

photos
+
algorithms



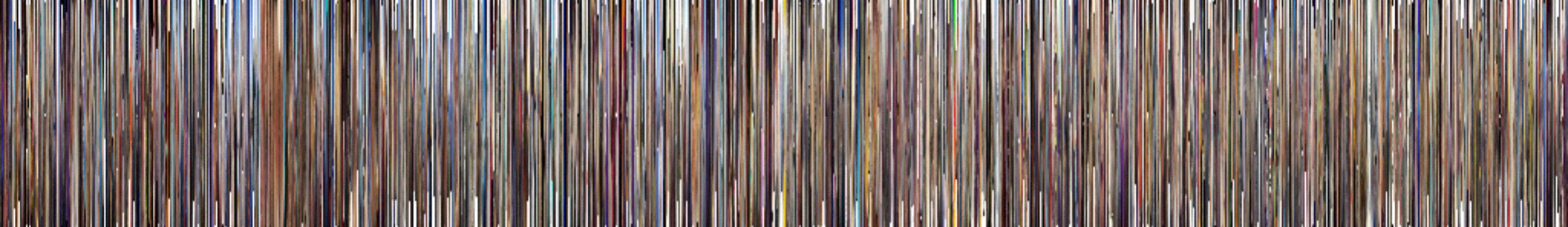
#1 Pager

- 
- what: visualizing millions of ig & flickr vancouver photos
 - github.com/rtanglao
 - repos: algosplusphotosequalsart, rtgram, ig-ggmap, ig-r-leaflet
 - stack: ruby, R, HTML5, MongoDB, imagemagick, graphicsmagick
 - sermon: narrate your work & have mentors

#thanks

OS X, BSD, Linux, C, POSIX, homebrew,
emacs, find, xargs, xxd, Photoshop,
IA Writer, ruby, bash, R, ggmap,
ggplot2, leaflet, imagemagick,
graphicsmagick, webshot, phantomJS,
R Studio, [zazzle.com](#), Art of Wear, git,
flickr, dropbox, github, js, Firefox,
shape collage, time lapse assembler,
yoshirt

#narrateYourWork

- 
- document what you tried TODAY
 - document what you'll do TOMORROW
 - because you will forget!
 - do it EVERY DAY!

#getMentors

- 
- Everybody needs help and inspiration
 - Mine is @kearwoodgilbert
 - Can I help you or can you help others?

#stack

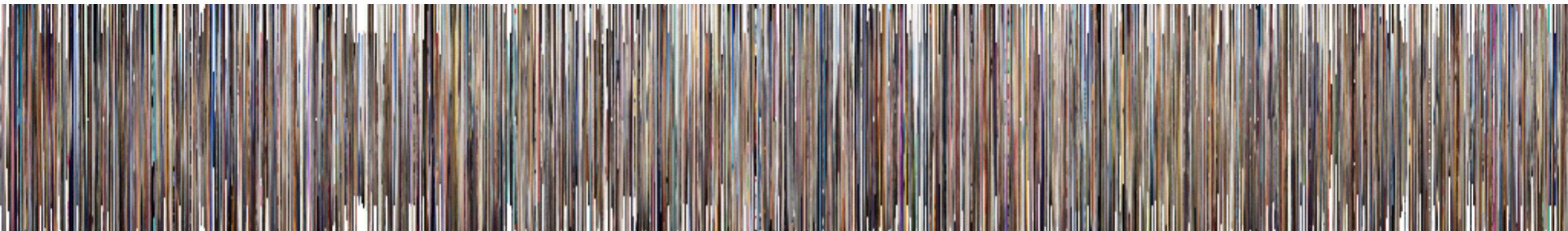
- 
- ruby: call the instagram API & write to MongoDB
 - ruby: read MongoDB & create JSON & CSV
 - R: read CSV and visualize w/ggmap & ggplot2
 - JS: read JSON and visualize w/leaflet
 - imagemagick & gm to make collages and convert to jpg & resize
 - visualizations: top colour maps, “barcodes”, 4 minute bins top colours

#everythingBreaks



- ruby 1.x to 2.x breaks MongoDB driver
- OS X can't handle millions of files: find & args
- tools break: JPG breaks w>65535px
- APIs break: ig doesn't support 1 year;
just 7 days & will break my code in June 2016

#WhyMongoDB



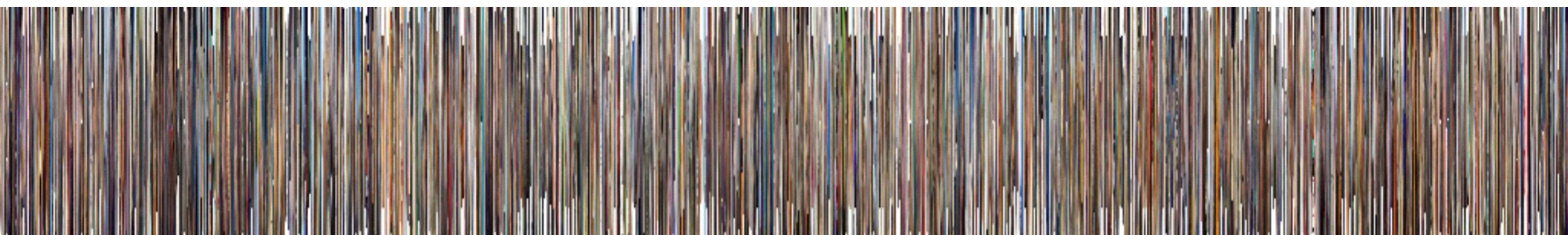
- I don't understand SQL :-)
- if API returns JSON, mongoDB is basically a glorified JSON store
- I've been using MongoDB since 2010 (used it with the Get Satisfaction API)

#dataMustBeCleaned



- 100,000 photos' metadata missing lat & long
- 400,000 photos out of 1.4 million couldn't be downloaded! (deleted or made private?)

#next



- ggvis? shiny? ganimate? VR?
- sound: Sonic Pi, tidal
- everything on the web!
- continuous visualization
- “real” wearables
- visualize Mozilla volunteer support data