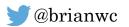


http://freelawproject.org

Brian W. Carver & Michael Lissner

Columbia University Web Archiving Conference June 4, 2015







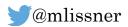
- •Free Law Project is a California non-profit that seeks to:
 - •provide free online access to primary legal materials,
 - develop online legal research tools, and
 - •support academic research on legal corpora.

•Co-founders:

- •Michael Lissner &
- •Brian W. Carver







http://freelawproject.org



- •Free Law Project sponsors the development of:
 - •CourtListener, https://www.courtlistener.com

COURT LISTENER About Coverage Sign in / Register		Search
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Case name	Ranjit Singh v. Eric Holder, Jr. (6th Cir. 2014) Date Filed: May 13th, 2014 Status: Non-Precedential Docket Number: 13-3380	
Judge	NOT RECOMMENDED FOR PUBLICATION File Name: 14a0362n.06 No. 13-3380 FILED May 13, 2014 DEBORA Clerk UNITED STATES COURTS OF APPEALS	H S. HUNT,
Precedential Status ✓ Precedential (2,221,450) ✓ Non-Precedential (295,915)	Ice House America, LL.C v. Charles Cardin (6th Cir. 2014) Date Filed: May 13th, 2014 Status: Precedential Docket Number: 13-5764 RECOMMENDED FOR FULL-TEXT PUBLICATION Pursuant to Sixth Circuit I.O.P. 32.1(b) File Name: 14a0099p./ STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT ICE HOUSE AMERICA, LLC, 7 Appellant, 1	06 UNITED
✓ Errata (291) ✓ Separate Opinion (64) ✓ In-chambers (12) ✓ Relating-to orders (98)	United States v. Quavon Peterson (6th Cir. 2014) Date Filed: May 13th, 2014 Status: Non-Precedential Docket Number: 13-3542 NOT RECOMMENDED FOR FULL-TEXT PUBLICATION File Name: 14a0358n.06 No 13-3542 FILED UNITED ST COURT OF APPEALS May 13, 2014 FOR THE SIXTH CIRCUIT DEBORAH S. HUNT, Clerk UNITED STAT	ATES
✓ Unknown Status (5) Filed After YYYY-MM-DD	Xiu Ling Chen v. Eric H. Holder, Jr. (8th Cir. 2014) Date Filed: May 13th, 2014 Status: Precedential Docket Number: 13-1103 United States Court of Appeals For the Eighth Circuit No. 13-1103 Xiu Ling Chen	H. Holder, Jr.,
Filed Before YYYY-MM-DD	Gregory Bickley v. Dish Network LLC (6th Cir. 2014) Date Filed: May 13th, 2014 Status: Precedential Docket Number: 13-5979 RECOMMENDED FOR FULL-TEXT PUBLICATION Pursuant to Sixth Circuit LO.P. 32.1(b) File Name: 14a00980.	06 UNITED



- •Free Law Project sponsors the development of:
 - •Juriscraper,

https://github.com/freelawproject/juriscraper, a software system for harvesting the court opinions provided on appellate court websites.

- •Covers all federal circuit courts and Supreme Court.
- •Now covers all state courts of last resort and most all intermediate appellate state courts.
- •Covers various special jurisdictions, such as Court of Federal Claims, Veterans Claims, Tax, Int'l Trade, etc.
- •This amounts to watching over 200 different webpages for new documents, every weekday.

- •Free Law Project partners with Princeton's Center for Information Technology Policy on:
- •RECAP, http://recapthelaw.org, browser extensions that improve the experience of browsing the federal electronic document system, PACER, while helping PACER users build a free and open repository of public court records.
- •Michael will give a lightning talk about RECAP tomorrow.

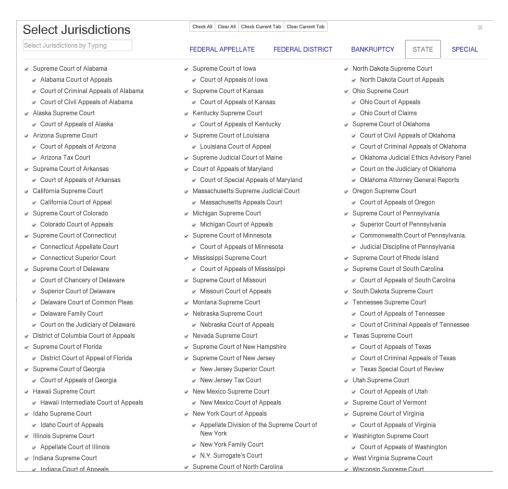




- •Free Law Project sponsors the development of:
 - •Online legal research tools on the CourtListener platform, such as a citator, table of authorities for each document, sophisticated search filtering options, improvements to relevancy search results, etc.
 - •An Application Programming Interface (API) to provide access to all court opinions and key related metadata in our database, to enable others to programmatically utilize our collections.



What did you do with our money?!





Scrapers

- We want the metadata about the documents we collect to be accurate.
- A one-size-fits-all solution cannot guarantee this across hundreds of different court websites.
- We do have an extensible general core.
- The details for each site are handled independently, and this creates a very low barrier to entry for new developer-contributors.



```
Raw Blame History
56 lines (45 sloc) 1.717 kB
      """Scraper for Supreme Court of Maine
      CourtID: me
      Court Short Name: Me.
      Author: Brian W. Carver
      Date created: June 20, 2014
         2014-06-25 (est): Added code for additional date formats.
         2014-07-02: Was receiving InsanityException and tweaked date code to get some
                    missing dates.
        2014-12-15: Fixes insanity exception by tweaking the XPaths.
      from datetime import datetime
       from 1xml import html
       from juriscraper.OpinionSite import OpinionSite
 18
 19
      class Site(OpinionSite):
          def __init__(self);
              super(Site, self).__init__()
              self.court_id = self.__module__
              self.url = 'http://www.courts.maine.gov/opinions_orders/supreme/publishedopinions.shtml'
 26
          def _get_download_urls(self):
              path = '//table//tr/td[2]/a[1]/@href'
              return list(self.html.xpath(path))
 28
 29
          def _get_case_names(self):
  30
              case_names = []
              for e in self.html.xpath('//table//tr/td[2]/a[1]'):
                  s = html.tostring(e, method='text', encoding='unicode')
                  case_names.append(s)
  34
  35
              return case_names
 36
          def _get_case_dates(self):
  38
              path = '//table//tr/td[3]/text()'
  39
              date_styles = ['%B %d, %Y', '%B %d, %Y']
              dates = []
  40
              for s in self.html.xpath(path):
                  for date_style in date_styles:
 43
                          d = datetime.strptime(s.strip(), date_style).date()
 44
                      except ValueError:
                          continue
 46
 47
                      dates.append(d)
              return dates
```



Scrapers

- When we started this grant, we had 87 state court scrapers.
- When we finished work under this grant, we had 154 state court scrapers.
- Since completing this work we have added over 58,000 state court opinions to our archive.

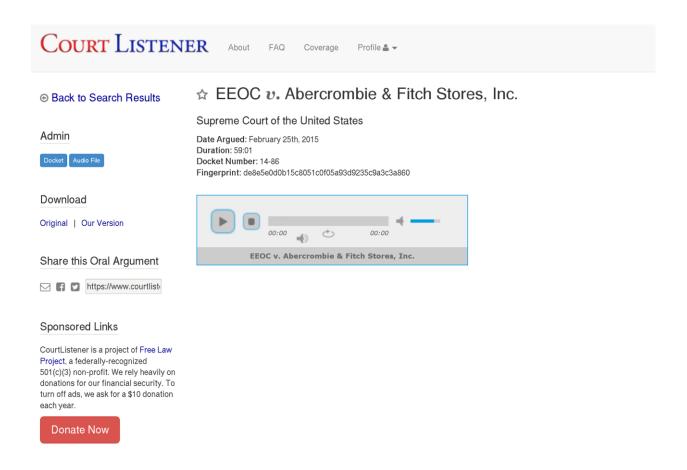


What did you do with our money?!

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	United States v. Gamache (1st Cir. 2015) Date Argued: May 6th, 2015 Docket Number: Case:14-1546 Duration: 10:18	
Refine Your Query	II :: 1 (c)	
Select Jurisdictions ☑* All Jurisdictions Selected	United States v. Miguel Osuna-Alvarez (9th Cir. 2015) Date Argued: May 6th, 2015 Docket Number: 13-50636 Duration: 31:42 Judge: Noonan, Wardlaw, Murguia	
Case Name	Patricia Stockman-Sann v. Robert McKnight, Jr. (9th Cir. 2015) Date Argued: May 6th, 2015 Docket Number: 13-55892 Duration: 42:05 Judge: Noonan, Wardlaw, Murguia	
Judge	United States v. Cruz Torres-Gonzalez (9th Cir. 2015) Date Argued: May 6th, 2015 Docket Number: 14-50017 Duration: 39:30 Judge: Noonan, Wardlaw, Murguia	
Argued After Argued Before YYYY-MM-I YYYY-MM-I	Alaska Airlines v. Judy Schurke (9th Cir. 2015) Date Argued: May 6th, 2015 Docket Number: 13-35574 Duration: 36:41 Judge: Wallace, Kleinfeld, Christen	
Docket Number	Nadia Naffe v. John Frey (9th Cir. 2015) Date Argued: May 6th, 2015 Docket Number: 13-55666 Duration: 30:11 Judge: Tashima, Tallman, Nguyen	
Create an Alert	Zagfly, Inc. v. CIR (9th Cir. 2015) Date Argued: May 6th, 2015 Docket Number: 13-71566 Duration: 19:00 Judge: Fisher, Bea, Friedland	



What did you do with our money?!





Oral Arguments

- We preserve the original audio file.
- We create an improved .mp3 with metadata, album covers, etc.
- These are also accessible via our API and bulk downloads.



Oral Arguments

- When we started this grant, we had 0 oral argument audio files.
- Today we host more than 10,000 oral argument audio files. (257 *days* of listening.)
- By adding a new document/entity type we began the process of generalizing our infrastructure to accommodate new document types in the future.
- DC Legal Hackers named it a Legal Hack of the Year for 2014.



- What did we do under this grant?
 - Complete our daily coverage of all 50 states, even the state courts with terrible websites, by building lots of web scrapers.
 - Add oral argument audio scrapers for the federal appellate courts.
 - Add an open source audio player to our site.
 - Design our system to recognize a new type of document/media.



- Dain Points
 - DPFs are horrible.
 - Would like to automate a no-cost audio-to-text transcription solution. Does it exist?
 - Ongoing maintenance and monitoring.
- Future (Related) Work
 - Increasingly, courts are providing oral argument *video*.



- Thinking beyond the law:
 - Juriscraper has taught us a lot about how to harvest material from lots of websites.
 - One could change some variable names and use the same library to harvest anything.
 - Harvesting audio taught us a lot about audio processing and audio metadata that is useful to anyone archiving audio files.



- Get in touch!
 - http://freelawproject.org
 - https://www.courtlistener.com
 - http://recapthelaw.org
 - @freelawproject
 - @courtlistener
 - @recapthelaw
 - @brianwc
 - @mlissner