

Instrument Your Life



GDPR

A

Authy

Travis CI

Happy GDPR day! *

Sat 26/05

UR

Y

We ha

Yubico

N

Nest

Updating the Authy Privacy Policy for GDPR

Updates to Nest's privacy policies and controls

Privacy laws in the European Union are changing as of May 25

Uptime Robot

Prefe

...Frid



Humble Bundle

We updated our Privacy Policy, too

Didn't think we'd miss out on the fun, did you? Help

SO

St

[Email and Privacy]

Change your settings

D

Discord

We're updating our Pr

Hey alistairjchr

26/05

Fri

Wed 25

GDPR

Wednesday
Sat 26/05
26/05



Travis CI
Happy GDPR day! *

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Change your settings

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Discord

We're updating our Pr

Hey alistairjchr

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Uptime Robot

Prefe

...Frid

SO

D

Who am I?

Alistair Brown

Lead Engineer @ ShopKeep

Building things with JavaScript for the last 7 years

twitter.com/alistairjcbrown

github.com/alistairjcbrown

keybase.io/alistairjcbrown



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Disclaimer



This won't give you a profound understanding of me, yourself or the world



Nothing to do with data privacy (my data's all on Github)

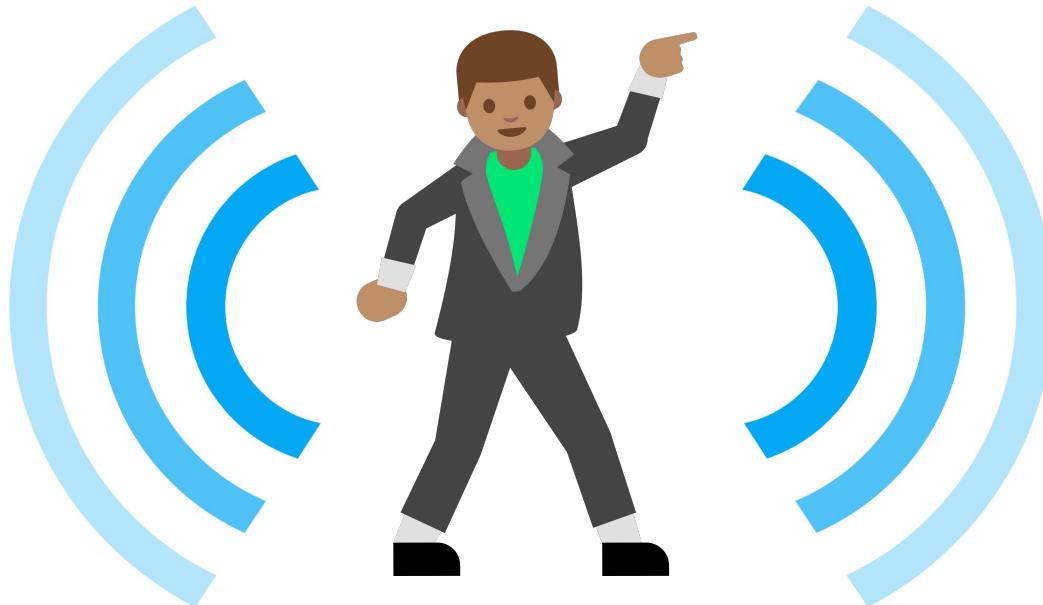


All the data is real - I'll try my best not to show anything too sensitive

Human Broadcasts



Human Broadcasts



Where have I been?



How active am I?



What have I watched?



Who did I meet?



What did I eat?



How was my day?



There's data, so what?

“Every day that goes by, data is lost” ~ Hugh Glaser



There's data, so what?

“Every day that goes by, data is lost” ~ Hugh Glaser



How do we capture it?

How do we use it?



Instrumentation

Instrument

equip (something) with measuring instruments.



Instrumentation

Instrument

equip (something) with measuring instruments.



Instrument everything

Instrumentation

Instrument

equip (something) with measuring instruments.



Instrument-**everything**-
as much as we can

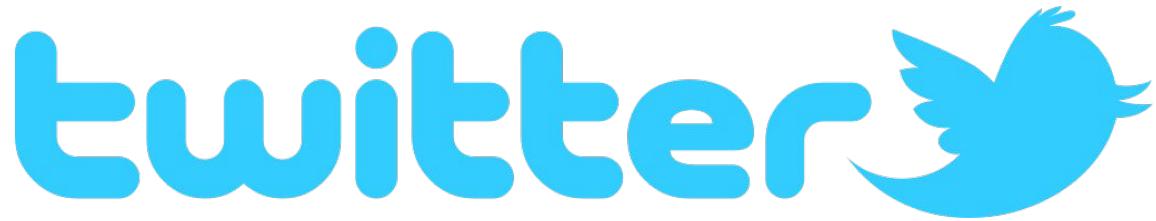
The year is **2010**...

The year is **2010**...

Challenge: “*Record everything you consume*”

The year is 2010...

Challenge: “*Record everything you consume*”



Tweets

Followers
1

Lists
0

Moments
0

2,533

Tweets

Tweets & replies



Ali - Food 🔒 @diggering · 28 Apr 2011

some milk chocolate, done White chocolate and a small curly wurly bar



Ali - Food 🔒 @diggering · 28 Apr 2011

a club sandwich, a can of lemon fanta, garlic potatoes, a mint, a piece of chewing gum and three large glasses of mountain dew



Ali - Food 🔒 @diggering · 28 Apr 2011

(yesterday) a cup of tea



Ali - Food 🔒 @diggering · 27 Apr 2011

two rolo yoghurts, a fried chicken sub and chicken and bacon in a cheese sauce with spaghetti



Ali - Food 🔒 @diggering · 27 Apr 2011

Two large glasses of water, three cans of diet coke, a chocolate filled doughnut, a piece of chewing gum and some chocolate



Ali - Food 🔒 @diggering · 27 Apr 2011

(yesterday) Four cups of green tea, two cans of diet coke, a cheeseburger, some chips, some chocolate and three large glasses of water



Ali - Food 🔒 @diggering · 11 Jul 2010

A medium snickers, a can of diet coke and a plate of chicken chow mein



Ali - Food 🔒 @diggering · 11 Jul 2010

A large glass of milk and a bowl of banoffee pie



Ali - Food 🔒 @diggering · 11 Jul 2010

A large glass of berry smoothie, two pieces of cheese on toast, a large glass of milk, a slice of sultana cake and some potato wedges



Ali - Food 🔒 @diggering · 10 Jul 2010

A can of fanta and three battered medium snickers



Ali - Food 🔒 @diggering · 10 Jul 2010

Half of a medium dominos Big Smoky Pizza and a can of diet coke



Ali - Food 🔒 @diggering · 10 Jul 2010

Two medium snickers, a glass of water, a can of fanta and a bowl of fruit and nut Weetabix Minis



Back to top ↑

Tweets Followers Lists Moments

2,533

1

Lists

0

Moments

0

Tweets

Tweets & replies



Ali - Food 🔒 @diggering · 28 Apr 2011

some milk chocolate, done White chocolate and a small curly wurly bar



Ali - Food 🔒 @diggering · 28 Apr 2011

a club sandwich, a can of lemon fanta, garlic potatoes, a mint, a piece of ch



Ali - Food 🔒 @diggering · 20 Nov 2010

six digestive biscuits with chocolate buttercream, a pint of Kronenbourg, a jaegerbomb and a pint of Stella



A

two rollo yogurts, a fried chicken sub and chicken and bacon in a cheese sauce with spaghetti



Ali - Food 🔒 @diggering · 27 Apr 2011

Two large glasses of water, three cans of diet coke, a chocolate filled doughnut, a piece of chewing gum and some chocolate



Ali - Food 🔒 @diggering · 27 Apr 2011

(yesterday) Four cups of green tea, two cans of diet coke, a cheeseburger, some chips, some chocolate and three large glasses of water



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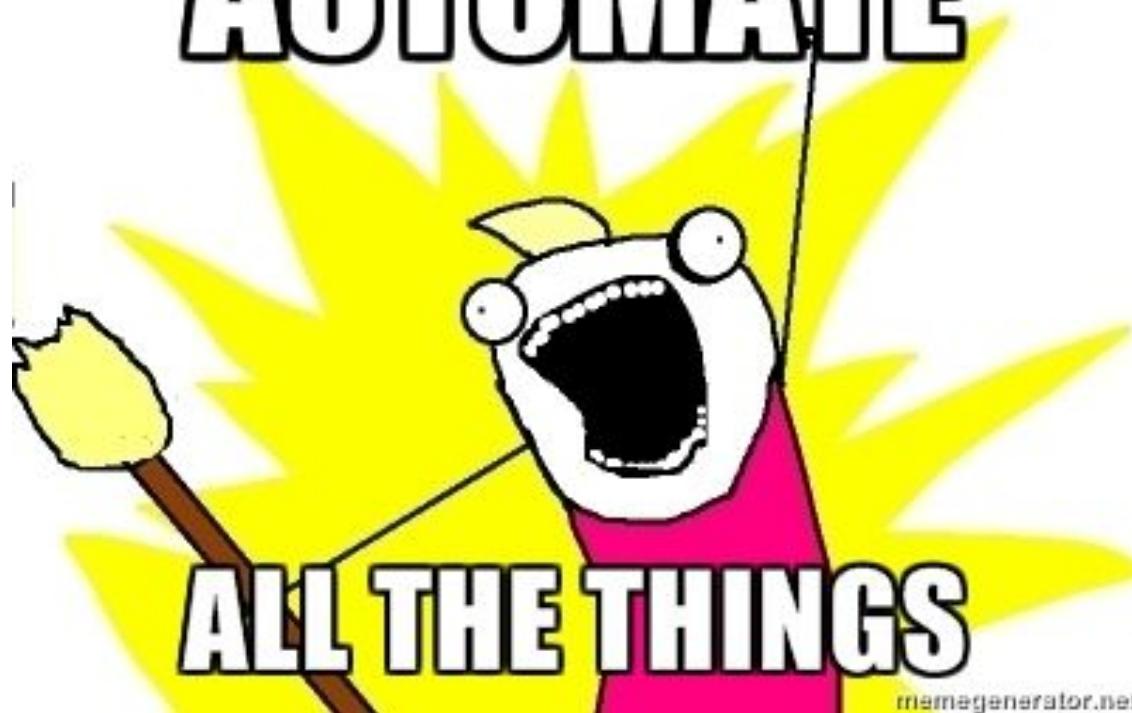
Two medium snickers, a glass of water, a can of fanta and a bowl of fruit and nut Weetabix Minis



Back to top ↑



AUTOMATE



Automation

What can I get for minimal effort?



Where have I been?



How active am I?



What have I watched?

Automation

What can I get for minimal effort?



Where have I been?



How active am I?



What have I watched?



NETFLIX

What about uncaptured data?

What about uncaptured data?



Who did I meet?



What did I have for lunch?



How was my day?

What about uncaptured data?



Who did I meet?



What did I have for lunch?



How was my day?



What was the weather like?



Was Github down?



Did we meet our team goals?

Manual

What can I get for minimal effort?

Manual

What can I get for minimal effort?



How was my day?

Manual

What can I get for minimal effort?



How was my day?





 Calendar • now ^

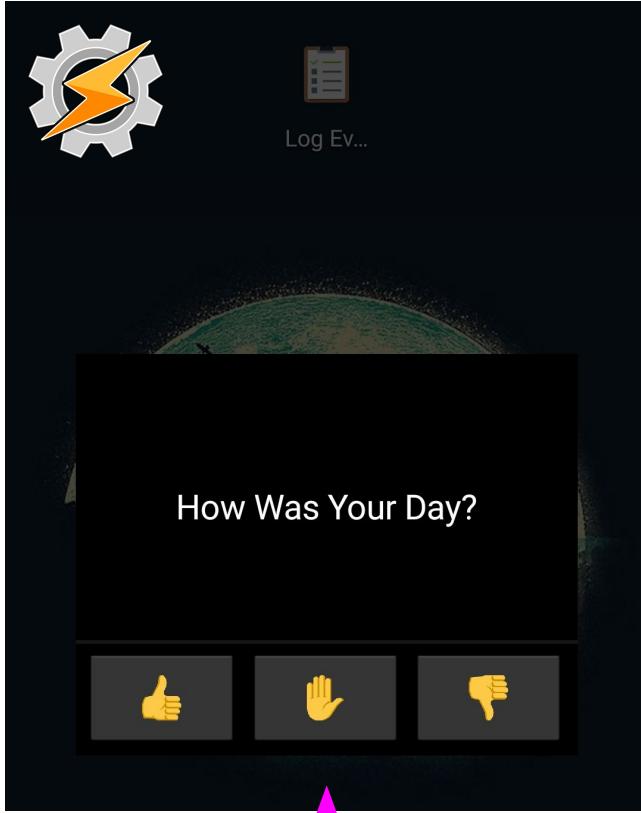
Log daily mood



DONE



10:00 AM



DONE

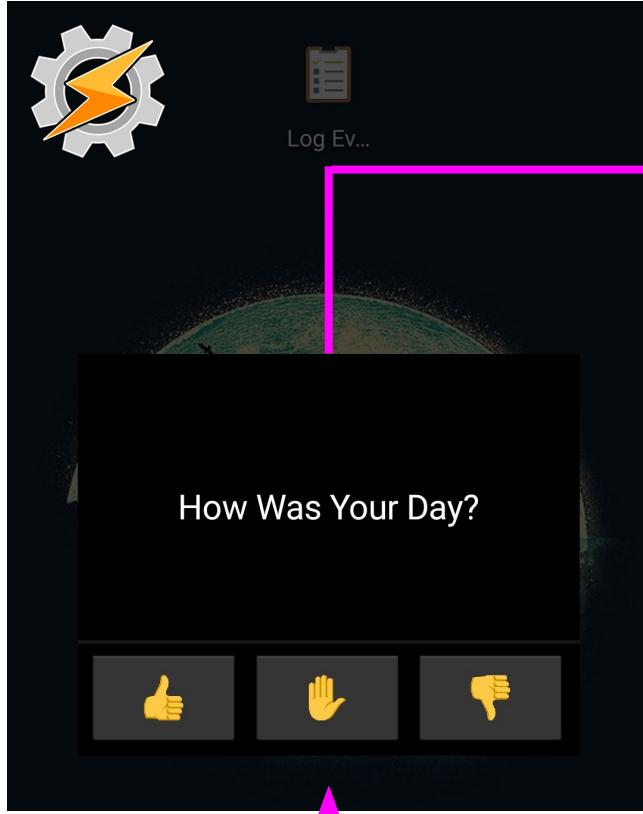


⌚ Calendar • now ^

Log daily mood



DONE

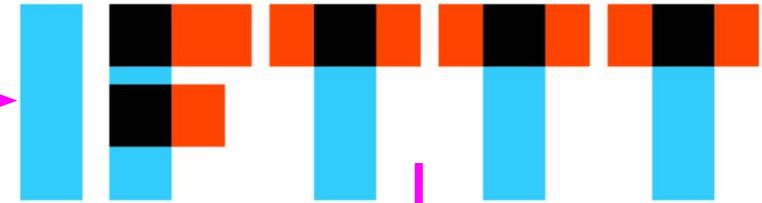
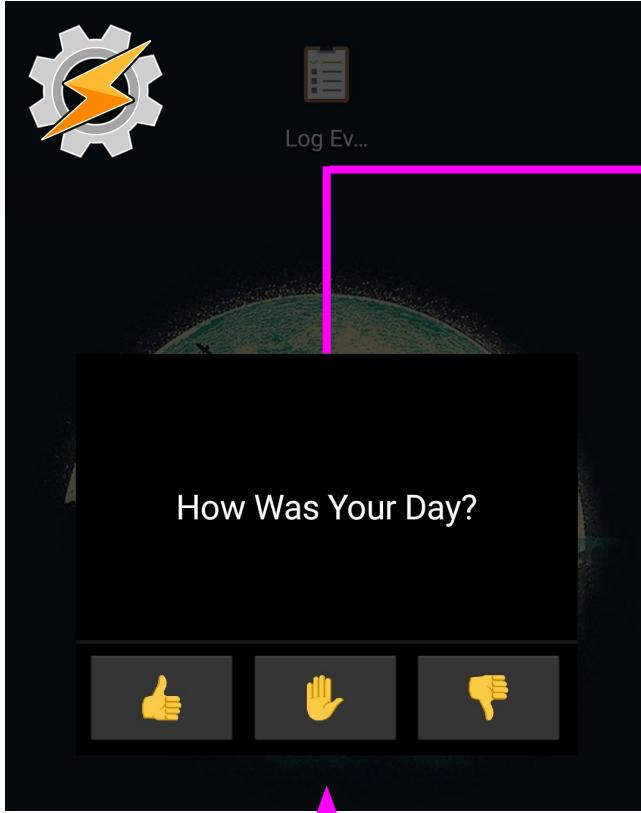




⌚ Calendar • now ^

Log daily mood

DONE

A screenshot of a spreadsheet application titled "log_daily-feeling". The menu bar includes File, Edit, View, Insert, Format, Data, Tools, and Add-ons. The toolbar includes icons for back, forward, print, and zoom (100%). The sheet is labeled "date". The data starts at row 92 and continues to row 100. Row 92: May 4, 2018 at 09:06PM. Row 93: May 5, 2018 at 10:48PM. Row 94: May 6, 2018 at 08:55PM. Row 95: May 7, 2018 at 09:00PM. Row 96: May 8, 2018 at 09:00PM. Row 97: May 9, 2018 at 09:08PM. Row 98: May 10, 2018 at 09:00PM. Row 99: May 11, 2018 at 09:00PM. Row 100: May 12, 2018 at 09:00PM. A pink arrow points from the "Log daily mood" button in the interface above to the first column of the spreadsheet.

Data Hunting

5 results for repositories matching backuper

 Clear filter

[fitbit-backuper](#)

Backup app for fitbit

 JavaScript  2 Updated on 10 Dec 2017



[netflix-activity-backuper](#) Private

Pull activity data from Netflix

 JavaScript  MIT Updated 15 days ago



[daily-feeling-backuper](#) Private

Pull daily feeling data from Google sheets

 JavaScript  MIT Updated 15 days ago



[Code](#)[Issues 0](#)[Pull requests 0](#)[Projects 0](#)[Wiki](#)[Insights](#)[Settings](#)

Backup of data from different services

[Edit](#)[Add topics](#)

197 commits

1 branch

0 releases

1 contributor

Branch: master ▾

[New pull request](#)[Create new file](#)[Upload files](#)[Find file](#)[Clone or download ▾](#)

alistairjcbrown	Fitbit backup for 2018-06-03	Latest commit 2b11212 6 hours ago
daily-feeling/data	Daily feeling backup - updated	23 hours ago
fitbit/data	Fitbit backup for 2018-06-03	6 hours ago
google-maps-visual-timeline	Google Maps visual timeline backup - updated	23 hours ago
netflix	Netflix activity backup - updated	23 hours ago
.gitignore	Update fitbit data to date	6 months ago
README.md	Add link to daily feeling backuper	15 days ago

[README.md](#)

Personal Data Backup

Mash it all together

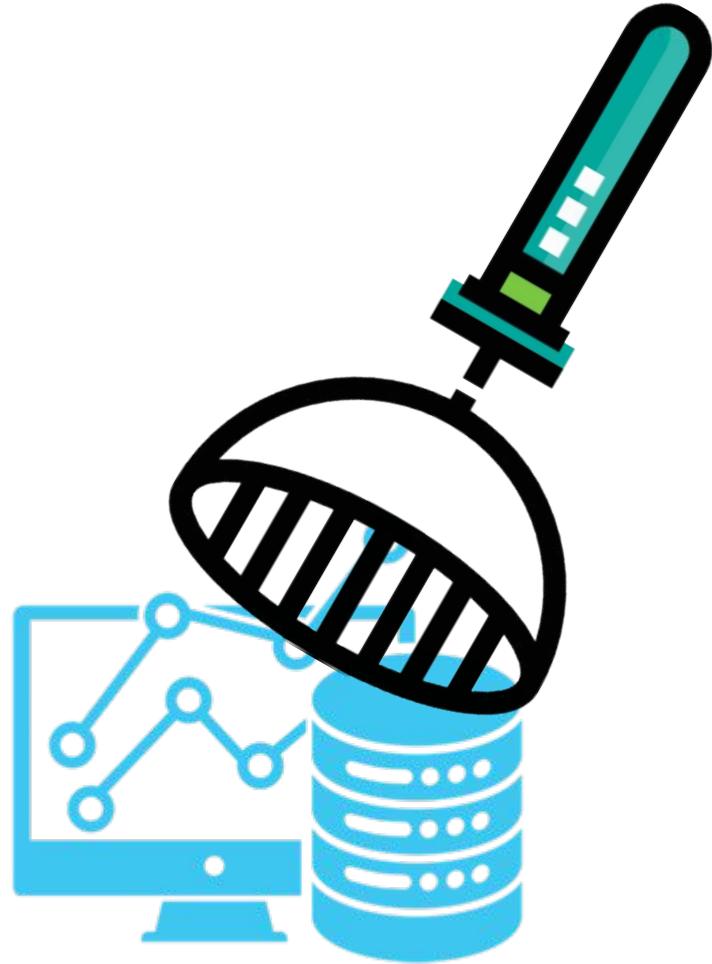
What can we learn? Can we built context?



Interrogate a single date in time



Look for trends across date ranges





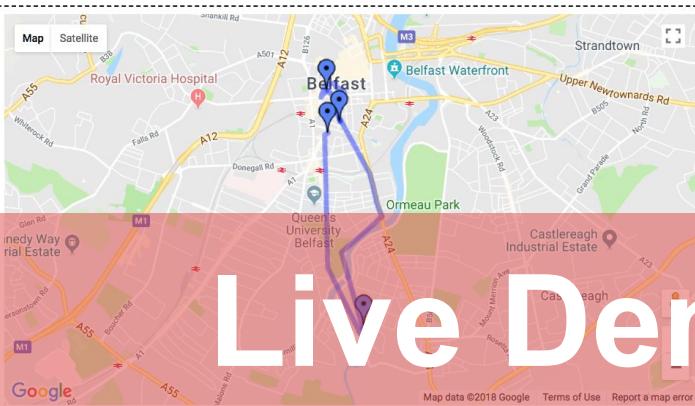
Thursday 17th May 2018 @ 20:10

-1 day 05/17/2018 +1 day

Play

Netflix Viewing History

The Expanse - Here There Be Dragons (@ 23:31 - 00:14)
The Expanse - Cascade (@ 22:48 - 23:30)
Little Boy Blue - Episode 4 (@ 14:40 - 15:27)



Timeline Summary

 Home
 Work (Shopkeep Ltd)

 Greggs Movie House Cinema Dublin Road Belfast

Driving (2 times)
Distance: 3.38 mile
Time: 19 minutes

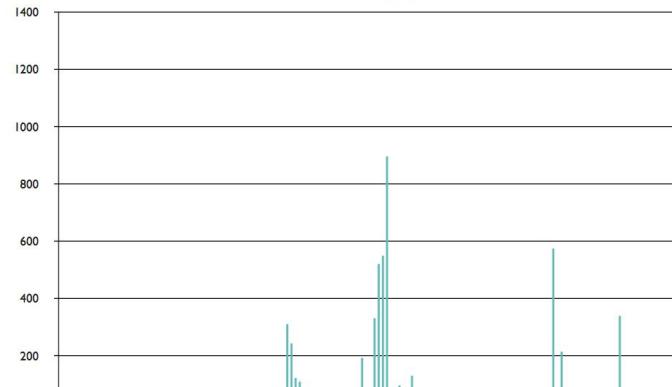
Walking (2 times)
Distance: 0.82 mile
Time: 15 minutes

Live Demo Time



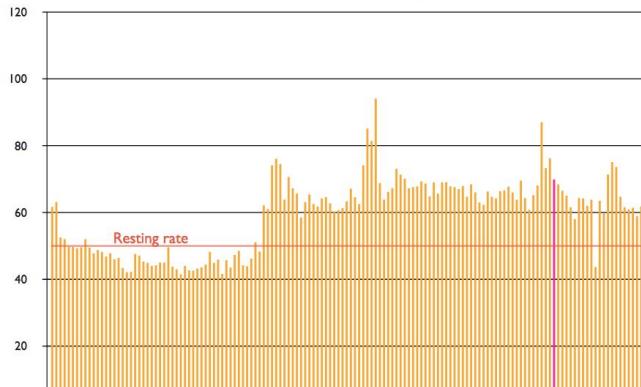
Steps Taken

Step total: 6099



Heart Rate

Resting heart rate: 50

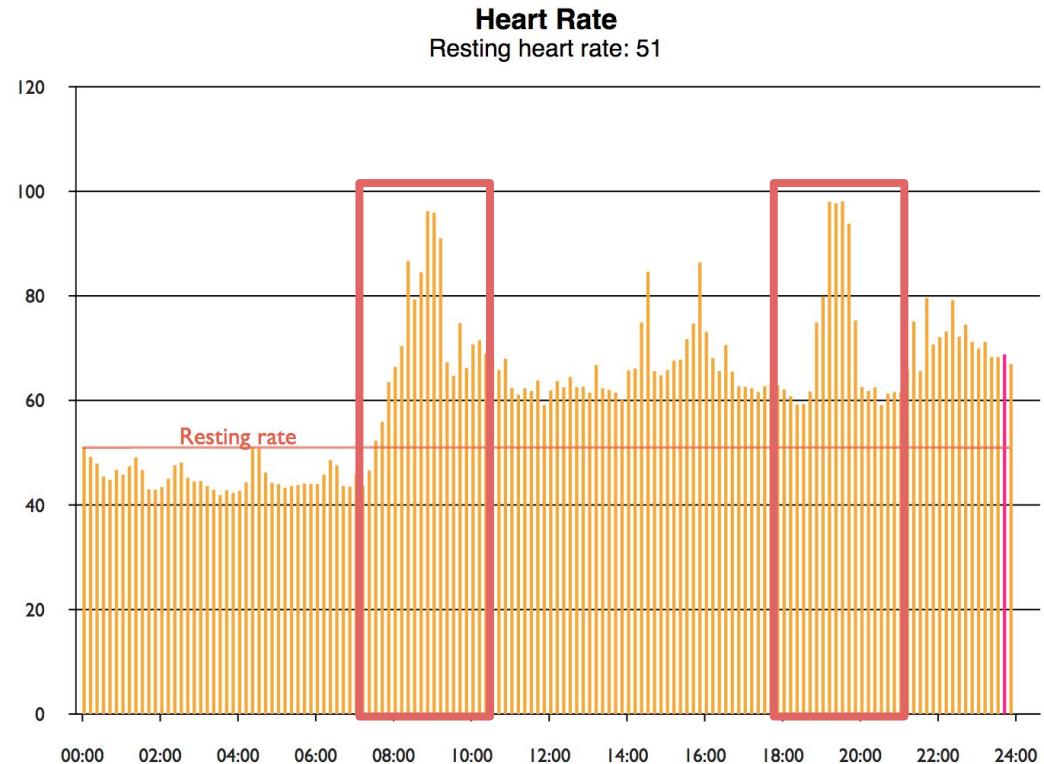


Friday 1st June 2018

Heart rate spikes. Why?



How active am I?



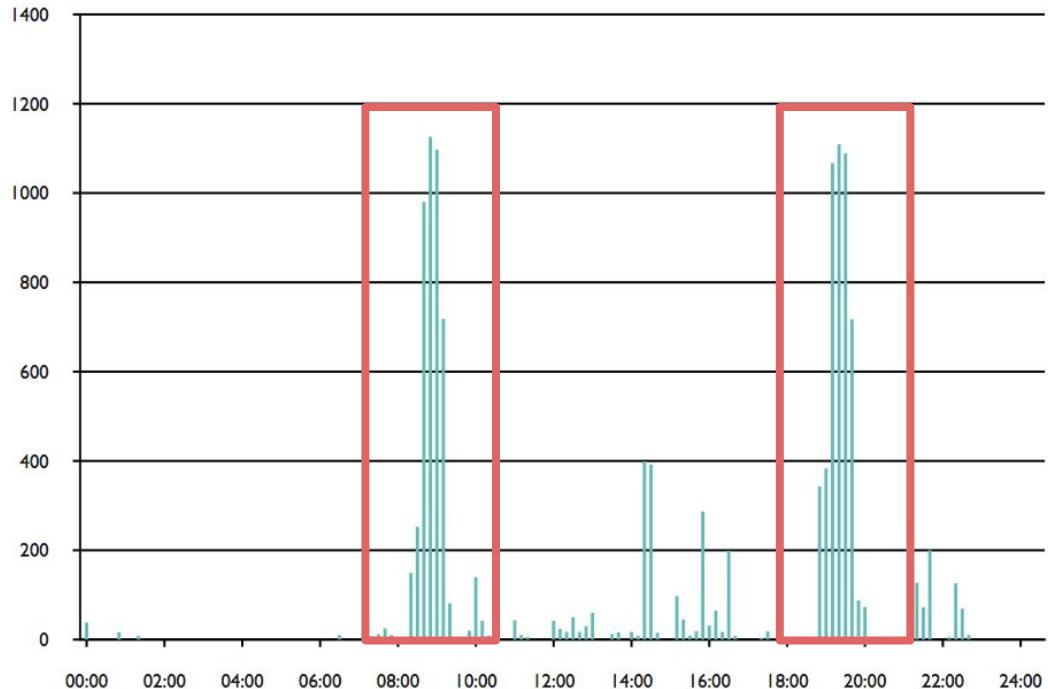
Friday 1st June 2018

Heart rate spikes. Why?



How active am I?

Steps Taken
Step total: 12460



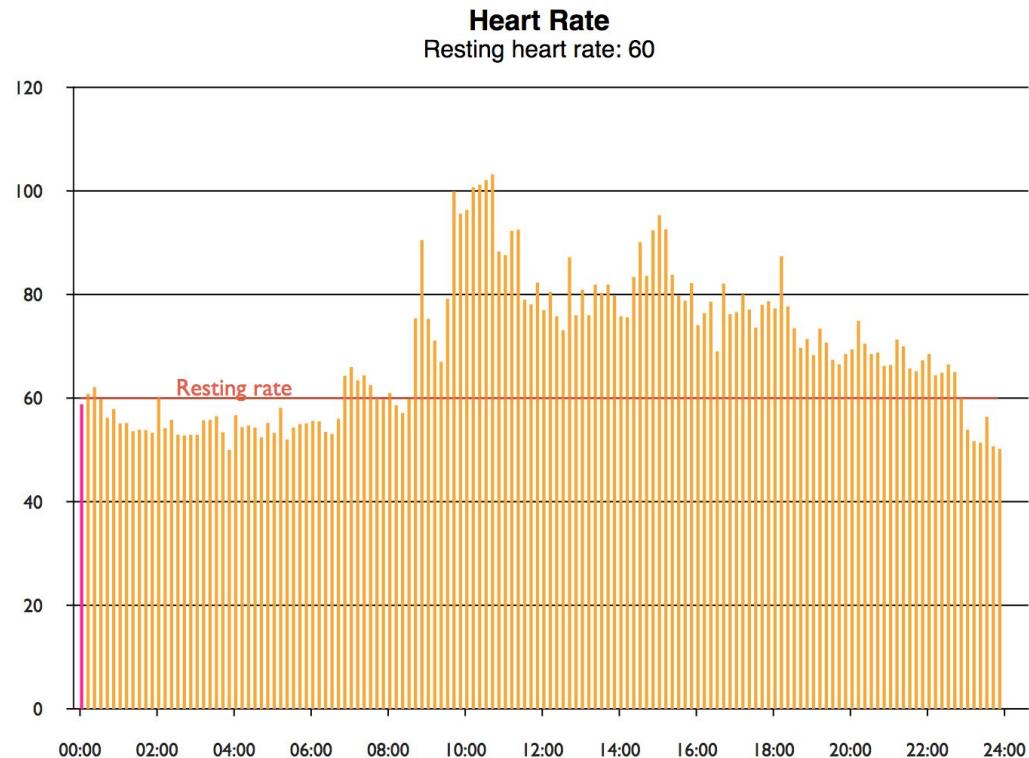
Monday 5th March 2018



How active am I?

Higher resting heart rate (60). Why?

Average resting heart rate: 48 - 52



Monday 5th March 2018



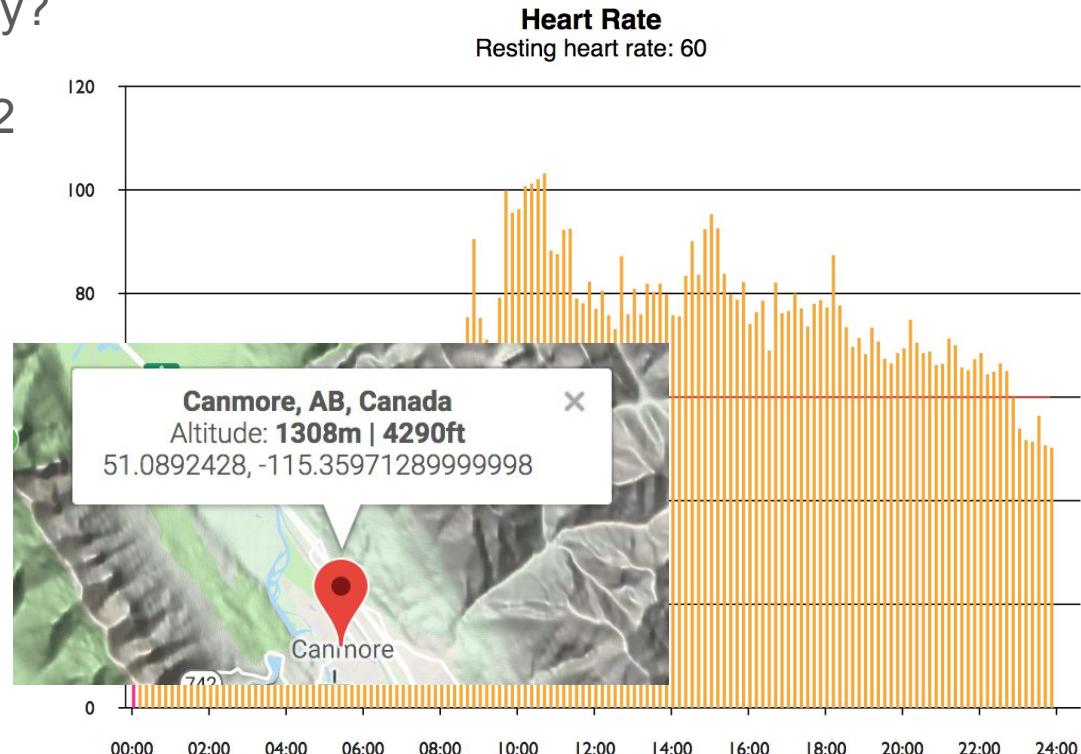
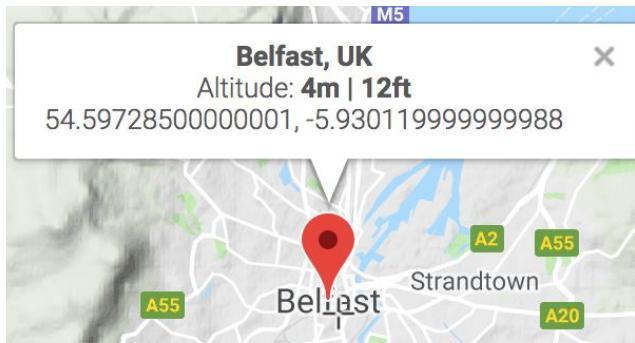
How active am I?

Higher resting heart rate (60). Why?

Average resting heart rate: 48 - 52



Where have I been?



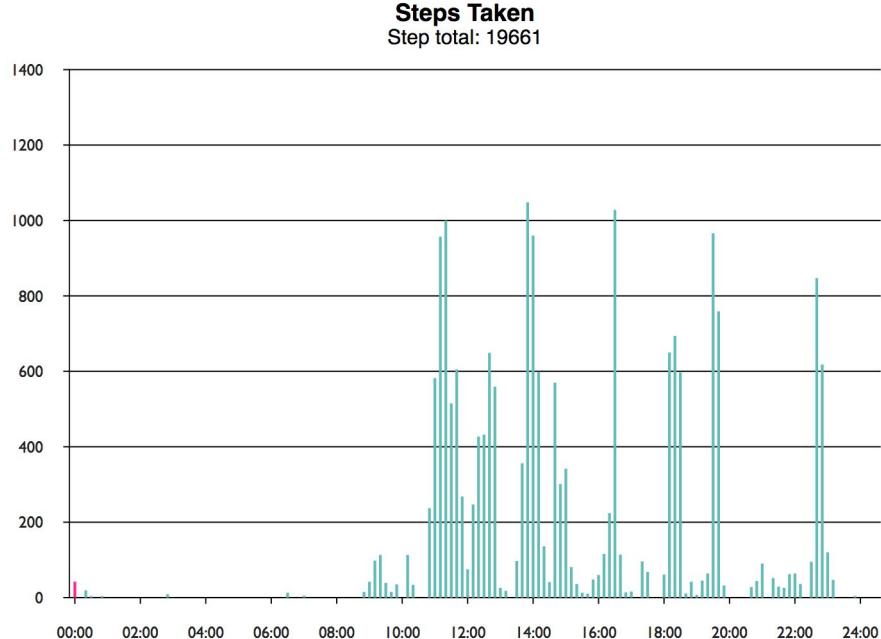
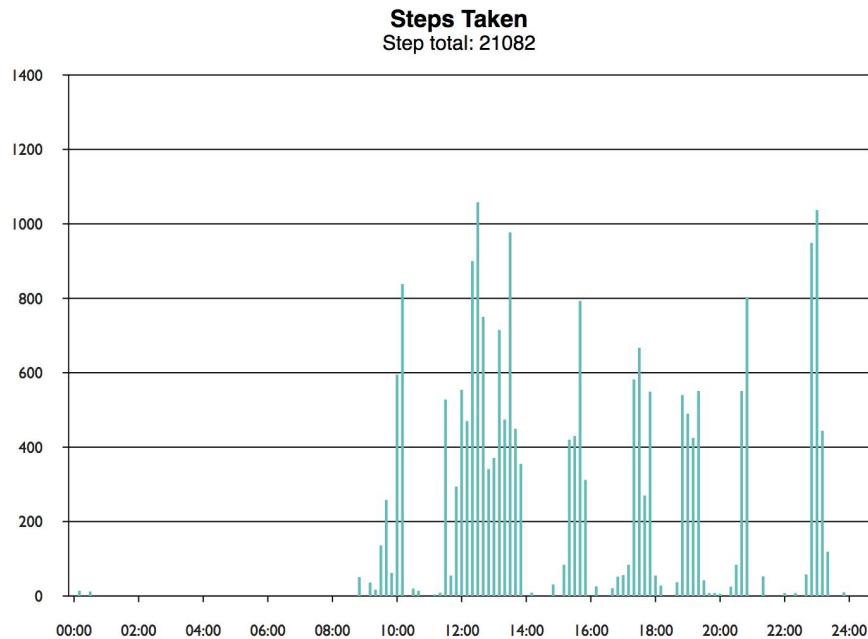
Saturday 10th March 2018 & Monday 30th April 2018



How active am I?



Where have I been?



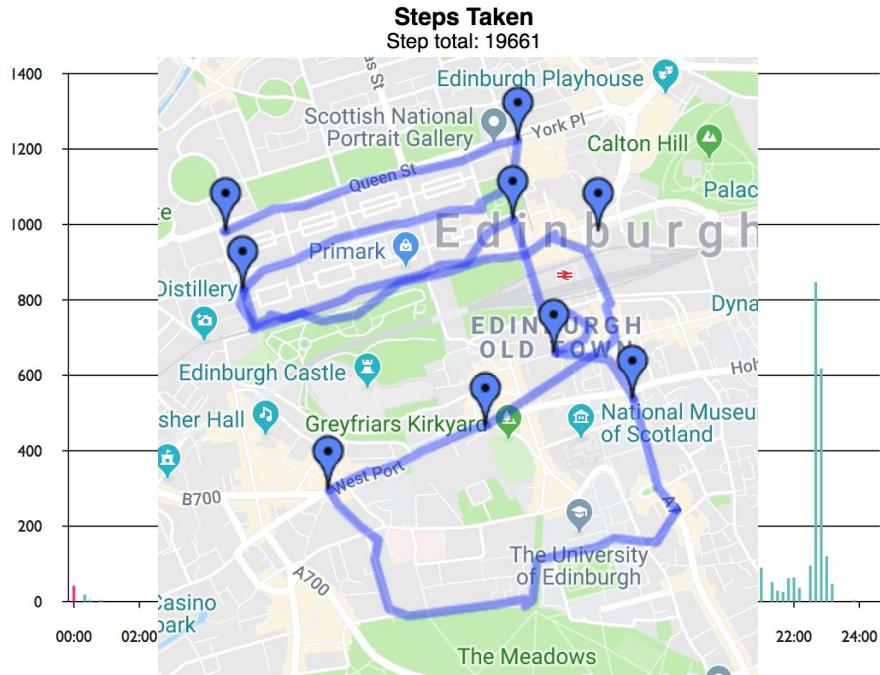
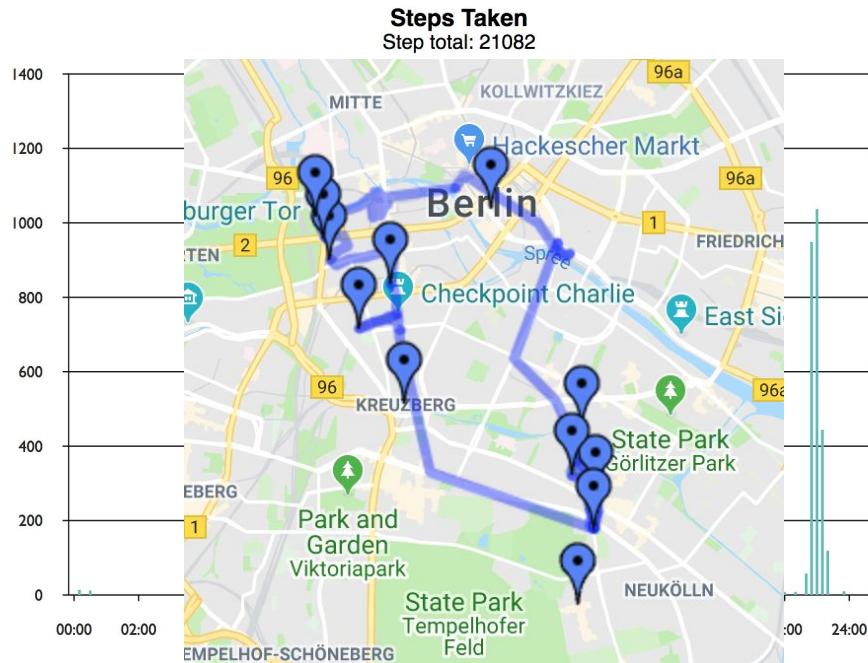
Saturday 10th March 2018 & Monday 30th April 2018



How active am I?

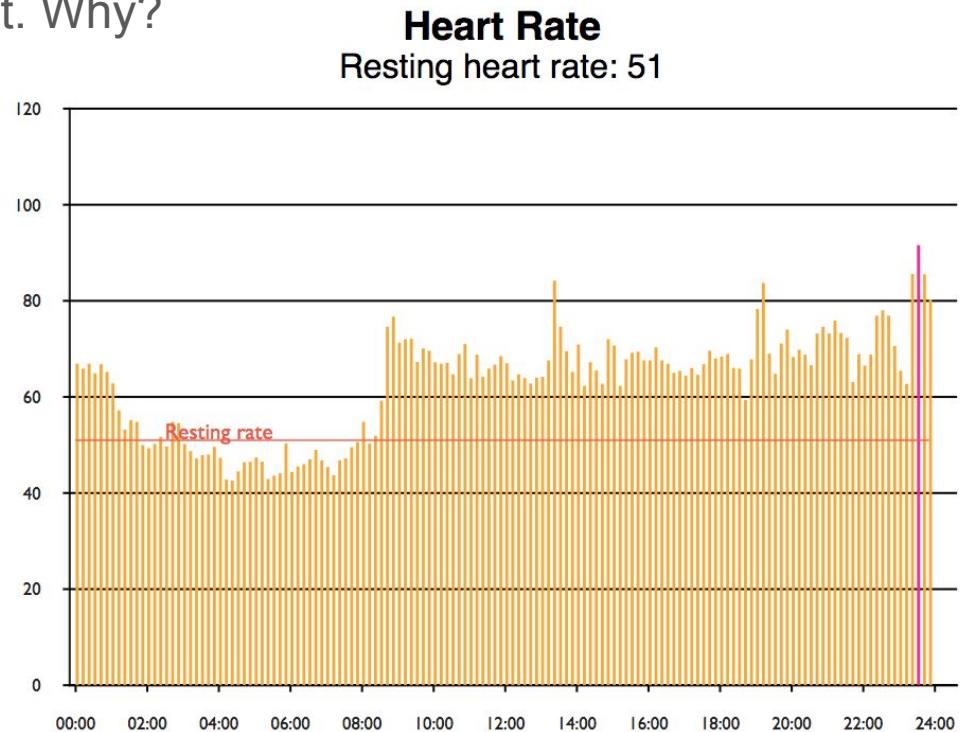


Where have I been?



Wednesday 13th December 2017

Heart rate spikes just before midnight. Why?

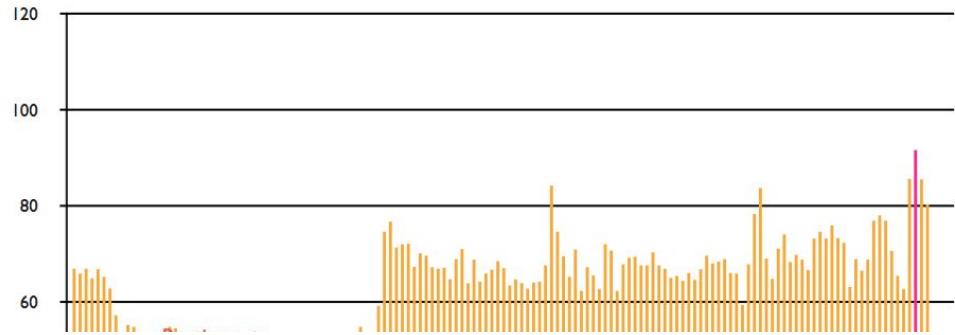


Wednesday 13th December 2017

Heart rate spikes just before midnight. Why?

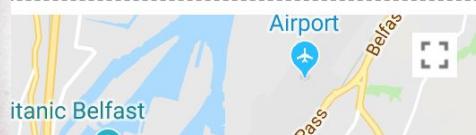


Heart Rate
Resting heart rate: 51



Netflix Viewing History

Star Wars: Episode VII: The Force Awakens (@ 20:14 - 22:29)
Breaking the Cycle (@ 14:35 - 15:32)



Timeline Summary

Home
Work (Shopkeep Ltd)
Odyssey Cinemas

Wednesday 13th December 2017



Opportunity for new data source?



Pulling out Trends

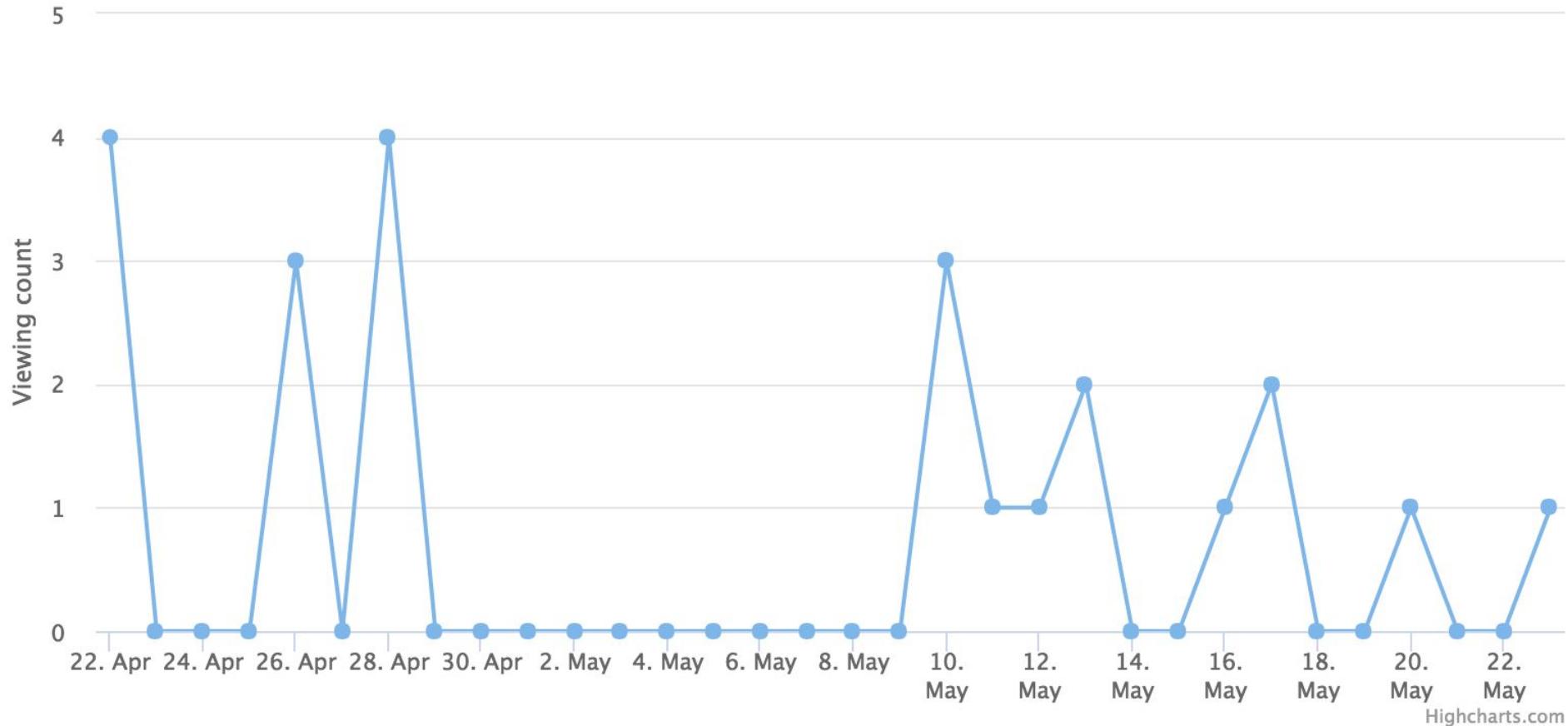
How long did it take me to watch a series on Netflix?
When did I generally watch it?



```
1 const fs = require('fs-extra');
2 const klaw = require('klaw')
3 const moment = require('moment')
4
5 const files = [];
6 klaw('../personal-data-backup/netflix/data/')
7 .on('data', async ({ stats, path }) => {
8   if (!stats.isDirectory()) files.push(await fs.readJson(path));
9 })
10 .on('end', function(){
11   const showViewings = files.reduce((viewings, data) => {
12     return viewings.concat(data.filter(({ seriesTitle }) => seriesTitle === 'The Expanse'))
13   }, []).sort((a, b) => a.movieID - b.movieID);
14
15   const bucketed = showViewings.reduce((graph, {date, title}) => {
16     const key = moment(date).startOf('day').format('x');
17     return Object.assign(graph, {[key]: (graph[key] || 0) + 1});
18   }, {});
19
20   const output = Object.keys(bucketed).map((key) => [parseInt(key), bucketed[key]]).sort((a, b) => a[0] - b[0]).reduce((graph, view) => {
21     if (graph.length === 0) return graph.concat([view]);
22     const previous = moment(graph[graph.length-1][0]);
23     const length = moment(view[0]).diff(previous, 'days') - 1;
24
25     return graph.concat(
26       Array.from({length}).map(_ , i) => [parseInt(previous.clone().add(i+1, 'days').format('x')), 0],
27       [view]
28     );
29   }, []);
30
31   console.log(output);
32 });
33 }
```

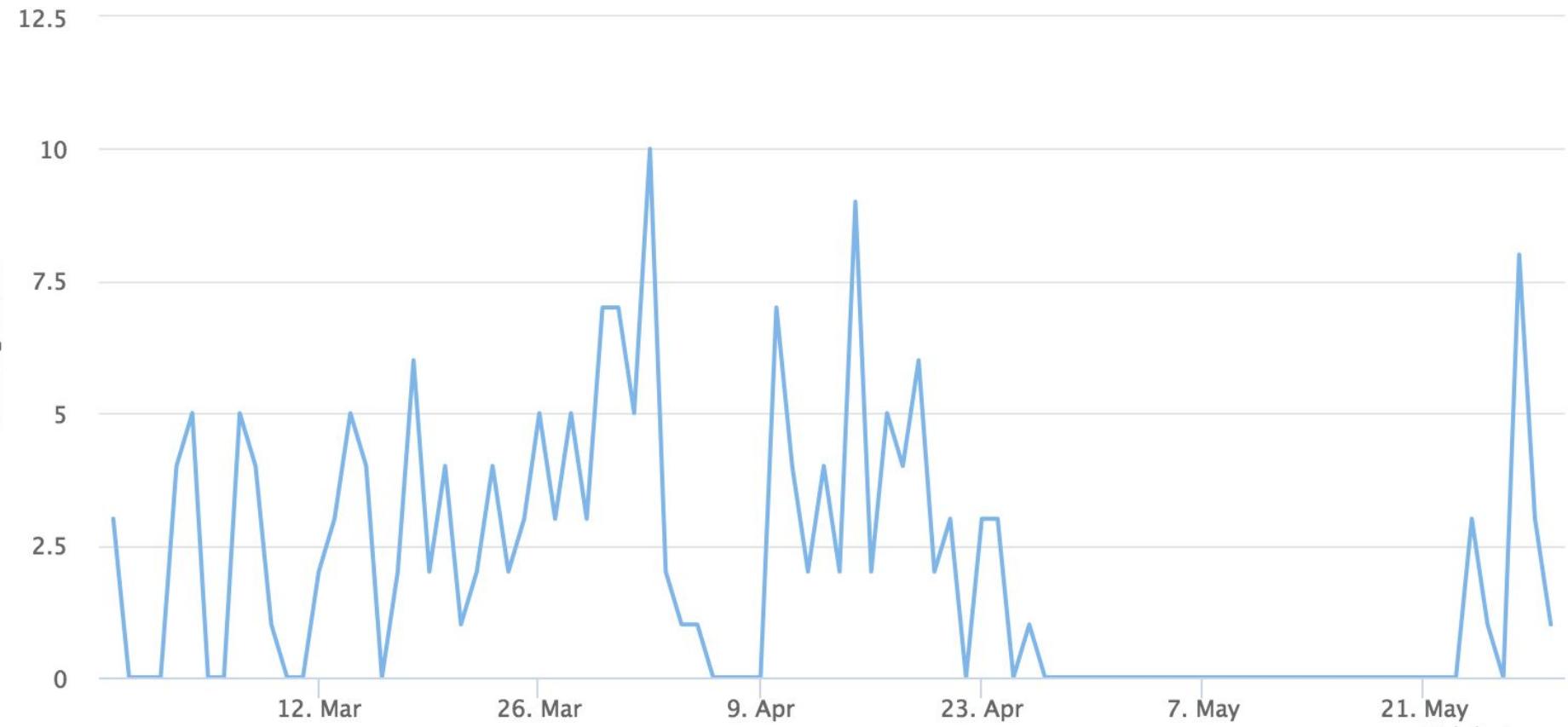
```
1 const fs = require('fs-extra');
```

The Expanse viewing seasons 1 and 2



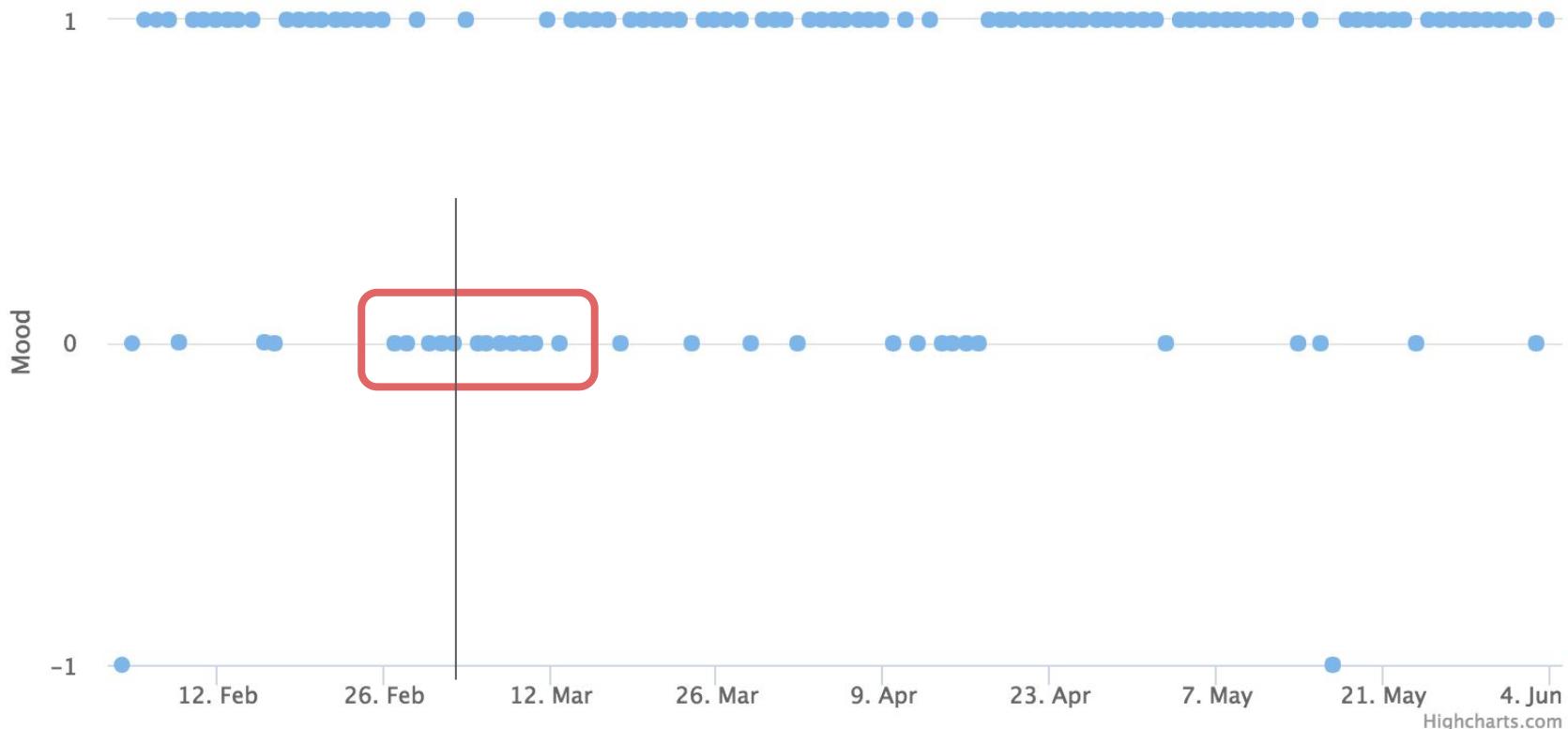
```
1 const fs = require('fs-extra');
```

Friends viewing seasons 1 and 7





Mood over the last few months?



How often do I not leave the house?

```
1 const fs = require('fs-extra');
2 const klaw = require('klaw')
3 const moment = require('moment')
4 const xmlParser = require('xml2js');
5
6 const files = [];
7 klaw('../personal-data-backup/google-maps-visual-timeline/data/')
8 .on('data', async ({ stats, path }) => {
9   if (stats.isDirectory()) return;
10  files.push(await new Promise(async function(resolve, reject) {
11    xmlParser.parseString(await fs.readFile(path), function (err, result) {
12      if (err) return reject(err);
13      return resolve(result.kml.Document[0]);
14    });
15  }));
16 })
17 .on('end', function() {
18
19   const onlyHome = files
20   .filter(({ Placemark }) => (Placemark && Placemark.length === 1 && Placemark[0].name[0].toLowerCase() === 'home'))
21   .sort((a, b) => moment(a.Placemark[0].TimeSpan[0].begin[0]).diff(moment(b.Placemark[0].TimeSpan[0].begin[0])))
22
23   const output = onlyHome.map(({ Placemark }) => [parseInt(moment(Placemark[0].TimeSpan[0].begin[0]).format('x')), 1]);
24
25   console.log(output);
26 });
27
```

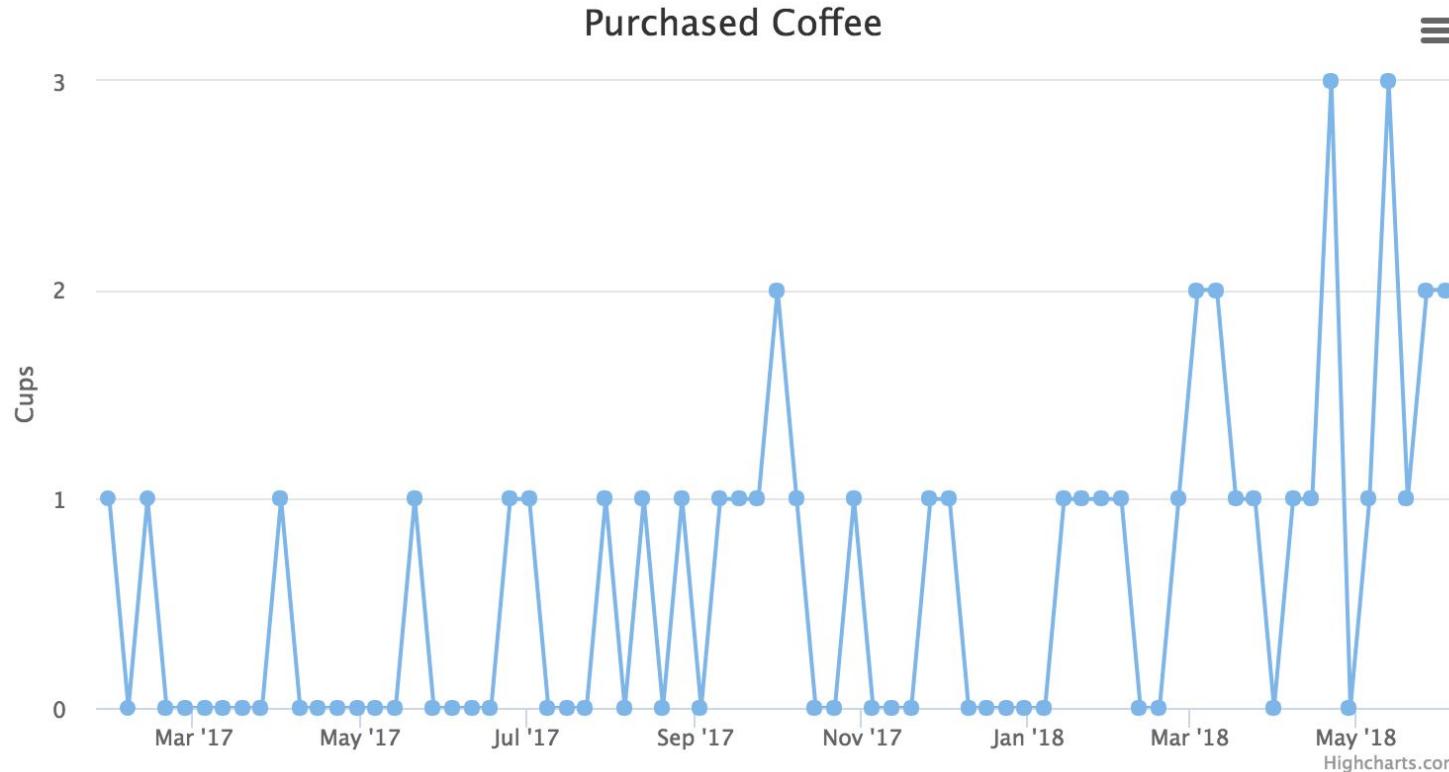
```
1 const fs = require('fs-extra');
2
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16
17
18
19
20
21
22 const output = onlyHome.map(({ Placemark }) => [parseInt(moment(Placemark[0].TimeSpan[0].begin[0]).format('x')), 1]);
23
24 console.log(output);
25
26 });
27
```

A horizontal timeline visualization consisting of a thin grey line with 13 evenly spaced blue circular markers. The markers are positioned at regular intervals along the line, representing time points from March 2017 to May 2018. The timeline is labeled with month and year abbreviations below the axis.

```
1 const fs = require('fs-extra');
2
3
4
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12
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14
15
16
17
18
19
20
21
22
23 const output = onlyHome.map(({ P
24
25 console.log(output);
26 }));
```

```
{ 'January 2017': 1,  
  'February 2017': 1,  
  'March 2017': 1,  
  'April 2017': 1,  
  'May 2017': 1,  
  'June 2017': 1,  
  'July 2017': 1,  
  'August 2017': 1,  
  'September 2017': 1,  
  'October 2017': 2,  
  'November 2017': 1,  
  'December 2017': 2,  
  'January 2018': 1,  
  'February 2018': 1,  
  'May 2018': 1 }
```

How often do I buy coffee?



What do **you** want to know?



Where have I been?



How active am I?



What have I watched?

NETFLIX

What do **you** want to know?



Where have I been?



How active am I?



What have I watched?

NETFLIX

last.fm



TRAKT



What have I listened to?



What have I watched?



What have I bought?

The image shows the Monzo logo (a stylized 'M' composed of blue, yellow, and red triangles) and the IFTTT logo (the word 'IFTTT' in large, bold, blue letters) side-by-side against a dark blue background.

monzo IFTTT

monzo

About Blog Sign up

7 JUN 2018

Product Updates

**Automate your financial life with
Monzo and IFTTT**

<https://monzo.com/blog/2018/06/07/monzo-on-ifttt/>

What do **you** want to know?



How often do I make tea?



Who did I meet?



Teeth brushing?

Bluetooth® Connectivity

IT'S NOT BRUSHING
IT'S PERSONALIZED
ORAL CARE

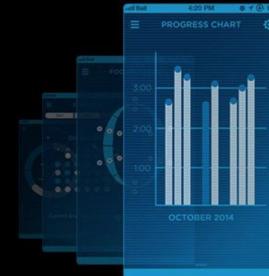
Oral-B's best electrical toothbrush so you know you're getting a superior clean.* The Oral-B Smart Series.

*vs. a regular manual brush

BUY NOW

READ THE REVIEWS

CHECK THE PERFORMANCE ORAL-B APP



HERE'S HOW IT WORKS

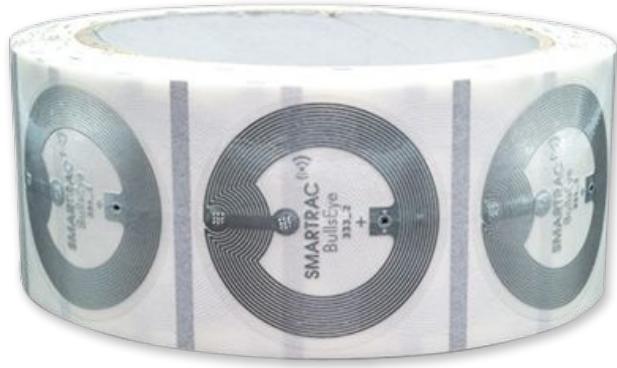
Using Bluetooth technology, the Oral-B SmartSeries electric toothbrush guides your brushing. It can give you a superior clean,* and even help you with future goals that you set for your oral care.

*vs. a regular manual brush

Bluetooth®



What do **you** want to know?



Did I take medication?



Did I walk the dog?



How often am I at my desk?



Which room am I in?

Inspiration

MY SUBREDDITS 1/4 HOME POPULAR ALL RANDOM USERS | ASKREDDIT WORLDNEWS VIDEOS FUNNY TODAYILEARNED PICS GAMING MOVIES NEWS GIFS MILDLYINTERESTING AWW SHOWERTHOUGHTS TELEVISION

DATA IS BEAUTIFUL

hot new top wiki

All about that bass: exploring auditory perception using a meme (Yanny vs Laurel) research.fb.com
submitted 3 days ago by quokkanut
1 comment share save hide give gold report

I tracked my hot drink consumption for a month [OC] i.redd.it
submitted 3 days ago by chickabiddybex OC: 1
11 comments share save hide give gold report

[OC] Interactive Maps to Help You Find the Best Place to Own A Home in the United States lonedatum.com
submitted 3 days ago by VanillaMonster OC: 16
5 comments share save hide give gold report

Best and Worst States for First-Time Homebuyers in 2018 [OC]



Top Tips



Check how **accessible** the data is - clean API or screen scraping?



Get the **easy data first** and play with it - low hanging fruit!



Check what's out already there - don't reinvent the wheel!



Keep **manual** instrumentation **small** - use helpers to keep on top of it



Keep all the **raw data** - you'll never know what might come in handy!





Thank you for
listening



Any Questions?

