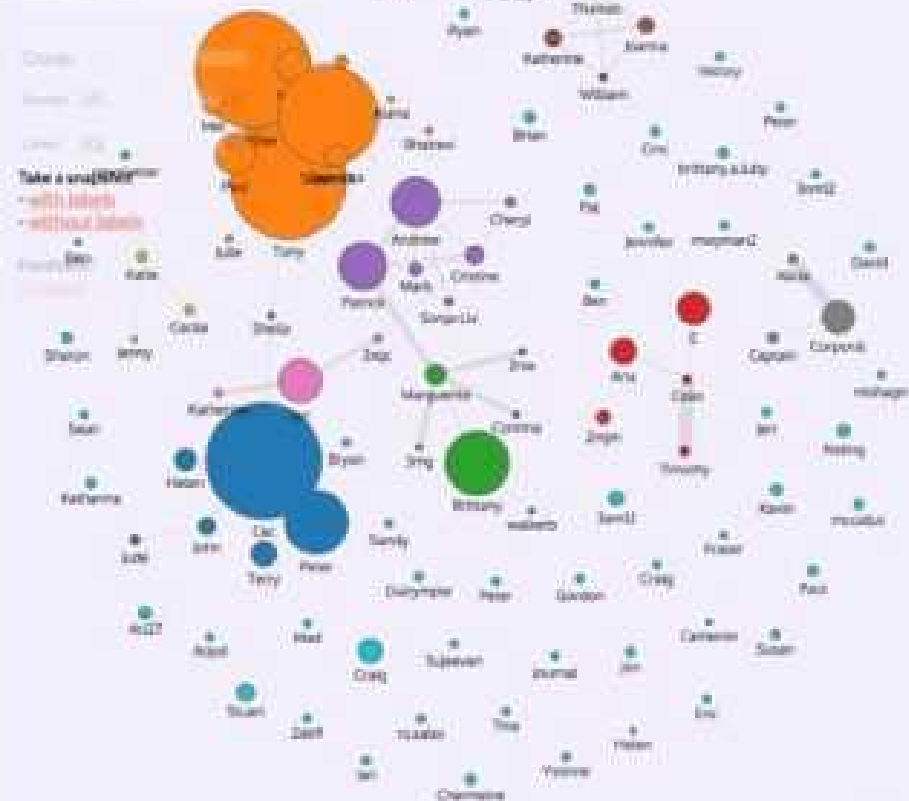
Ian



Tells you little!

But what if I emailed
him every Monday? Or
Friday? Or every day?





Ian Milligan



729 collaborators

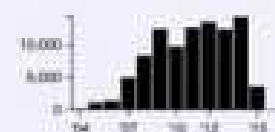
121,854 emails

[My Stats](#) [The Collaborators](#)

Emails Sent



Emails Received

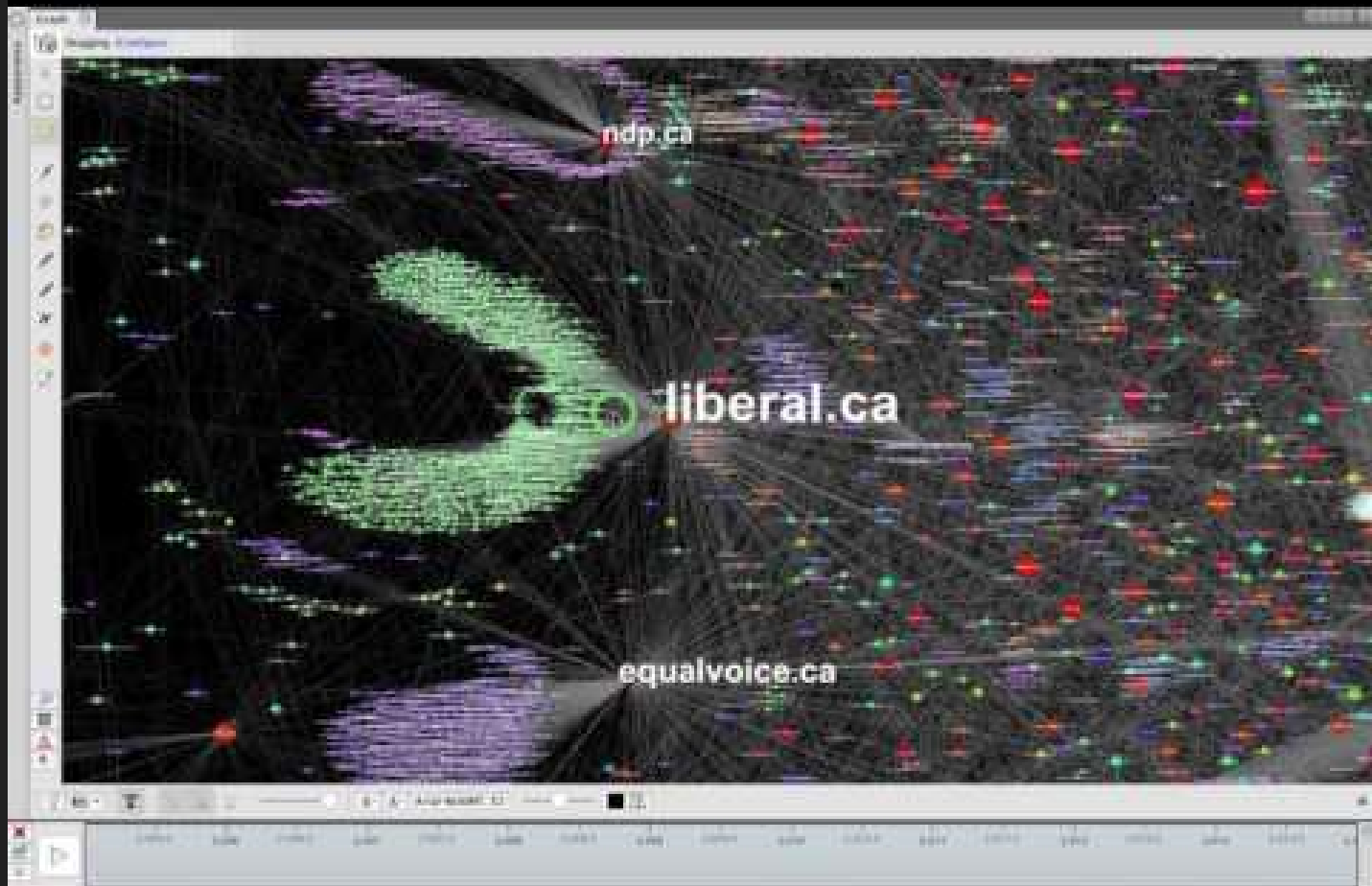


New Collaborators



1.3 years
26 Sep 2004 - 16 Jan 2006





... and we can
create indexes to
provide search
access to
collections.

The screenshot shows the WALK website in a browser window. The browser's address bar shows 'localhost:3000'. The website has a blue header with the 'WALK' logo and navigation links like 'Dashboard', 'History', and 'Login'. Below the header is a search bar with the placeholder text 'Search...'. To the left of the main content area is a 'Limit your search' sidebar with expandable sections for 'General Content Type', 'Domain', 'Links Domains', 'Institution', 'Collection Name', and 'Collection Number'. The 'General Content Type' section is expanded, showing a list of content types with counts: audio (0), excel (0), html (0), image (0), other (0), pdf (0), powerpoint (0), text (0), video (0), and word (0). The main content area features the title 'Web Archives For Longitudinal Knowledge' and a paragraph about the project's mission. To the right of the text is a circular network diagram with nodes labeled 'twitter.com', 'facebook.com', and 'youtube.com'. Below the text, there is a section titled 'Our partners' which lists the 'UNIVERSITY OF ALBERTA LIBRARIES' and 'DALHOUSIE UNIVERSITY' with their respective logos.

So we have this tool...

how have we used it?

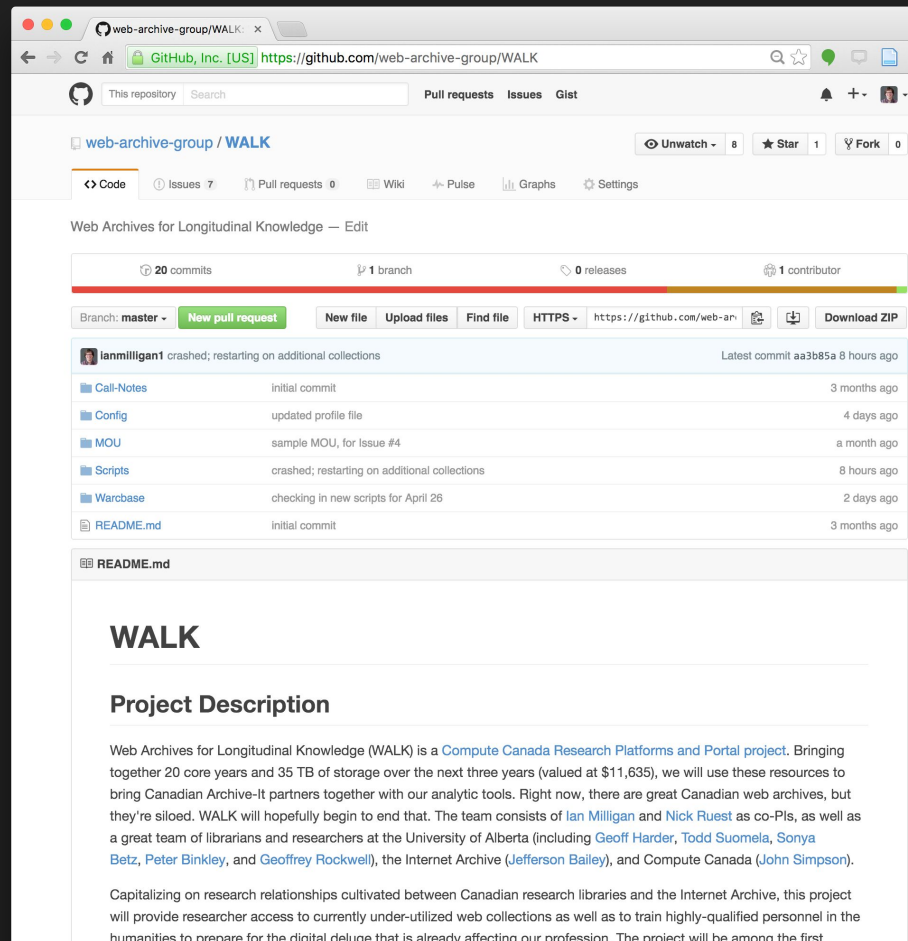
WALK Project

Web Archives for Longitudinal Knowledge

WALK

Web Archives for Longitudinal Knowledge (WALK)

Ian Milligan (Co-PI, UW) + Nick Ruest (Co-PI, York), w/ Geoff Harder, Todd Suomela, Sonya Betz, Peter Binkley, Geoffrey Rockwell (Alberta), Jefferson Bailey (Internet Archive), and John Simpson (Compute Canada).



The screenshot shows the GitHub repository page for `web-archive-group/WALK`. The repository has 20 commits, 1 branch, 0 releases, and 1 contributor. The latest commit is by `ianmilligan1` with the message "crashed; restarting on additional collections" 8 hours ago. The commit history table lists several files: `Call-Notes` (initial commit, 3 months ago), `Config` (updated profile file, 4 days ago), `MOU` (sample MOU, for issue #4, a month ago), `Scripts` (crashed; restarting on additional collections, 8 hours ago), `Warbase` (checking in new scripts for April 26, 2 days ago), and `README.md` (initial commit, 3 months ago). Below the commit history, the `README.md` file is displayed, showing the title "WALK" and the section "Project Description".

Web Archives for Longitudinal Knowledge (WALK) is a [Compute Canada Research Platforms and Portal project](#). Bringing together 20 core years and 35 TB of storage over the next three years (valued at \$11,635), we will use these resources to bring Canadian Archive-It partners together with our analytic tools. Right now, there are great Canadian web archives, but they're siloed. WALK will hopefully begin to end that. The team consists of [Ian Milligan](#) and [Nick Ruest](#) as co-PIs, as well as a great team of librarians and researchers at the University of Alberta (including [Geoff Harder](#), [Todd Suomela](#), [Sonya Betz](#), [Peter Binkley](#), and [Geoffrey Rockwell](#)), the Internet Archive ([Jefferson Bailey](#)), and Compute Canada ([John Simpson](#)).

Capitalizing on research relationships cultivated between Canadian research libraries and the Internet Archive, this project will provide researcher access to currently under-utilized web collections as well as to train highly-qualified personnel in the humanities to prepare for the digital deluge that is already affecting our profession. The project will be among the first

WALK

Currently ~ 25 Canadian partners who collect web archives, ~ 130 collections.

Archive-It is the back-end provider of web archiving services.

The screenshot shows a web browser window with the URL <https://archive-it.org/collections/227>. The page features the Archive-It logo and navigation links: HOME, EXPLORE, LEARN MORE, and CONTACT US. The main heading is "Canadian Political Parties and Political Interest Groups", collected by the University of Toronto. It notes the collection was archived since October 2005, with a description of Canadian political parties and a subject of "Politics & Elections". Below this, a section titled "Narrow Your Results" lists subjects like "New Democratic Party of Canada (2)", "Assembly of First Nations (1)", "Bloc Québécois (1)", "Canada First (1)", and "Canada West Foundation (1)". A search bar is present with the text "Enter search terms here". At the bottom, a list of results is shown, including "Cosmopolitan Party of Canada" with its URL and capture dates, and "Bloc Québécois".

Archive-It - Canadian Political Parties and Political Interest Groups

HOME EXPLORE LEARN MORE CONTACT US

Explore >> University of Toronto >> Canadian Political Parties and Political Interest Groups

Canadian Political Parties and Political Interest Groups
Collected by: [University of Toronto](#)
Archived since: Oct, 2005
Description: Canadian Political Parties and Political Interest Groups
Subject: [Politics & Elections](#)
Collector: [University of Toronto](#)

Narrow Your Results

Subject: [New Democratic Party of Canada \(2\)](#)
[Assembly of First Nations \(1\)](#)
[Bloc Québécois \(1\)](#)
[Canada First \(1\)](#)
[Canada West Foundation \(1\)](#)
[More ▼](#)

Sort By: Count (A-Z)

Sites for this collection are listed below. Narrow your results by specific URL or to search the text of archived webpages.

Enter search terms here

Sites Search Page Text

Page 1 of 1 (54 results)

Sort By: Title (A-Z) Title (Z-A) URL (A-Z) URL (Z-A)

Title: [Cosmopolitan Party of Canada](#)
URL: <http://agoracosmopolite.com/>
Captured 59 times between Oct 4, 2005 and Nov 3, 2005
Subject: [Cosmopolitan Party of Canada](#)

Title: [Bloc Québécois](#)
URL: <http://blog.quebecois.com/fr/le-bloc-quebecois/>

WALK

Current interfaces are **very limited** - simple search engine, some advanced options, no facets

Great collections, but nobody uses them.

The screenshot shows a web browser window with the URL `https://archive-it.org/collections/227?q=Stephen+Harper&page=1&show=Sites`. The page header includes the Internet Archive logo and navigation links: HOME, EXPLORE, LEARN MORE, and CONTACT US. A tagline reads: "The leading web archiving service for collecting and accessing cultural heritage on the web. Built at the Internet Archive".

The main content area displays the collection "Canadian Political Parties and Political Interest Groups" collected by the University of Toronto. It includes metadata: "Archived since: Oct, 2005", "Description: Canadian Political Parties and Political Interest Groups will archive the websites of all of the national Canadian political parties, and a number of special interest groups across the political spectrum", "Subject: Politics & Elections", and "Collector: University of Toronto".

A search bar is present with the text "Enter a search term on the right to search the text within the archived pages. Or for more search options, use the Advanced Search options below." The search term "Stephen Harper" is entered, and a "Search" button is visible.

Below the search bar, the results are displayed. The first result is "Stephen Harper | Facebook", with the URL `http://www.facebook.com/pages/Stephen-Harper/9106562109`. The text indicates it was captured on May 02, 2009. The page also shows "Page 1 of 60,657 (1,213,132 Total Results)" and a "Next Page" button.

On the left side of the search results, there is an "Advanced Search" section with fields for "Contains all of:", "Exact phrase:", "Not containing:", "From the Host:", "Results per host:", and "File format:". The "From the Host:" field contains the example `ex. www.archive-it.org`.

How could we build better access?

Preparing our dataset!

Project ^

Compute ^

Overview

Instances

Volumes

Images

Access & Security

Network v

Orchestration v

Identity v

Overview

Limit Summary



Instances
Used 2 of 10



VCPUs
Used 18 of 20



RAM
Used 75GB of 75GB



Floating IPs
Allocated 2 of 2



Security Groups
Used 1 of 10



Volumes
Used 1 of 10



Volume Storage
Used 15.8TB of 15.8TB

Usage Summary

Select a period of time to query its usage:

From:

To:

The date should be in YYYY-mm-dd format.

Active Instances: 2 Active RAM: 75GB This Period's VCPU-Hours: 437.23 This Period's GB-Hours: 11246.43 This Period's RAM-Hours: 1865498.75

Usage

[Download CSV Summary](#)

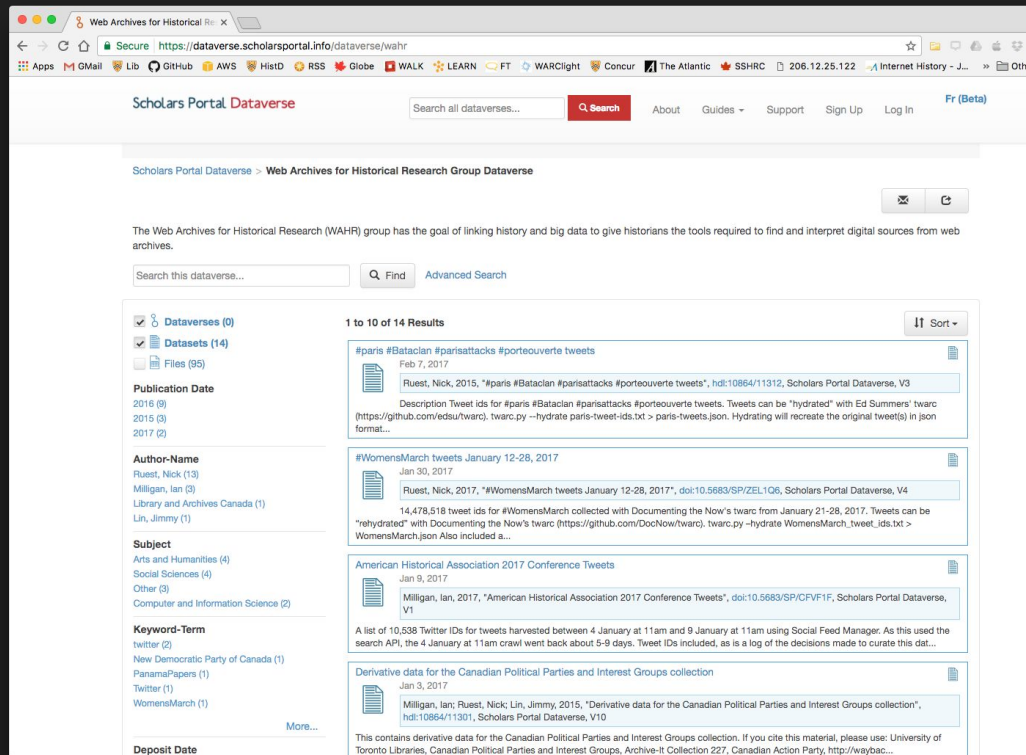
Instance Name	VCPUs	Disk	RAM	Time since created
---------------	-------	------	-----	--------------------

Public Access

Providing Access to Derivative Datasets

Want to do network diagrams like Ian showed?
All collections have data.

List of URLs, domains
(As well as social media data, etc.)



The screenshot shows the Scholars Portal Dataserve website. The browser address bar displays the URL <https://dataserve.scholarsportal.info/dataserve/wahr>. The page header includes the site name "Scholars Portal Dataserve" and a search bar. Below the header, there is a navigation menu with links for "About", "Guides", "Support", "Sign Up", and "Log In". The main content area displays search results for the "Web Archives for Historical Research Group Dataserve". The results are organized into a table with columns for "Publication Date", "Author-Name", "Subject", "Keyword-Term", and "Deposit Date". The table lists several datasets, including "Paris #Bataclan #parisattacks #porteouvre tweets", "WomensMarch tweets January 12-28, 2017", "American Historical Association 2017 Conference Tweets", and "Derivative data for the Canadian Political Parties and Interest Groups collection". Each row provides a brief description of the dataset and a link to the full record.

Publication Date	Author-Name	Subject	Keyword-Term	Deposit Date
2016 (9) 2015 (3) 2017 (2)	Ruest, Nick (13) Milligan, Ian (3) Library and Archives Canada (1) Lin, Jimmy (1)	Arts and Humanities (4) Social Sciences (4) Other (3) Computer and Information Science (2)	twitter (2) New Democratic Party of Canada (1) PanamaPapers (1) Twitter (1) WomensMarch (1)	
Feb 7, 2017	Ruest, Nick, 2015, "Paris #Bataclan #parisattacks #porteouvre tweets", hdi:10864/11312, Scholars Portal Dataserve, V3			
Jan 30, 2017	Ruest, Nick, 2017, "WomensMarch tweets January 12-28, 2017", doi:10.5683/SP/ZEL1Q6, Scholars Portal Dataserve, V4			
Jan 9, 2017	Milligan, Ian, 2017, "American Historical Association 2017 Conference Tweets", doi:10.5683/SP/CFVF1F, Scholars Portal Dataserve, V1			
Jan 3, 2017	Milligan, Ian; Ruest, Nick; Lin, Jimmy, 2015, "Derivative data for the Canadian Political Parties and Interest Groups collection", hdi:10864/11301, Scholars Portal Dataserve, V10			

~~Shine~~

Blacklight

WebArchives.ca

- Warcbase with a GUI front end
- Archivists/Librarians bring their collections, generate derivatives
- Hosted with Compute Canada

Blacklight Search Results

localhost:3000/?utf8=✓&search_field=nce

Apps GMail Lib GitHub AWS HistD RSS Globe Other Bookmarks

WALK

All Fields

nce

Search

Limit your search

You searched for: nce

Start Over

Previous | 1 - 10 of 5,527 | Next

10 per page

1. APPLICATION: bogenesis.uvic.ca [crawled on: 2014-08-18] Bookmark

Host: bogenesis.uvic.ca
Crawl Date: 2014-08-18T01:28:40Z
Content Type: application/xml
Domain: uvic.ca
Institution: University of Victoria Libraries
Collection Name: University of Victoria Digital Scholarship Websites
Collection Number: 4376

2. APPLICATION: mapoflondon.uvic.ca [crawled on: 2015-10-02] Bookmark

Host: mapoflondon.uvic.ca
Crawl Date: 2015-10-02T04:10:09Z
Content Type: application/xml
Domain: uvic.ca
Institution: University of Victoria Libraries
Collection Name: University of Victoria Digital Scholarship Websites
Collection Number: 4376

3. APPLICATION: youtube.com [crawled on: 2015-02-15] Bookmark

Host: youtube.com
Crawl Date: 2015-02-15T21:10:47Z
Content Type: application/xml
Domain: youtube.com
Institution: University of Winnipeg Library
Collection Name: University of Winnipeg Websites
Collection Number: 3832

4. APPLICATION: youtube.com [crawled on: 2015-11-02] Bookmark

Host: youtube.com
Crawl Date: 2015-11-02T05:40:32Z
Content Type: application/xml
Domain: youtube.com
Institution: University of Toronto Libraries
Collection Name: T-Space
Collection Number: 6473

5. APPLICATION: youtube.com [crawled on: 2015-02-17] Bookmark

Host: youtube.com
Crawl Date: 2015-02-17T13:37:32Z
Content Type: application/xml
Domain: youtube.com
Institution: University of Winnipeg Library

General Content Type

html	4,240
pdf	783
text	295
other	209
audio	0
image	0
powerpoint	0
video	0
word	0

Domain

Links Domains

Institution

University of Alberta Libraries	4,671
University of Victoria Libraries	457
University of Toronto Libraries	199
Simon Fraser University Library	90
Dalhousie University Libraries	62
University of Winnipeg Library	48

Collection Name

Prairie Provinces	3,940
Alberta Oil Sands	153
University of Alberta Websites	141
University of Victoria Research Centres, Groups, and Corporate Entities	130
University of Victoria Websites	129
Idle No More	92
Public Knowledge Project	87
University of Victoria Digital Scholarship Websites	80
T-Space	77
British Columbia Lo-	76

~~14 Million Solr docs!~~

100+ Million Solr docs!

TikaExtractor.extract#extract(#=2291683, time=960340.22ms, avg=2.39#/ms 0.42ms/#, 0.67%)
TikaExtractor.extract#parse(#=2291683, time=13045791.36ms, avg=0.18#/ms 5.69ms/#, 9.13%)
ImageAnalyzer.analyze#facesanddominant(#=12084, time=7117241.29ms, avg=0.00#/ms 588.98ms/#, 4.98%)
WARCPayloadAnalyzers.analyze#droid(#=2298053, time=22526126.18ms, avg=0.10#/ms 9.80ms/#, 15.77%)
HTMLAnalyzer.analyze#total(#=2117195, time=9261702.09ms, avg=0.23#/ms 4.37ms/#, 6.48%)
HTMLAnalyzer.analyze#parser(#=2117195, time=5677872.72ms, avg=0.37#/ms 2.68ms/#, 3.97%)
HtmlFeatureParser.parse#jsoupparse(#=2117195, time=3893471.84ms, avg=0.54#/ms 1.84ms/#, 2.73%)
HtmlFeatureParser.parse#featureextract(#=2117195, time=1214905.31ms, avg=1.74#/ms 0.57ms/#, 0.85%)
PDFAnalyzer.analyze(#=32238, time=6778115.05ms, avg=0.00#/ms 210.25ms/#, 4.74%)
WARCIndexer.extract#archheaders(#=5451459, time=799793.76ms, avg=6.82#/ms 0.15ms/#, 0.56%)
SolrRecord.removeControlCharacters#total(#=407986927, time=2037130.28ms, avg=200.28#/ms 0.00ms/#, 1.43%)
SolrRecord.sanitizeUTF8(#=407986927, time=490146.14ms, avg=832.38#/ms 0.00ms/#, 0.34%)
Parsing Archive File [472/2771]:/data/ALBERTA_university_of_alberta_websites/ARCHIVEIT-1830-NONE-CHONHQ-20111006081145-00043-crawling205.us.archive.org-6681.warc.gz
2017-03-01 20:03:23 INFO Instrument:155 - Performance statistics
WARCIndexerCommand.main#total(#=0, time=0.00ms, avg=0.00#/ms 0.00ms/#, 0.00%)
WARCIndexerCommand.parseWarcFiles#docdelivery(#=4030803, time=2618673.42ms, avg=1.54#/ms 0.65ms/#, 1.83%)
WARCIndexerCommand.checkSubmission#solradd(#=80616, time=2610861.06ms, avg=0.03#/ms 32.39ms/#, 1.83%)
WARCIndexerCommand.parseWarcFiles#startup(#=1, time=6455.69ms, avg=0.00#/ms 6455.69ms/#, 0.00%)
WARCIndexerCommand.commit#success(#=472, time=51991586.32ms, avg=0.00#/ms 110151.67ms/#, 36.36%)
WARCIndexerCommand.parseWarcFiles#fullarcprocess(#=472, time=36609191462.20ms, avg=0.00#/ms 77561846.32ms/#, 25601.30%)
WARCIndexerCommand.parseWarcFiles#solrdocCreation(#=16369360, time=87411850.72ms, avg=0.19#/ms 5.34ms/#, 61.13%)
WARCIndexer.extract#total(#=2298509, time=83285434.98ms, avg=0.03#/ms 36.23ms/#, 58.24%)
TextAnalyzers#total(#=2298509, time=10540192.01ms, avg=0.22#/ms 4.59ms/#, 7.37%)
PostcodeAnalyzer(#=2146519, time=164817.71ms, avg=13.02#/ms 0.08ms/#, 0.12%)
LanguageAnalyzer#total(#=2146519, time=9401277.30ms, avg=0.23#/ms 4.38ms/#, 6.57%)
LanguageDetector#startup(#=1, time=549.77ms, avg=0.00#/ms 549.77ms/#, 0.00%)
LanguageDetector.detectLanguage#li(#=2146519, time=3707193.74ms, avg=0.58#/ms 1.73ms/#, 2.59%)
LanguageIdentifier.addProfile(#=28, time=31.26ms, avg=0.90#/ms 1.12ms/#, 0.00%)
LanguageIdentifier#matchLanguageProfile(#=2146519, time=3197698.23ms, avg=0.67#/ms 1.49ms/#, 2.24%)
LanguageProfile.distanceInterleaved#total(#=60102532, time=3182638.22ms, avg=18.88#/ms 0.05ms/#, 2.23%)
LanguageProfile.interleaved.update(#=2146547, time=376252.70ms, avg=5.71#/ms 0.18ms/#, 0.26%)
LanguageProfile.distanceInterleaved#dist(#=60102532, time=2777574.28ms, avg=21.64#/ms 0.05ms/#, 1.94%)
LanguageProfile#profilewriter(#=2146519, time=506060.30ms, avg=4.24#/ms 0.24ms/#, 0.35%)
LanguageDetector.detectLanguage#ld(#=2146433, time=5681938.01ms, avg=0.38#/ms 2.65ms/#, 3.97%)
FuzzyHashAnalyzer(#=2146519, time=967674.67ms, avg=2.22#/ms 0.45ms/#, 0.68%)
WARCIndexer.extract#hashstreamwrap(#=4030803, time=9367320.28ms, avg=0.43#/ms 2.32ms/#, 6.55%)
WARCIndexer.extract#analyzetikaInput(#=2298509, time=62443631.77ms, avg=0.04#/ms 27.17ms/#, 43.67%)
WARCPayloadAnalyzers.analyze#total(#=2298509, time=62439400.21ms, avg=0.04#/ms 27.17ms/#, 43.66%)
WARCPayloadAnalyzers.analyze#firstbytes(#=2298509, time=25330.01ms, avg=90.74#/ms 0.01ms/#, 0.02%)
ARCNameAnalyzer.analyze(#=2298509, time=14759.56ms, avg=155.73#/ms 0.01ms/#, 0.01%)
XMLAnalyzer.analyze(#=1712, time=1544.68ms, avg=1.11#/ms 0.90ms/#, 0.00%)
WARCPayloadAnalyzers.analyze#arcname(#=2298509, time=16265.12ms, avg=141.32#/ms 0.01ms/#, 0.01%)
WARCPayloadAnalyzers.analyze#tikasolrextract(#=2298509, time=16671001.58ms, avg=0.14#/ms 7.25ms/#, 11.66%)
TikaExtractor.extract#detect(#=2298509, time=2543915.37ms, avg=0.90#/ms 1.11ms/#, 1.78%)
TikaExtractor.extract#extract(#=2292139, time=960426.89ms, avg=2.39#/ms 0.42ms/#, 0.67%)
TikaExtractor.extract#parse(#=2292139, time=13048109.51ms, avg=0.18#/ms 5.69ms/#, 9.12%)
ImageAnalyzer.analyze#facesanddominant(#=12119, time=7122593.06ms, avg=0.00#/ms 587.72ms/#, 4.98%)
WARCPayloadAnalyzers.analyze#droid(#=2298509, time=22554143.16ms, avg=0.10#/ms 9.81ms/#, 15.77%)
HTMLAnalyzer.analyze#total(#=2117238, time=9261882.41ms, avg=0.23#/ms 4.37ms/#, 6.48%)
HTMLAnalyzer.analyze#parser(#=2117238, time=5677980.36ms, avg=0.37#/ms 2.68ms/#, 3.97%)
HtmlFeatureParser.parse#jsoupparse(#=2117238, time=3893538.63ms, avg=0.54#/ms 1.84ms/#, 2.72%)
HtmlFeatureParser.parse#featureextract(#=2117238, time=1214933.36ms, avg=1.74#/ms 0.57ms/#, 0.85%)
PDFAnalyzer.analyze(#=32241, time=6779827.99ms, avg=0.00#/ms 210.29ms/#, 4.74%)
WARCIndexer.extract#archheaders(#=5452077, time=799933.68ms, avg=6.82#/ms 0.15ms/#, 0.56%)
SolrRecord.removeControlCharacters#total(#=408023959, time=2037350.77ms, avg=200.27#/ms 0.00ms/#, 1.42%)
SolrRecord.sanitizeUTF8(#=408023959, time=490191.93ms, avg=832.38#/ms 0.00ms/#, 0.34%)

WARClight prototype

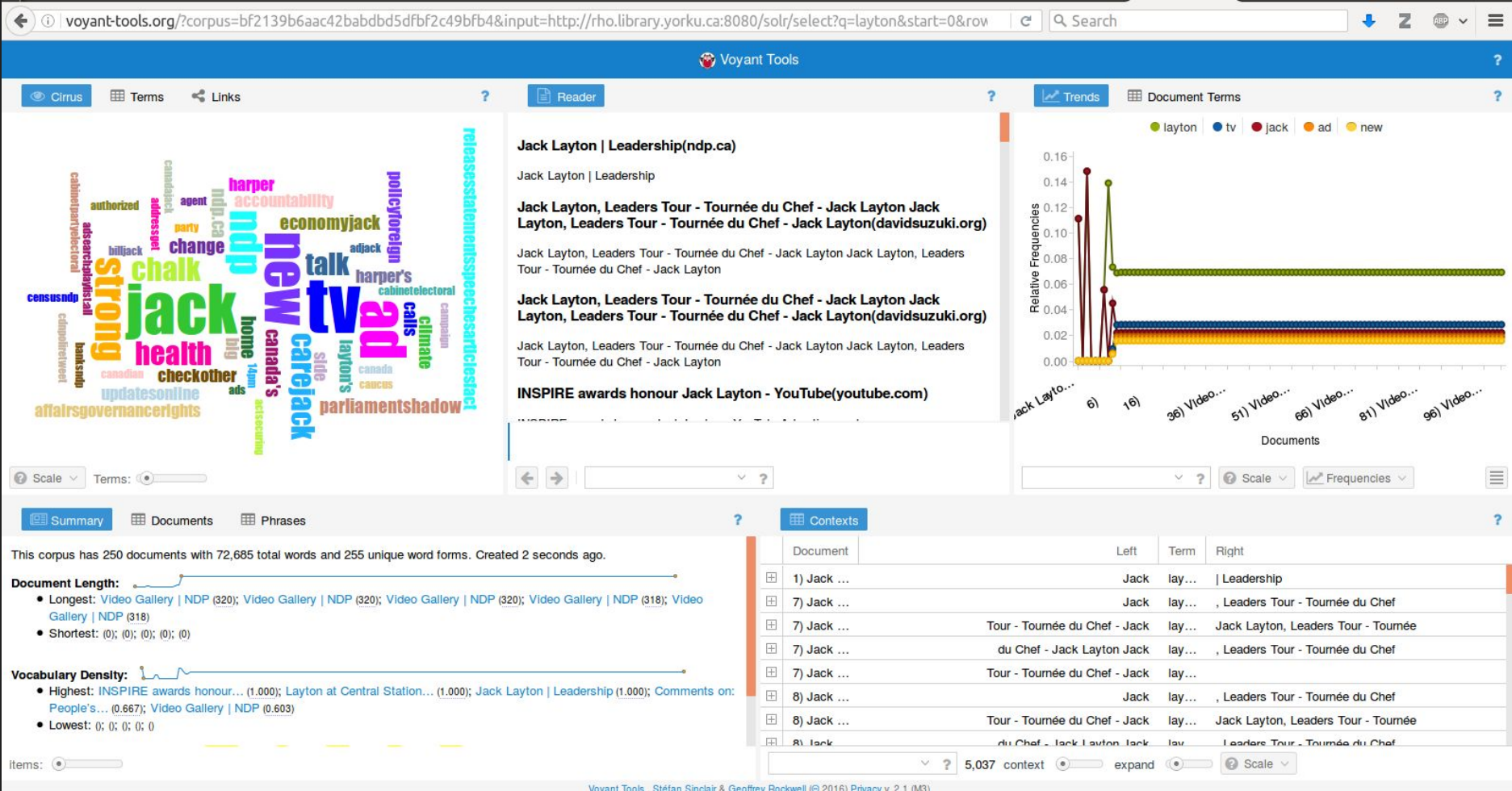
The screenshot shows a web browser window with multiple tabs. The active tab is 'Blacklight Search Results' for the URL 'localhost:3000/?utf8=✓&search_field=all_fields&q="Nick+Ruest"'. The page header features the 'WALK' logo and navigation links for 'Bookmarks (0)', 'History', and 'Login'. A search bar contains the query '"Nick Ruest"' with a 'Search' button. Below the search bar, a 'Limit your search' section includes filters for 'General Content Type' (listing html, other, pdf, text, audio, excel, image, powerpoint, video, word with counts) and 'Domain', 'Links Domains', 'Institution', 'Collection Name', and 'Collection Number'. The search results are displayed in a list format, showing the first two results. Each result includes a title, host, crawl date, content type, domain, and links to the original source. The first result is a tweet from '트위터의 nick ruest (ruebot)님' on twitter.com. The second result is a GitHub repository 'AhemNason (Mike Nason) / followers - GitHub' on github.com. The third result is partially visible at the bottom of the screen.

WARClight prototype

Search results for "Nick Ruest":

- 1. 트위터의 nick ruest (ruebot)님
Title: 트위터의 nick ruest (ruebot)님
Host: twitter.com
Crawl Date: 2013-10-11T00:58:16Z
Content Type: text/html
Domain: twitter.com
This page links to: twitter.com, t.co, and twimg.com
Institution: University of Alberta Libraries
Collection Name: Alberta Floods June 2013
Collection Number: 3747
- 2. AhemNason (Mike Nason) / followers - GitHub
Title: AhemNason (Mike Nason) / followers - GitHub
Host: github.com
Crawl Date: 2016-07-26T08:06:00Z
Content Type: text/html
Domain: github.com
This page links to: github.com
Institution: Simon Fraser University Library
Collection Name: Public Knowledge Project
Collection Number: 7100
- 3. AhemNason (Mike Nason) / followers - GitHub

Finding famous people in WARClight, by Ian Milligan



warcbase

Again :-)

WALK

- Mass Ingest Script to take each collection and:
 - Extract hyperlinks and generate gephi files;
 - Extract all URLs and domain counts;
 - Extract plain text;

The screenshot displays the 'Scholars Portal Dataserve' website. The browser address bar shows the URL: <https://dataserve.scholarsportal.info/dataset.xhtml?persistentId=hdl:10864/12040>. The page title is 'Network Data for the Web Archives for Longitudinal Knowledge (WALK) Project'. Below the title, it lists the creators: 'Milligan, Ian; Ruest, Nick, 2016, "Network Data for the Web Archives for Longitudinal Knowledge (WALK) Project", hdl:10864/12040, Scholars Portal Dataserve, V2'. A 'Cite Data' button is visible. The 'Description' section states: 'The GDF file format is supported by network analysis software, including Gephi. These are network files that can let you understand the domain-to-domain networks within WALK collections.' The 'Subject' is 'Arts and Humanities; Social Sciences' and the 'Keyword' is 'web archives'. Below this, there are tabs for 'Files', 'Metadata', 'Terms', and 'Versions'. A search bar for the dataset is present. The 'Files' tab is active, showing a list of 52 files. Three files are visible in the list:

File Name	Size	Date	Downloads	MD5	Description
ALBERTA_edmonton_public_library.gdf	Unknown	1.4 KB - Dec 14, 2016	1 Download	MD5: 132f5d2c653810d58f1d0c2a5b5e232e;	GDF file for Edmonton Public Library collection.
alberta_education_curriculum.gdf	Plain Text - 175.5 KB	Aug 22, 2016	4 Downloads	MD5: 16d0e4f23c0cde18f97f3d0f0d0e688897;	GDF file for Alberta Education Curriculum
alberta_floods_2013.gdf	Plain Text - 488.7 KB	Aug 22, 2016	0 Downloads	MD5: 1629efc9b9d9e1e3b39cad0dd5e6acc89;	GDF file for Alberta Flood Collection

Links!

- <https://uwaterloo.ca/web-archive-group/>
- <https://github.com/web-archive-group/>
- <https://github.com/ianmilligan1/>
- <https://github.com/ruebot>
- <http://dataverse.scholarsportal.info/dvn/dv/wahr>

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Thanks very much!