Everyday Automation for Marketers

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“we had no idea the coffee machine is on the network...
..this thing starts brewing a mid-sized half-caf latte and waits another 24 (!) seconds before pouring it into a cup.
The timing is exactly how long it takes to walk to the machine from the dude’s desk”

Source: https://github.com/NARKOZ/hacker-scripts
general tech audit process

- set screaming frog config
- check crawl data
- adjust screaming frog config
- wait... check if finished
- export all csv files
- analyze in jupyter/excel/sheets
- write document, attach cleansed data
What does it take a human to do this... properly?

- set screaming frog config
- check crawl data
- adjust screaming frog config
- wait... check if finished
- export all csv files
- analyze in jupyter/excel/sheets
- write document, attach cleansed data
1. Determine default language and country of main site
2. Mimic country by using VPN
3. Check each version of http(s), www/non-www combination of homepage URL for 200 and content
4. Repeat 3 with mobile and desktop user-agents (Googlebot and Chrome) as variations, check response and content
5. Repeat 3 & 4 adding using an IP from different country as a variation
6. If website has different languages, repeat 3,4,5 with accept-language variations
7. Repeat 3,4,5,6 variations with JS disabled. Compare parity
8. Run crawl for 100 pages at 3,10, 100 urls/seconds to check ideal crawl rate without being throttled/blocked
9. Now we’re ready to check a path, fingers crossed it’s on the same codebase.
Call it a couple of unbelievably boring hours for a senior SEO.
Models vs actual work

Demo purposes only. Non-working example.
No code automation is promising
Easy, right?

https://electroneek.com/
RPA is the hot topic.

Robotic Process Automation

G2 no code & G2 RPA
Vegetables fist, then cake.

Promise. Cake, later.
We’ll use simple examples and free processes.

The point:

Understand possibilities.

Give you a solid understanding of the fundamentals

So you can move on to no/low code solutions.
The deck will be available online.

Don’t take notes.

Sit back and enjoy.
Automation lingo and light examples

Psst...These are your vegetables
HTTP Requests
So you can request and send information programmatically.

Useful for automating:

Scraping
Interacting with APIs
Checking server response codes
Demonstration of wit.ai no code classification application for search intent based on Britney Muller’s WBF
HTTP Requests - GET

GET literally means get data. It’s what your browser does when you request a webpage.

Examples using the Wit.ai API:

**cURL** repl.it/@dsottimano/Mozcon-Curl-GET-witai-example

**Python** repl.it/@dsottimano/Python-GET-Witai
Video 2

Demonstration GET request to https://wit.ai
Relevant API documentation here
HTTP Requests - POST

POST means you’re sending data to a resource, like a website contact form.

Examples using the Wit.ai API:

Curl repl.it/@dsottimano/Mozcon-Curl-POST-Witai-example
Node js repl.it/@dsottimano/MozCon-Post
Video 3

Demonstration POST request to https://wit.ai
Relevant API documentation here
JSON is the most common data format for APIs.

It’s the key to accessing a wealth of automation.

data : [{
  "keyword" : "seo",
  "volume" : "1000"
}]

Please label any people, places, or organizations in the following text:

They were delighted by the Hilton’s location: surrounded by vibrant nightlife, and in close proximity to major landmarks in Paris. And as luck would have it, Paris Hilton happened to be staying in the room next door!

https://scale.com/
**Generation**

The API can generate complex and consistent natural language, and enables use cases like creative writing.

**AI Dungeon**

[SEE IT IN ACTION](https://beta.openai.com)

AI Dungeon is an AI-powered text adventure where every response is determined by an AI language model. Typically, for these types of games, the developer must preprogram a decision tree and text options for the user to select from. AI Dungeon is the first of its kind in which any story option is possible, and the AI adapts the adventure to the users’ input. The game sees 20-25,000 daily users.
API data format - JSON

JSON (JavaScript Object Notation) is the most popular format.

Object {}
Object key and value  {“key” : “value”}
String {“name” : “dave”}
Number {“keyword_volume” : 1000} - no quotes required
Array []
Array of objects [{“name”: “dave”, “name”: “john”}]
Boolean {“success” : true} - no quotes required
Null {“name” : null} - no quotes required
Cron jobs

Do something at this time.

Useful for automating:

Anything you want to do on a schedule

*does not include ironing your clothes and a bunch of other stuff.
Video 4

Turning SearchEngineLand homepage into an API using Simplescraper.io (no-code) and updating with cron-jobs.org
Webhooks... are so cool.

Looks like a regular URL (https://webhook.site) that listens, responds and perform further actions like passing data.

Examples:

When processes finish, email/alert me
Sending data from Google Sheets to Bigquery
Video 5

How to build your own webhook, for free in less than 3 minutes.

Make a copy of this Google Sheet
FYI

Zapier does webhooks and cron very well.
Wait.

Why am I learning this? I’m not a programmer.
To explain to developers what you want.
I believe ML will automate tech SEO in the next few years.
Test 3: Adding Alt Tags to Images ~ Null

Estimated additional sessions

This can be automated

Dom Woodman - https://www.searchpilot.com/
How to Produce Quality Titles & Meta Descriptions Automatically

Liana barrientos has been married 10 times. Nine of her marriages occurred between 1999 and 2002. She is believed to still be married to four men, and at one time, she was married to eight men at once.
To be able to use no/low code automation, you need the fundamentals.
Data transfer, ETL

ETL = extract, transform, load

Useful for automating:

- Data extraction
- Data transfer
Stitch is awesome.

ETL your data to your data warehouse with the Stitch webhooks integration

The webhooks integration gives you access to business critical data, without the headache of writing and maintaining ETL scripts.
Video 6

Storing JSON data into Bigquery using this curl repl.it and Stitch Data
Simple Browser Automation

Automate boring stuff

Useful for automating:

Web Page extraction
Repetitive web based tasks
Automatically store GSC link data to Google drive by recording no-code macros with Testim.io
Machine learning definitely leads the pack for no code machine learning.

Useful for automating:

Text classification
Predictions
Anomaly detection
Video 8

No code machine learning using Bigml.com to instantly find association rules in datasets.

Association Discovery Tutorial here.

Special thanks to @atakante (VP, bigml.com) for 1:1 assistance and COO @tlegwinski
Deploying your own free automation platform (n8n.io) on Heroku.
Video 9

Lighthouse Speed metrics directly into BigQuery using N8n.io and Stitchdata.com.

Github repository with instructions here.

Inspired by Arnout Hellemans. Python version by Ruth Everett
Closing thoughts.

Computers can’t replace your current skill, yet. Don’t get comfortable though.

If you wouldn’t put your name on it, don’t use it.

Learn how to call APIs and read/write/parse json as a bare minimum skill in whatever language you prefer.
Bonus Cake!

bit.do/mozsheets
Bonus, bonus Cake!

Add your email to the GET parameter below and I’ll automatically send you everything in this presentation:

fetchlet.com/mozcon?email=YOUR_EMAIL
A massive thank you.

None of the amazing things I’ve shown you would be possible without the tireless efforts of amazing people behind each of these products/code.

Please consider using them :)

Bigml.com
N8n.io
Heroku.com
Sarvesh for n8n deployment
Stitchdata.com
Apps script (Google devs)
Simplescraper.io
Wit.ai
Repl.it
A few automation ideas

- Take screenshots of webpages
- Get web vitals metrics from PSI
- Classify web pages
- Understand images before seeing
- On demand single page crawl
- Extract audience intelligence through Twitter (Process by @richardbaxter)
- Send data to data warehouse
- Get expiring domains list and email me asap
Thank you

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