

ChatGPT and Scripts

- The AI Advantage -

Supercharging Google Ads with Chat GPT and Scripts

SMX Advanced Berlin, Sep 2023

Nils Rooijmans

Today you will learn

1. The power of ChatGPT for PPC management
2. How you can use scripts to automate the use of this superpower
3. How you can use ChatGPT to create these scripts for you

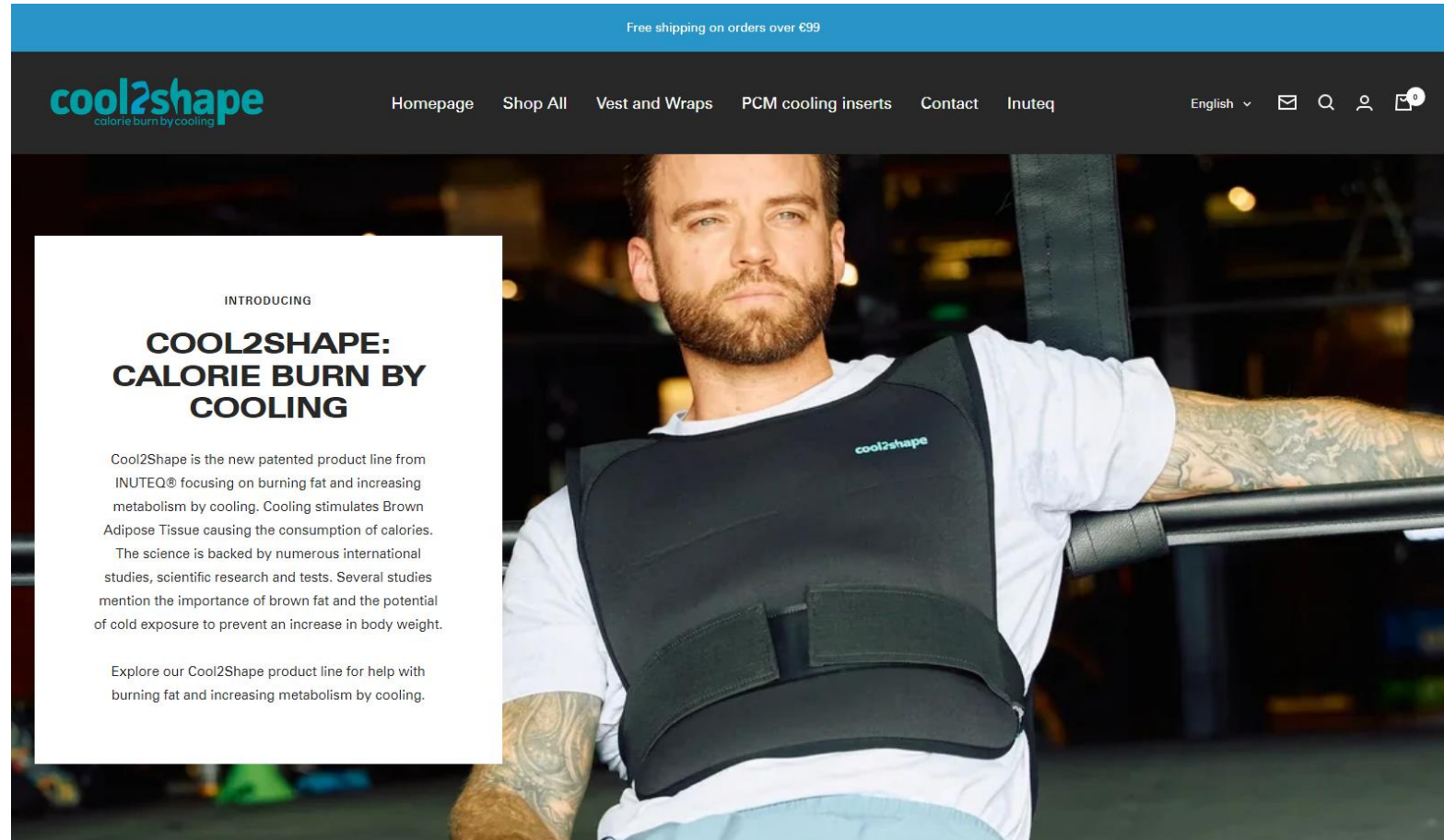


PROBLEM: Onboarding a new client



- KWR
- Ad Copy
- Landing Pages
- Campaign Structure
- Budgets
- Bids
- Conversion tracking
- ...

The client



Chat GPT for PPC: Keyword Research

System Prompt

You are a senior Google Ads consultant with excellent skills in creating and optimizing Google Ads campaigns.

Your current job is to do keyword research for a new client that wants to start advertising.

Chat GPT for PPC: Keyword Research

Prompt

Create some keyword suggestions for this page:
<https://cool2shape.inuteq.com/>

Make sure the keywords are highly relevant to the content on the page. Group the suggested keywords into upper-funnel and lower-funnel keywords.

Chat GPT for PPC: Keyword Research



Mwah



While I can't directly view the page at "<https://cool2shape.inuteq.com/>" due to the limitations of my current interface, I can still offer a methodical approach based on your description and common practices in keyword research.

Assuming the website is about a product or service related to 'cooling' and 'shaping', here are some potential keyword suggestions. Please adjust them based on the specific content you find on the page.

Upper-funnel keywords: These are typically broader, more generic terms that people might use when they're just starting to research or become aware of a solution. They might not be ready to purchase yet, but they're gathering information.

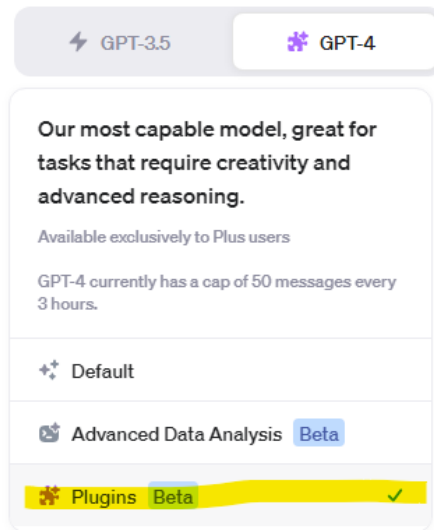
1. Cooling solutions
2. Body cooling techniques
3. How to stay cool in summer
4. Benefits of body cooling
5. Modern cooling technology
6. Stay cool during workouts
7. Ways to beat the heat
8. Personal cooling products

Lower-funnel keywords: These keywords indicate a user who is further along in their purchasing journey. They're more specific and might relate directly to the product or service features, brands, or problems that the product solves.

1. Cool2Shape product reviews
2. Buy Cool2Shape online
3. Cool2Shape discounts

Chat GPT for PPC: Keyword Research

1 Activate Plugins

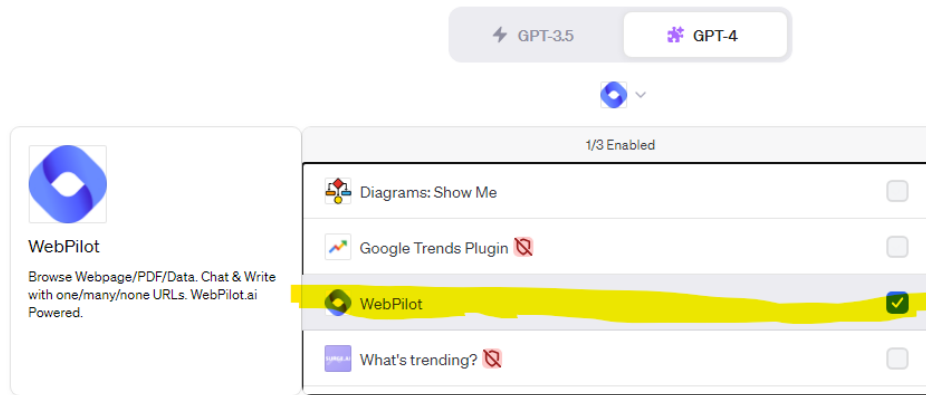


ChatGPT plugins are add-ons that extend the AI chatbot's capabilities.

The feature can be accessed through the in-platform store, providing you have a valid ChatGPT Plus subscription and ChatGPT-4 access.

Chat GPT for PPC: Keyword Research

2



WebPilot allows users to provide a URL and make requests for interacting with, extracting specific information, or modifying the content from the URL

Chat GPT for PPC: Keyword Research

3

🔌 Plugins • Enabled plugins: 🌐

NI

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Your current job is to do keyword research for a new client that wants to start advertising.



Create some keyword suggestions for this page: <https://cool2shape.inuteq.com/> .

Make sure the keywords are highly relevant to the content on the page. Group the suggested keywords into upper-funnel and lower-funnel keywords.








Using WebPilot...



Chat GPT for PPC: Keyword Research



 Used WebPilot 

Based on the content of the Cool2Shape website, here are some keyword suggestions grouped into upper-funnel and lower-funnel keywords:

Upper-Funnel Keywords (Awareness and Interest):

1. Cooling technology for weight loss
2. Brown Adipose Tissue stimulation
3. Benefits of cooling for metabolism
4. INUTEQ cooling products
5. Calorie burn by cooling
6. Science behind cooling for health
7. Cool2Shape technology
8. Innovative personal cooling technologies

Lower-Funnel Keywords (Consideration and Purchase):

1. Cool2Shape product line
2. Cool2Shape vest price
3. Cool2Shape leg wrap buy online

Ad Copy Inspiration please!



Chat GPT for PPC: Ad copy writing

Zero shot prompting

Create 3 headlines and 3 descriptions for the keyword 'calorie burn by cooling'.

Make sure each headline has a maximum of 30 characters, and each description a maximum of 90 characters.

Chat GPT for PPC: Ad copy writing



Headlines:

- 1. Boost Metabolism Naturally!
- 2. Burn Calories with Cooling!
- 3. Cool2Shape: The Cool Way!

Descriptions:

- 1. Activate brown fat, burn more calories.
- 2. Innovative cooling tech for weight loss.
- 3. Stay cool, lose weight, feel great!



Chat GPT for PPC: Ad copy writing

One shot prompting

Create 3 headlines and 3 descriptions for the keyword 'calorie burn by cooling'.

Make sure each headline has a maximum of 30 characters, and each description a maximum of 90 characters.

Here's an example of the desired output:


Headline: "Cool way to burn calories"

Description: "Cool2Shape offers state of the art cooling technology that let's you burn fat in no time!"




Chat GPT for PPC: Ad copy writing

getting better





Headlines:

1. "Chill Out, Burn Calories!"
2. "Cooling's Calorie-Burning Magic!"
3. "Turn Cold into Calorie Burn!"

Descriptions:

1. "Experience the new age of weight loss with our cooling tech."
2. "Harness the power of cold for a slimmer you."
3. "Cool2Shape: Where cooling meets calorie burn."

Chat GPT for PPC: Ad copy writing

Few shot prompting

Create 3 headlines and 3 descriptions for the keyword 'calorie burn by cooling'.

Make sure each headline has a maximum of 30 characters, and each description a maximum of 90 characters.

Here are some examples of the desired output:

Headline: "Burn Calories. Buy Now."

Headline: "Cooling for Health. Buy Now."

Headline: "Order Cool2Shape Online"


Description: "Burn Fat. Increase Metabolism. Explore our Cool2Shape product line online."

Description: "Cool2Shape Vests, Leg Wraps and Waist Wraps. Go check them out!"

Description: "The Latest and Greatest Cooling Technology. Order Now!"

Chat GPT for PPC: Ad copy writing



 **Headlines:** 📄 👍 🗨

1. "Cool Down, Burn Up Calories!"
2. "Revolution in Calorie Burning!"
3. "Get Slim with Cool2Shape!"

Descriptions:

1. "Experience calorie burn like never before. Dive into Cool2Shape."
2. "From vests to wraps, Cool2Shape has it all. Discover now!"
3. "Harness cooling for weight loss. Secure your Cool2Shape today!"

Chat GPT for PPC: Ad copy writing

Fine-tuning via uploading new information

read this article and summarize lessons you've learned that will improve the ad copy:
<https://searchengineland.com/the-anatomy-of-compelling-search-ad-copy-12086>

PHB
PickHisBrain



Search Engine Land Trending: GA4 SEO PPC Platforms SMX Awards Webinars Intelligence reports White papers Newsletter About Cha

[Search Engine Land](#) » [PPC](#) » [The Anatomy Of Compelling Search Ad Copy](#)

The Anatomy Of Compelling Search Ad Copy

Ad copy is the only part of your PPC campaign that a searcher actually sees. A searcher does not see your keyword list, bids, day parting settings, or daily budget. Those precious few words that make up your ad copy are the only insight into your offer that a searcher uses to make the decision [...]

Brad Geddes on September 4, 2007 at 3:09 pm | Reading time: 7 minutes

Ad copy is the only part of your PPC campaign that a searcher actually sees. A searcher does not see your keyword list, bids, day parting settings, or daily budget. Those precious few words that make up your ad copy are the only insight into your offer that a searcher uses to make the decision to click on your ad.

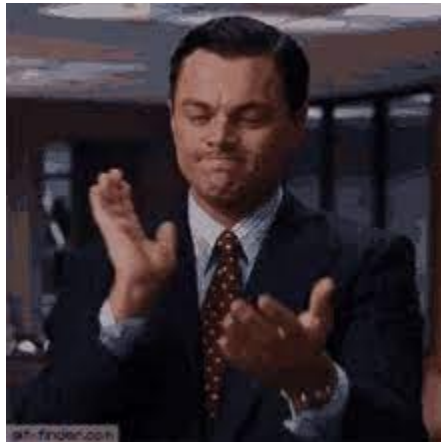
Therefore, the characters that are allotted to the ad copy need to convey a message that draws attention, is simple to comprehend, and compels a searcher to click on your ad and do business with your company.

There are five major items that can be used in ad copy. However, ads do not have the character space to effectively allot all of these items at a single time (unless you start combining them—which is a possibility). This is one of the reasons that testing ad copy is essential to PPC success. Ideas are not difficult to come by—results are.

The five major parts of search ad copy are:

- Captivating headline
- Features
- Benefits
- Unique selling proposition (USP)
- Call to action

Chat GPT for PPC: Ad copy writing



Used WebPilot



From the article "The Anatomy Of Compelling Search Ad Copy" on Search Engine Land, here are the key lessons to improve ad copy:

1. **Importance of Ad Copy:** The ad copy is the only part of a PPC campaign that a searcher sees. It's essential to convey a compelling message in those limited characters to entice a click.
2. **Five Major Parts of Search Ad Copy:**
 - **Captivating Headline:** The headline should grab attention and entice the searcher to read the rest of the ad. It can be a standalone element or incorporate other elements like a feature or call to action.
 - **Unique Selling Proposition (USP):** It's crucial to differentiate your business in your ad copy. Highlight what's unique about your business that customers won't find elsewhere.
 - **Features vs. Benefits:** Features list what a product is, while benefits explain what a product does for the customer. Transforming features into benefits can make the ad more compelling.
 - **Calls to Action:** Direct the consumer on what to do next. It should extend to your website and guide the consumer towards the desired outcome.
 - **Combining Elements:** A strength of ad copy is combining elements together, like making a call to action also a benefit. However, it's essential not to make the ad confusing.
3. **Testing is Essential:** It's vital to test each element of the ad copy to ensure it's helping achieve the campaign's success metrics. Measure each element's impact on click-through rate (CTR) and conversion rate.
4. **Simplicity is Key:** PPC ads are concise. It's a challenge to take complex messages and simplify them into easy-to-understand statements. Only keep characters that contribute to the campaign's success.

Incorporating these lessons can significantly enhance the effectiveness of ad copy, ensuring it resonates with searchers and drives desired actions.

Chat GPT for PPC: Ad copy writing

how would you change your latest ad copy suggestions based upon what you have just learned?



Certainly! Based on the lessons learned from the article, here's a revised set of ad copy suggestions:

Headlines:

1. "Cool & Burn Calories Fast!"
 - **Rationale:** A captivating headline that combines the unique feature (cooling) with the benefit (burning calories).
2. "Why Just Sweat? Burn More!"
 - **Rationale:** A unique selling proposition (USP) that differentiates the product by suggesting that with cooling, you can do more than just sweat.
3. "Cool2Shape: See Results Now!"
 - **Rationale:** A call to action combined with the brand name, urging immediate action and hinting at quick results.

Descriptions:

1. "Experience next-gen weight loss. Dive into Cool2Shape's cooling tech & transform your routine."
 - **Rationale:** Combines the feature (cooling tech) with the benefit (transforming one's weight loss routine).
2. "From vests to wraps, we offer unique cooling solutions. Stand out & achieve your fitness goals."
 - **Rationale:** Highlights the product range (vests to wraps) and the USP (unique cooling solutions) while pointing towards a benefit (achieving fitness goals).
3. "Harness the power of cold. Boost metabolism & order your Cool2Shape product today!"
 - **Rationale:** A call to action urging order combined with the benefit of boosting metabolism.

These revised suggestions incorporate captivating headlines, clear benefits, and calls to action, all while keeping the message concise and compelling.

Make the client happy



Chat GPT for PPC: Conversion Rate Optimization

You are a senior Conversion Rate Optimization expert with excellent skills in optimizing landing pages for Google Ads campaigns.

Your current job is to give concrete tips to improve the conversion rate for this page:



<https://cool2shape.inuteq.com/>

Write the tips in the form of an email I can send to my client.

Chat GPT for PPC: Conversion Rate Optimization

BE SPECIFIC



 Used WebPilot 

Certainly! Based on the content of the website, here's a draft email you can send to your client with concrete tips to improve the conversion rate for the Cool2Shape landing page:

Subject: Recommendations to Boost Conversion Rate for Cool2Shape Landing Page

Dear [Client's Name],

I hope this email finds you well. I've taken the time to review the Cool2Shape landing page and have identified several areas of improvement that can potentially boost the conversion rate for your Google Ads campaigns. Here are my recommendations:

1. **Clear Call-to-Action (CTA):** While the products are prominently displayed, consider adding a more distinct CTA button such as "Shop Now" or "Discover the Science" to guide visitors towards making a purchase or learning more.
2. **Highlight Free Shipping:** The offer for free shipping on orders over €99 is a great incentive. Consider making this more prominent, perhaps with a banner at the top or a highlighted section.
3. **Testimonials & Reviews:** Consider adding a section with customer testimonials or product reviews. Real-life experiences can significantly influence purchasing decisions.
4. **Simplify Navigation:** The navigation bar could be simplified to focus on the most essential pages, making the user journey more straightforward.

5. **Engaging Visuals:** Incorporate more visuals, such as before-and-after photos or infographics explaining the science behind Cool2Shape, to make the page more engaging.
6. **Mobile Optimization:** Ensure the website is fully optimized for mobile devices, as a significant portion of users might access the site via smartphones or tablets.
7. **FAQ Section:** An FAQ section addressing common questions about the product, shipping, returns, etc., can help alleviate any concerns potential customers might have.
8. **Social Proof:** Display any endorsements from high-profile athletes, ProCycling teams, or Formula-1 teams to build trust and credibility.
9. **Newsletter Signup:** The newsletter signup could be made more enticing with an offer, such as a discount on the first purchase or exclusive access to new products.
10. **Live Chat Support:** Consider adding a live chat feature to address any immediate questions or concerns visitors might have.

I believe that by implementing these recommendations, we can create a more user-friendly experience, build trust with potential customers, and ultimately increase the conversion rate for the Cool2Shape landing page.

Please let me know your thoughts, and if you'd like to proceed with any of these changes. I'm here to help!

Warm regards,

[Your Name] ■



Ongoing optimizations



Chat GPT for PPC: Ongoing Account Optimizations

"Is there a trend in the number of impressions for my top 5 search terms this year?"



Chat GPT for PPC: Ongoing Account Optimizations



"Is there a trend in the number of impressions for my top 5 search terms this year?"

"Hmm....my data analyses skills are very limited..."

Chat GPT for PPC: Ongoing Account Optimizations



"Is there a trend in the number of impressions for my top 5 search terms this year?"

"

"Hmm....my data analyses skills are very limited..."

"Well, why not ask ChatGPT?"

Introducing...



ChatGPT on Steroids

Advanced Data Analysis with ChatGPT

Upload File on
ChatGPT

Advanced Data Analysis **Beta**

ChatGPT New Feature

Analyze Big data in seconds

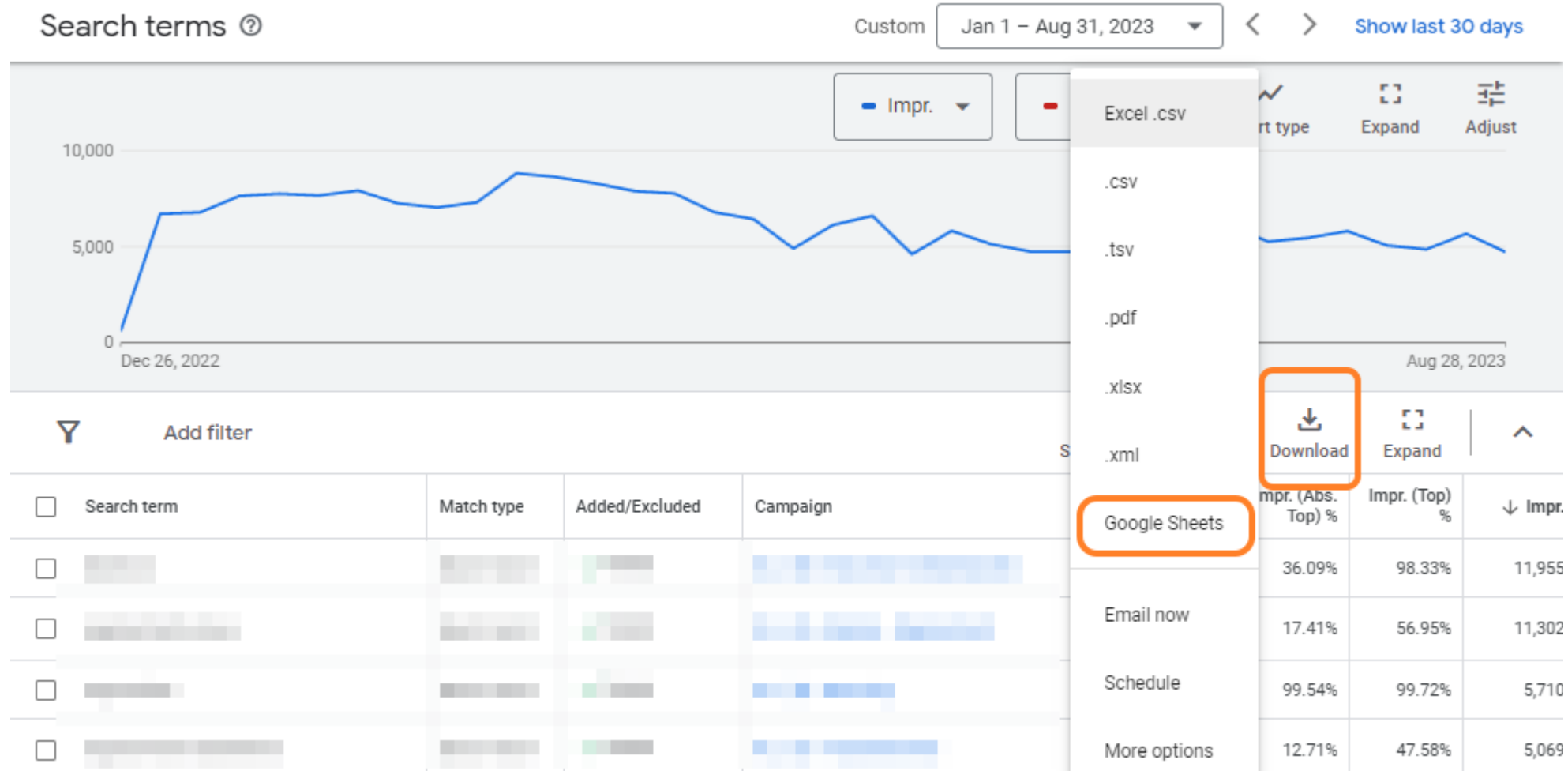
New Course!
ChatGPT Advanced Data Analysis.
Available today!

By: Dr. Jules White
Professor of Computer Science

This course will introduce you to prompt writing skills that target ChatGPT Advanced Data Analysis

Chat GPT + Advanced Data Analysis:

Visualize trends in search term data – step 1



Chat GPT + Advanced Data Analysis: Visualize trends in search term data – step 2

Download to Google Sheets

File name
Search terms report

Folder
My Drive

▼ More options

Cancel Download

Download to Google Sheets

File name
Search terms report

Folder
My Drive

Segments ⓘ
Add segments

Day

Week

Month

Quarter

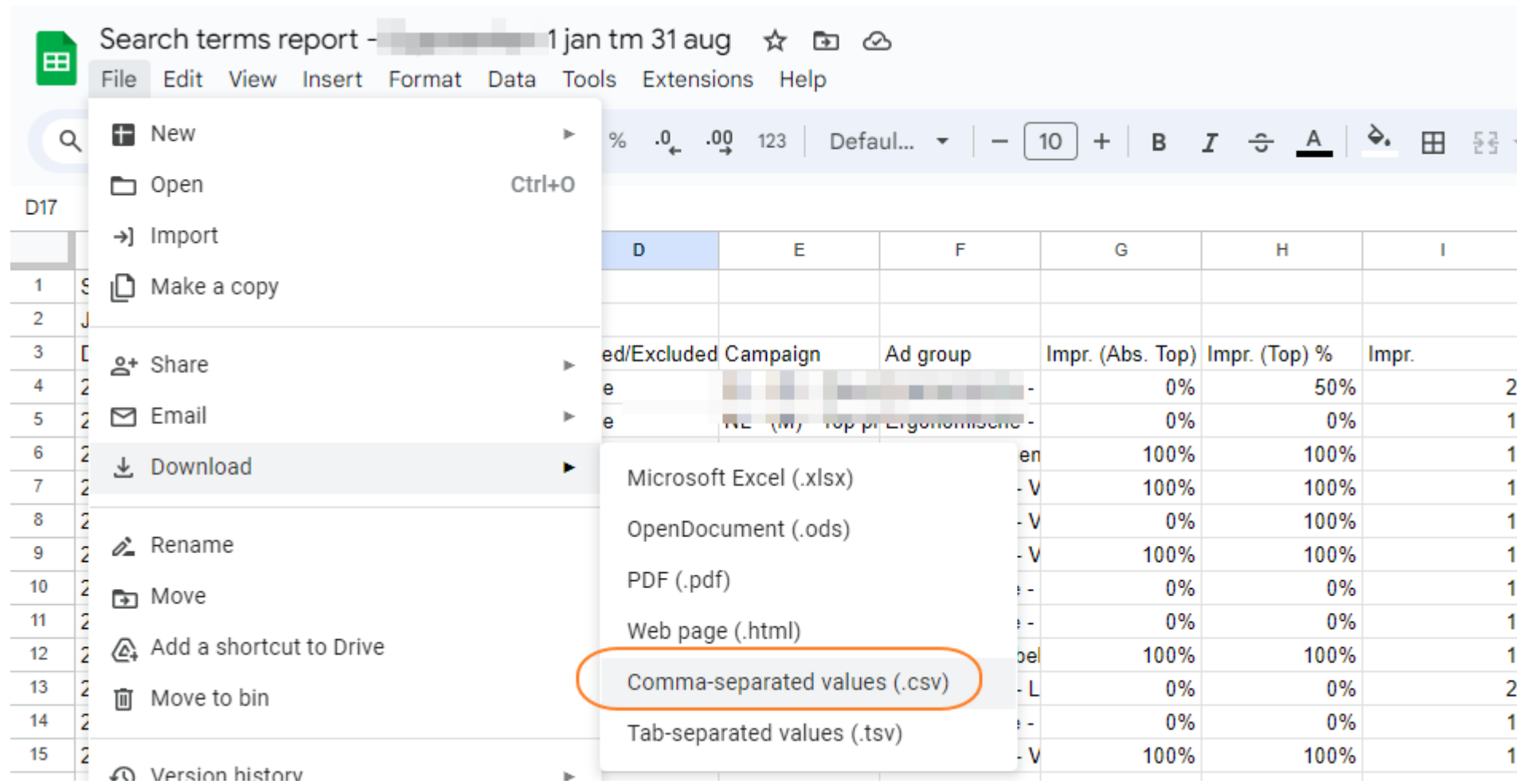
Year

Day of the week

PRO TIPS!

Chat GPT + Advanced Data Analysis:

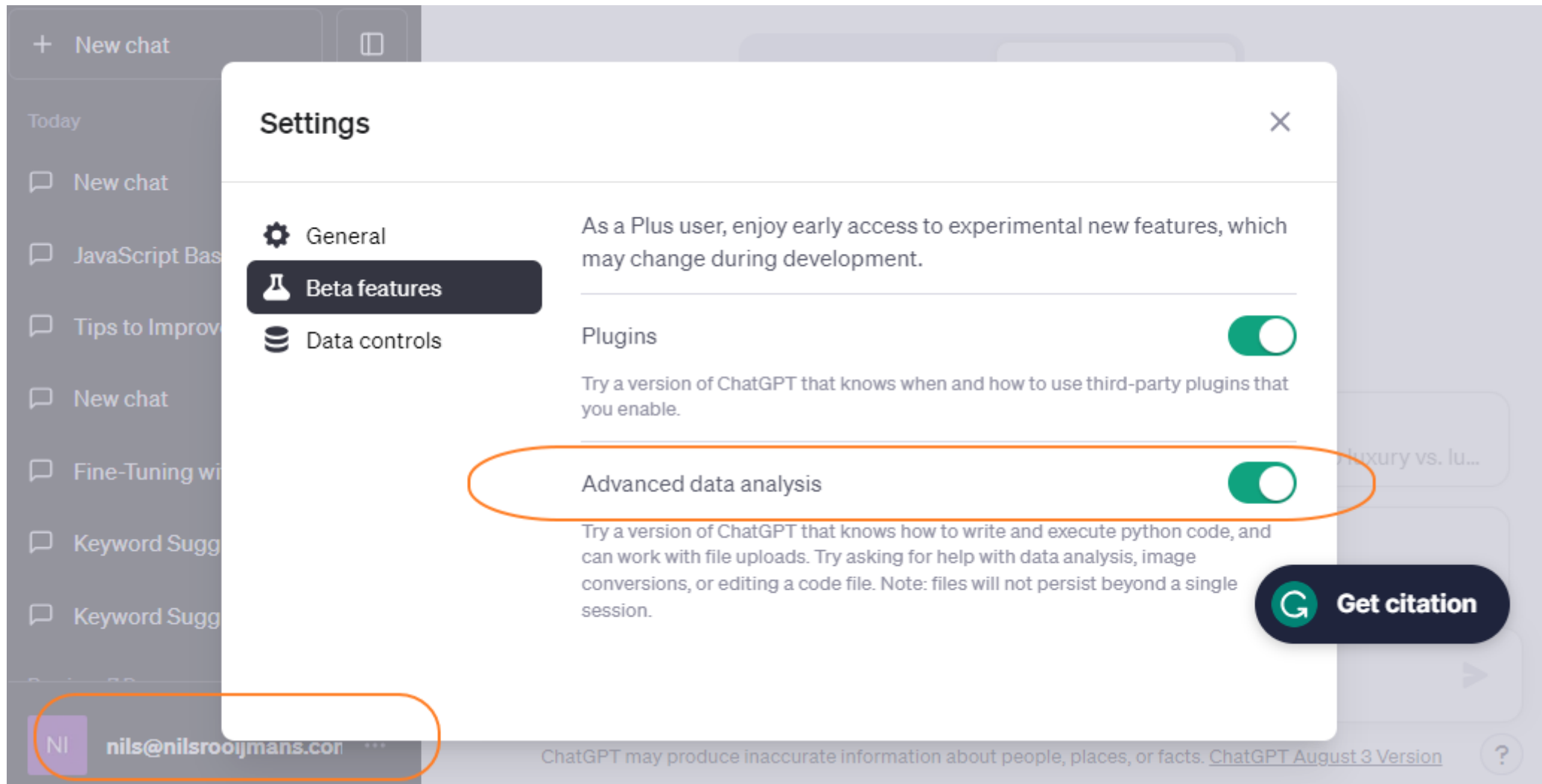
Visualize trends in search term data – step 3



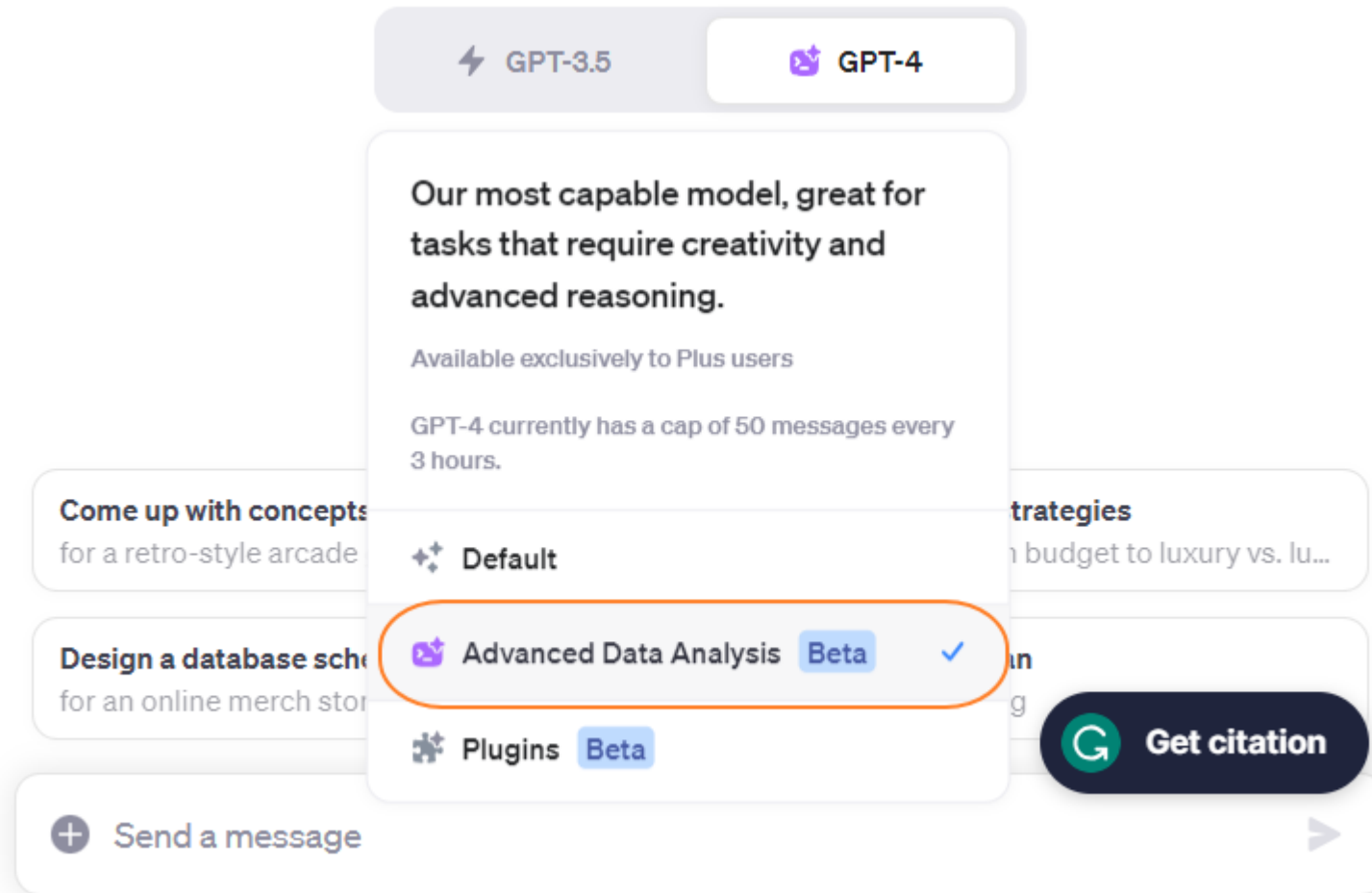
The screenshot shows a Google Sheets document titled "Search terms report - [redacted] 1 jan tm 31 aug". The "File" menu is open, and the "Download" option is selected, which has opened a sub-menu. In this sub-menu, "Comma-separated values (.csv)" is highlighted with an orange circle. The spreadsheet data is visible in the background, showing columns for "ed/Excluded", "Campaign", "Ad group", "Impr. (Abs. Top)", "Impr. (Top) %", and "Impr.". The data rows show various search terms and their performance metrics.

ed/Excluded	Campaign	Ad group	Impr. (Abs. Top)	Impr. (Top) %	Impr.
e	[redacted]	[redacted]	0%	50%	2
e	RE (M)	Top pr. Ergonomische	0%	0%	1
		en	100%	100%	1
-V			100%	100%	1
-V			0%	100%	1
-V			100%	100%	1
-			0%	0%	1
-			0%	0%	1
bel			100%	100%	1
-L			0%	0%	2
-			0%	0%	1
-V			100%	100%	1

Chat GPT + Advanced Data Analysis: Visualize trends in search term data – step 4

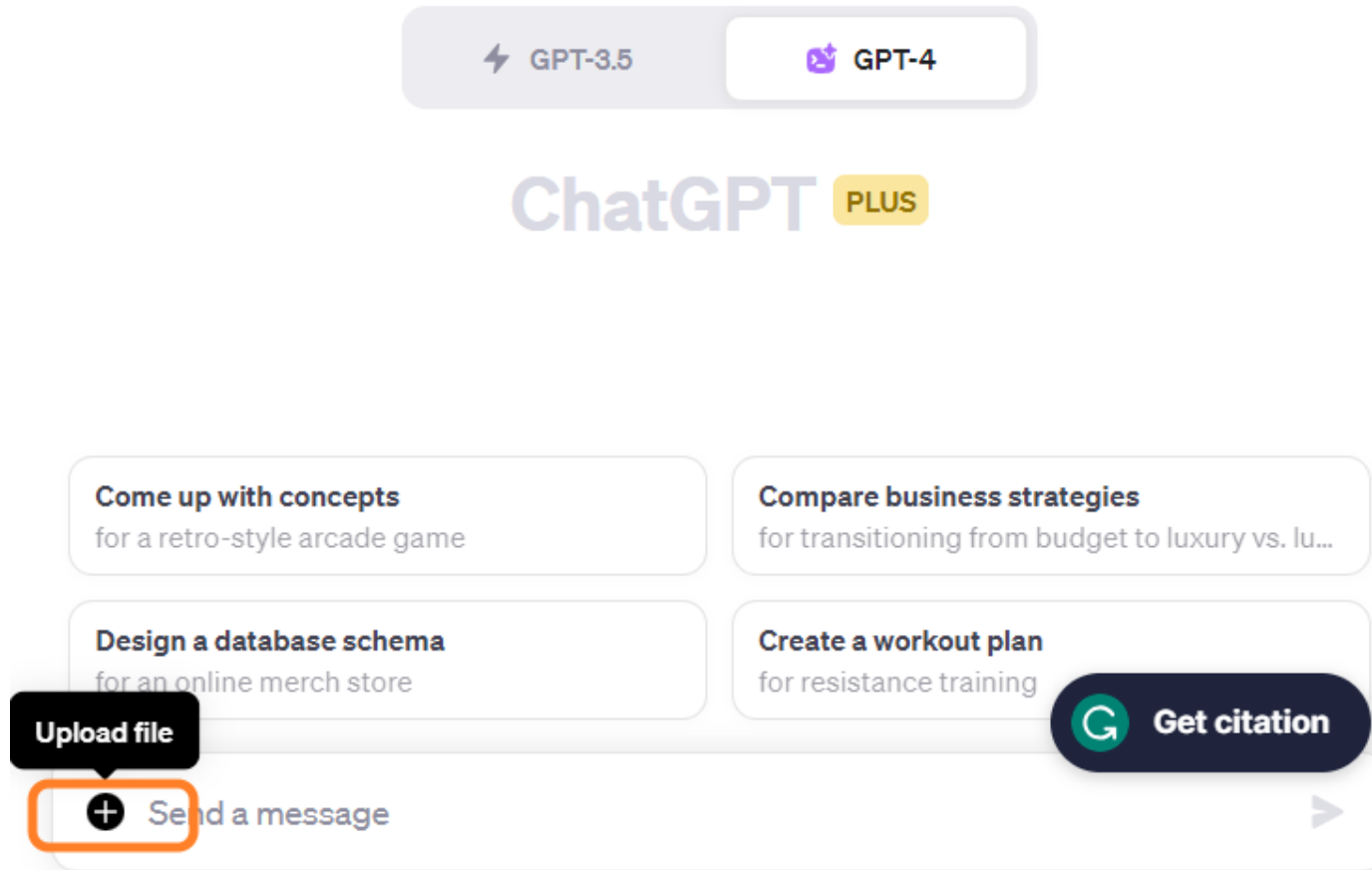
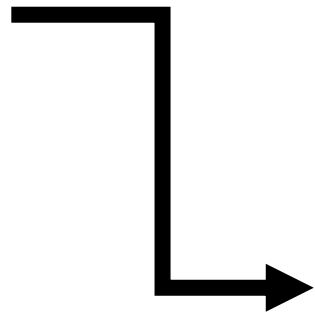


Chat GPT + Advanced Data Analysis: Visualize trends in search term data – step 4



Chat GPT + Advanced Data Analysis: Visualize trends in search term data – step 5

— This —
IS WHERE THE
★ MAGIC ★
HAPPENS



Chat GPT + Advanced Data Analysis: Visualize trends in search term data – step 5

 Advanced Data Analysis

NI



Search terms report - Ergowerken 1 jan tm 31 aug.csv

You are an experienced Google Ads consultant with excellent data analysis skills.
Attached is a csv file with a large list of search terms and their corresponding metrics for different dates this year.
The file contains a header on line 3 as well as rows describing the totals at the bottom. Ignore the first two rows and ignore the totals in the last few rows.



Show me you understand the meaning of the data and identify the top 5 search terms with the most impressions over the period. List them in a table.



Chat GPT + Advanced Data Analysis: Visualize trends in search term data



Alright, let's start by loading the data and inspecting the first few rows. We'll omit the first two rows as you mentioned and then take a look at the structure of the dataset.



Finished working

Show work ▼

The dataset appears to be a typical Google Ads search terms report. Here's a brief overview of some columns:

- **Day:** The date on which the search term was queried.
- **Search term:** The actual search term that users typed into Google.
- **Match type:** How closely the search term matched the keywords in your campaign.
- **Campaign and Ad group:** Organizational structures in Google Ads for your advertisements.
- **Impr. (Abs. Top) % and Impr. (Top) %:** Metrics indicating where your ad appeared on the search results page.
- **Impr.:** The number of times your ad was shown (impressions).
- **Clicks:** The number of times your ad was clicked.

↻ Regenerate



Chat GPT + Advanced Data Analysis:

Visualize trends in search term data – step 5

Next, I'll aggregate the data to identify the top 5 search terms with the most impressions over the given period.

Finished working

Show work ▼

It seems I made an oversight. The top entries in the dataset appear to be aggregate totals, which we should have excluded. My apologies for the oversight.

I'll remove these aggregate rows and then re-calculate the top 5 search terms with the most impressions.

Finished working

Show work ▼

Here are the top 5 search terms with the most impressions over the period:

Search Term	Impressions
[REDACTED]	15,432
[REDACTED]	11,310
[REDACTED]	6,345
[REDACTED]	5,917
[REDACTED]	5,074



Chat GPT + Advanced Data Analysis: Visualize trends in search term data – step 6

NI

Next, it is your job to create an animated graph that shows the number of impressions for these top 5 search terms on a weekly basis.

Proceed by first creating a table with the weekly stats for the top 5 search terms, including a column for the week number and a column for the start date of the week.

Sort that table based on the start date of the week, in chronological order.

Create a download link for this table.

The data in the graph should be presented in a way that has the oldest dates on the left of the x axis, and the most recent dates on the right

On the x axis, for every interval of 5 weeks, list the start date of the week. Make sure the animated graph shows the complete date range on the x-axis in each frame.

Use the y-axis to visualise the number of impressions per week.

Be sure to use distinctive colors for the different search terms.

Be sure to include download links for all images you create.

Bad Prompt



Write a short poem about a giraffe

Good Prompt



Write a 50 words poem about a tall giraffe who struggles with anxiety but ultimately learns to deal with it with the help of his animal friends. Write it in simple language that would be easy to understand for children.

Chat GPT + Advanced Data Analysis: Visualize trends in search term data



Let's break this task down step by step:

1. Create a table with weekly stats for the top 5 search terms.
 - This table will include a column for the week number and a column for the start date of the week.
 - We'll sort this table based on the start date of the week in chronological order.
2. Create the animated graph based on the table.
 - The x-axis will represent the start date of the week, with intervals of 5 weeks labeled.
 - The y-axis will show the number of impressions per week.
 - The graph will be animated to show the data for each search term over time.

Let's start with the first step: creating the table with weekly stats for the top 5 search terms.

Finished working

Show work ▼

I've created a table with weekly statistics for the top 5 search terms. This table is sorted based on the start date of the week in chronological order.

[Download the table with weekly stats for the top 5 search terms](#)

	A	B	C	D
1	Week Start Date	Week Number	Search term	Impr.
2	02-01-23	1		115
3	02-01-23	1		353
4	02-01-23	1		227
5	02-01-23	1		312
6	02-01-23	1		553
7	09-01-23	2		489
8	09-01-23	2		258
9	09-01-23	2		173
10	09-01-23	2		346
11	09-01-23	2		230
12	16-01-23	3		156



Chat GPT + Advanced Data Analysis: Visualize trends in search term data

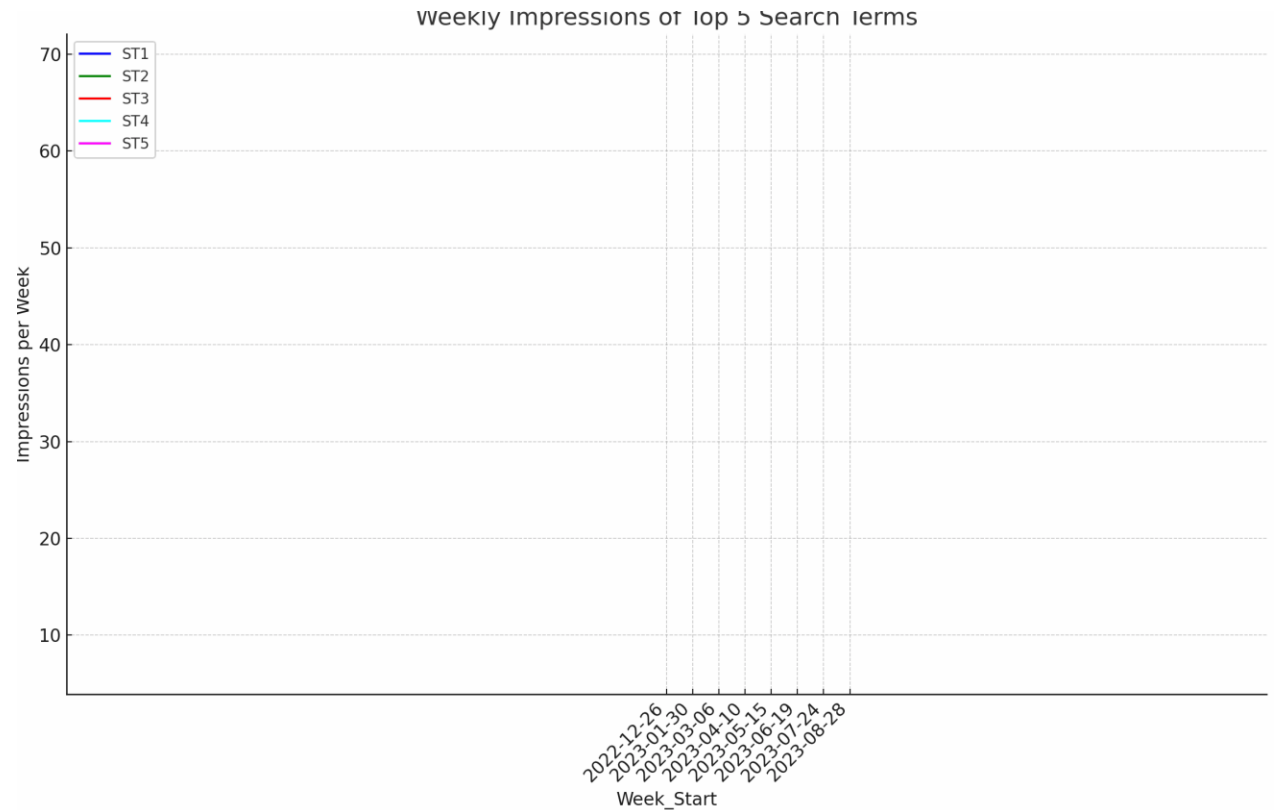
Next, we'll proceed to create the animated graph. We'll represent the search terms as ST1, ST2, ST3, ST4, and ST5 and make sure the oldest dates are on the left of the x-axis, and the most recent dates are on the right. On the x-axis, for every interval of 5 weeks, we'll list the start date of the week in an easy-to-read format. The y-axis will visualize the number of impressions per week. Let's proceed with this step.

Finished working

Show work ▼



2 PROMPTS



Chat GPT + Advanced Data Analysis: Visualize trends in search term data

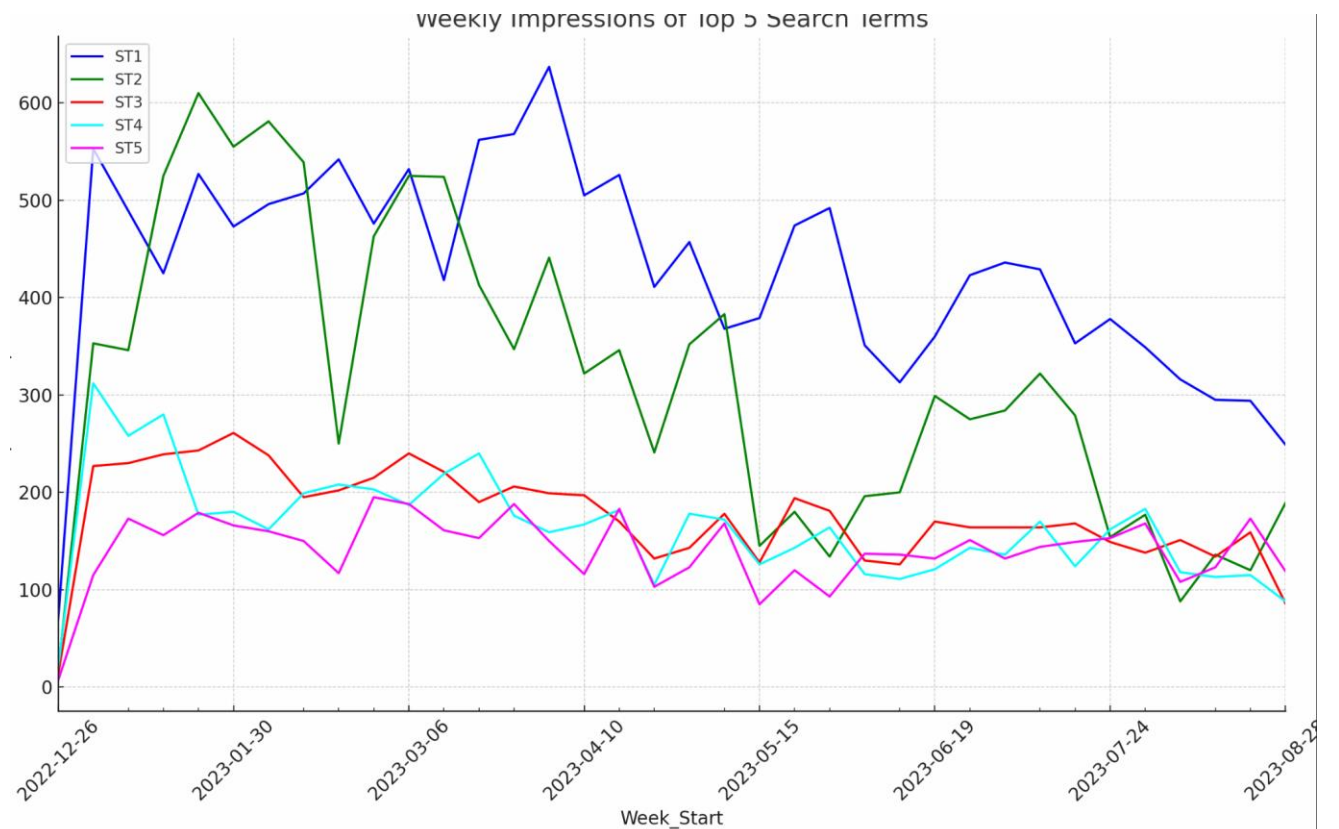
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Finished working

Show work ▼



2 PROMPTS



Chat GPT for PPC: Ongoing Account Optimizations

“Could ChatGPT help me do n-gram analyses?”



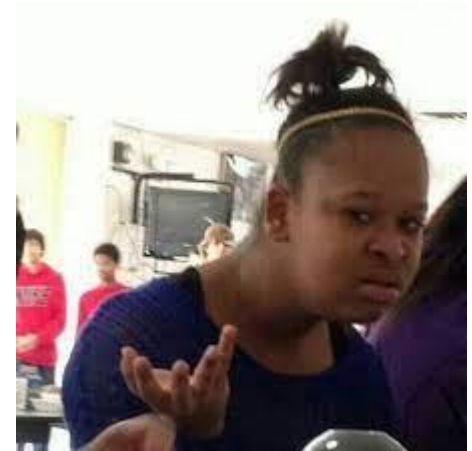
Chat GPT + Advanced Data Analysis: n-gram analyses

An n-gram is a phrase made of n words:

a 1-gram is a single word,

a 2-gram is a phrase made of two words, and
so on.

For example, “this four word phrase” contains
three 2-grams (“this four,” “four word,”
“word phrase”) and two 3-grams (“this four
word” and “four word phrase”).



duhh...

Chat GPT + Advanced Data Analysis: n-gram analyses



1. Download SQR data (ie: for shopping, DSA or Broad match)
2. Upload to ChatGPT+ADA
3. **Ask it to analyze all of the search terms and explain the data**
4. Ready? Let's **prompt** ->

Chat GPT + Advanced Data Analysis: n-gram analyses

Perform bi-gram analyses.

Aggregate the number of impressions, clicks and cost per bi-gram.

For each bi-gram, calculate the CTR with $CTR = (clicks/impressions) * 100\%$, and calculate the 'Avg CPC' with $Avg\ CPC = cost/clicks$

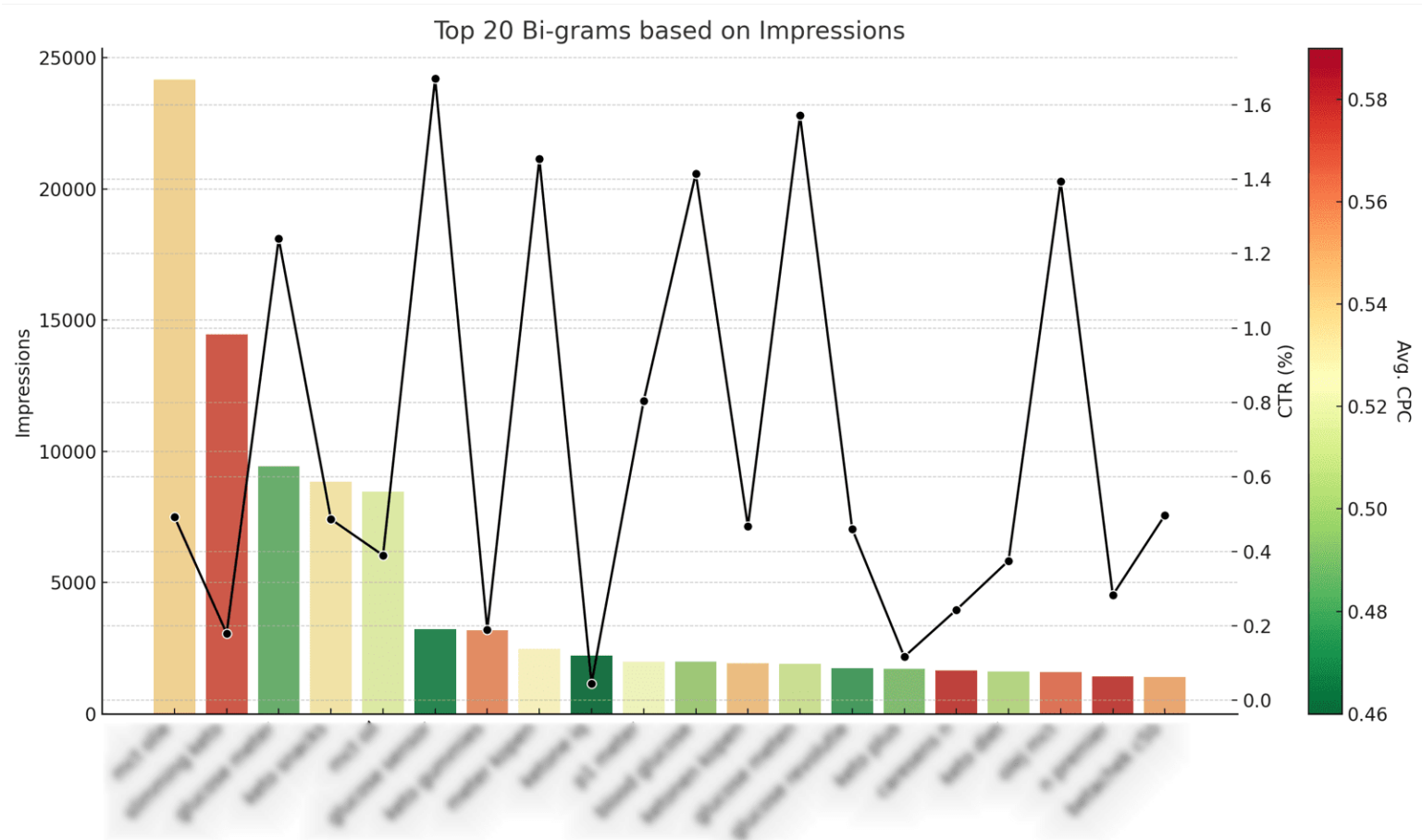
Continue with the top 20 bi-grams based on number of impressions

Show the top 20 bi-grams based on impressions, as a table with download link

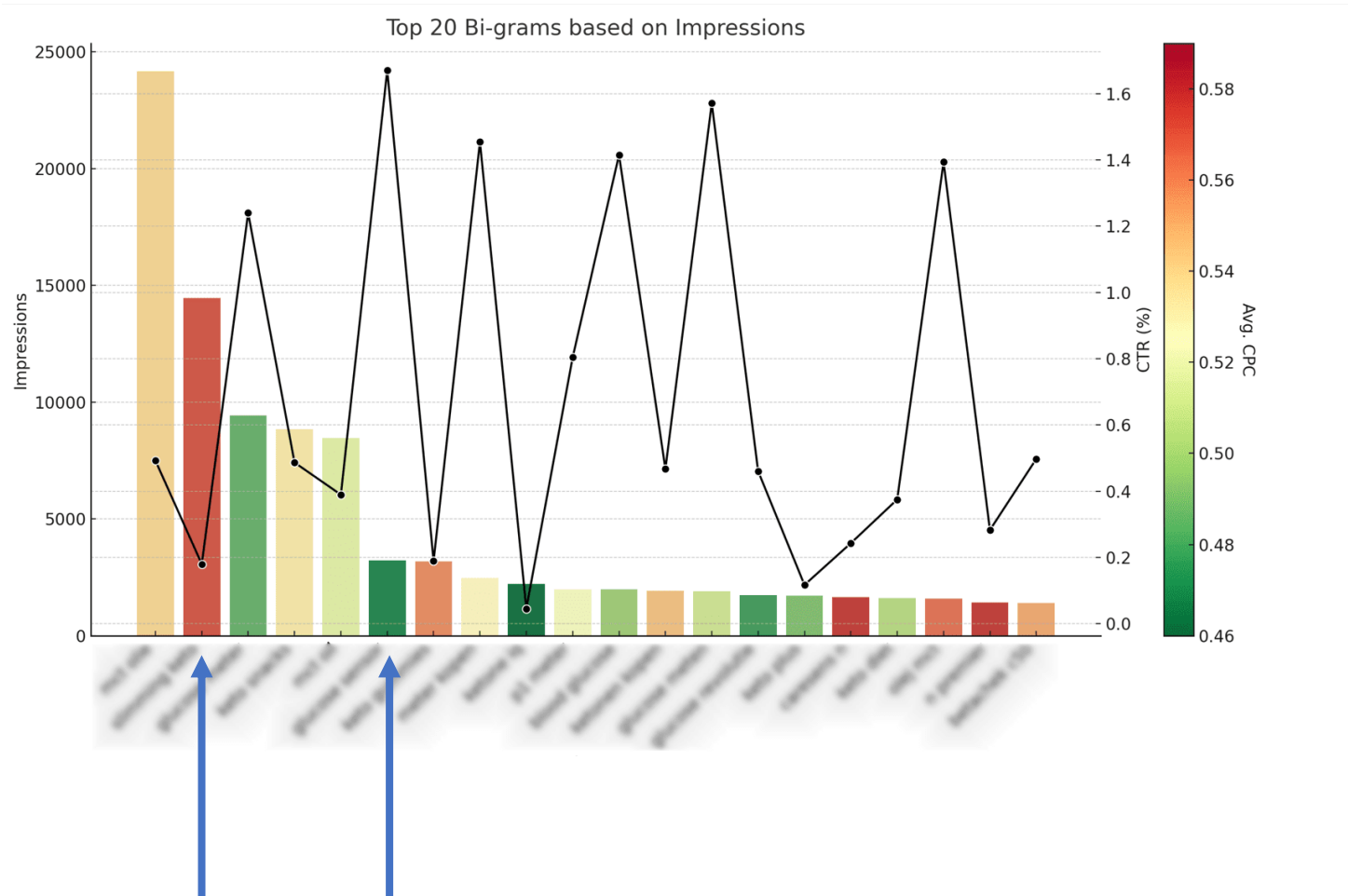
Visualise the top 20 bi-gram in a Dual-Axis Bar chart. Use Y axis for the number of impressions and CTR. Use the x-axis for the bi-grams. Be sure to add color gradient on the bars that represents the Avg. CPC, ranging from green (low cost) to red (high cost).

As always, add a download link for the graph.

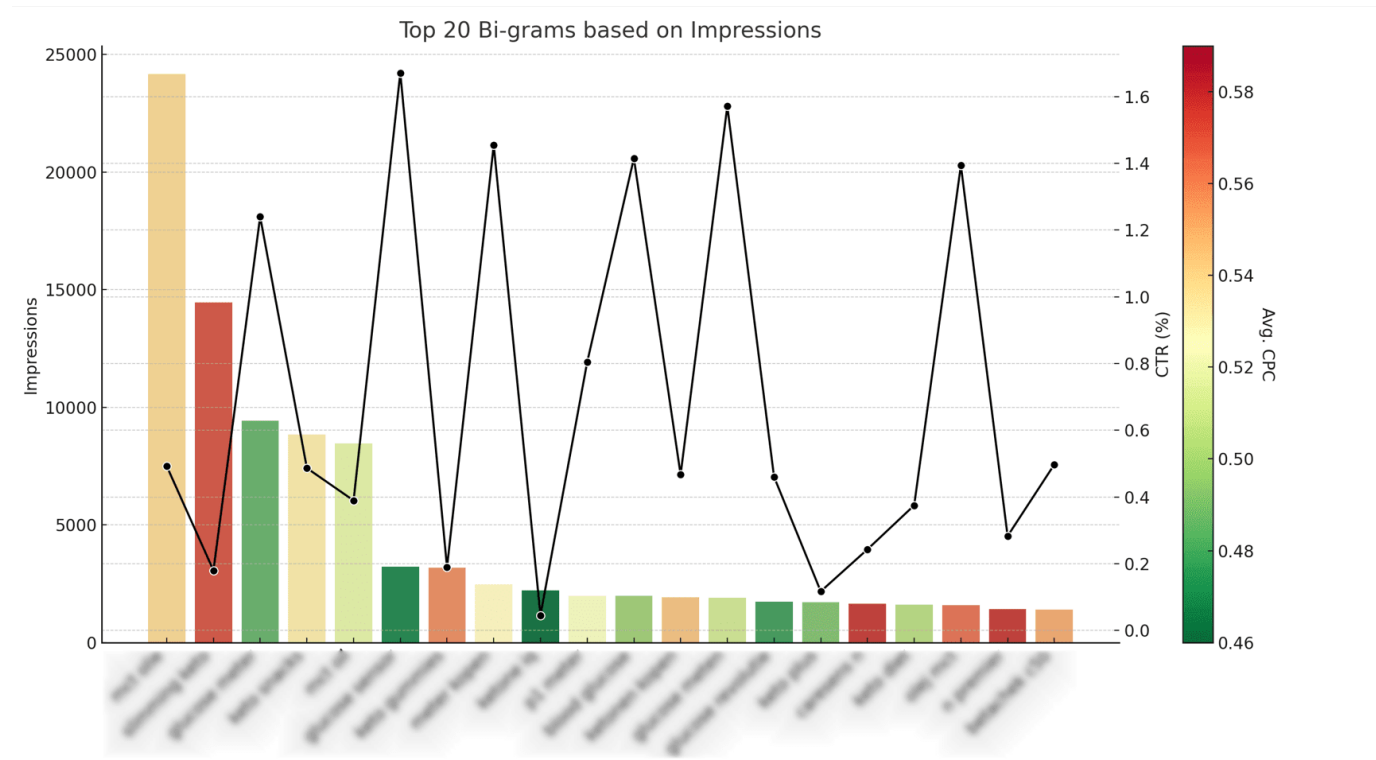
Chat GPT + Advanced Data Analysis: n-gram analyses



Chat GPT + Advanced Data Analysis: n-gram analyses



Chat GPT + Advanced Data Analysis: n-gram analyses

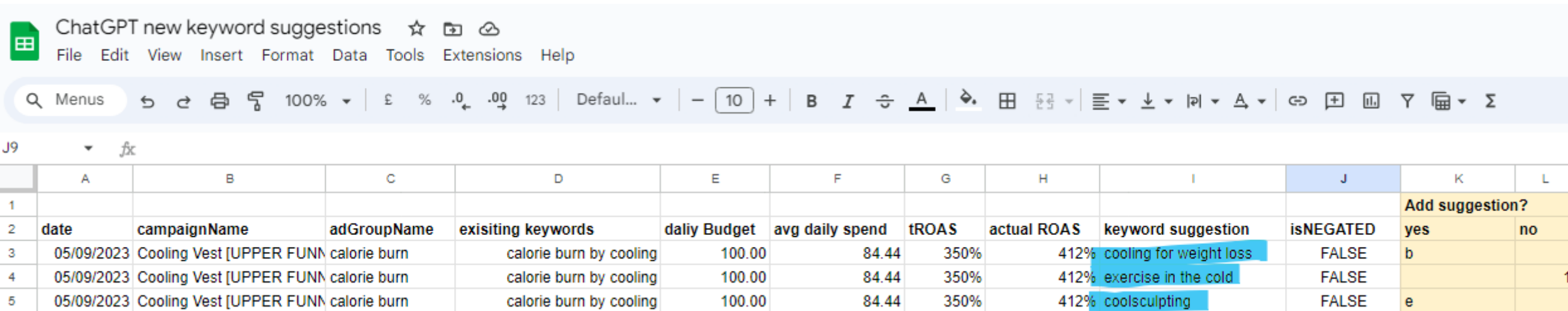


ChatGPT – from manual to (semi) automated



Google Ads Scripts that use GPT

- add new keywords to campaigns with great performance



ChatGPT new keyword suggestions

File Edit View Insert Format Data Tools Extensions Help

Search Menus 100% £ % .0 .00 123 Default... 10 B I A

	A	B	C	D	E	F	G	H	I	J	K	L
1											Add suggestion?	
2	date	campaignName	adGroupName	existing keywords	daily Budget	avg daily spend	tROAS	actual ROAS	keyword suggestion	isNEGATED	yes	no
3	05/09/2023	Cooling Vest [UPPER FUNN	calorie burn	calorie burn by cooling	100.00	84.44	350%	412%	cooling for weight loss	FALSE	b	
4	05/09/2023	Cooling Vest [UPPER FUNN	calorie burn	calorie burn by cooling	100.00	84.44	350%	412%	exercise in the cold	FALSE		1
5	05/09/2023	Cooling Vest [UPPER FUNN	calorie burn	calorie burn by cooling	100.00	84.44	350%	412%	coolsculpting	FALSE	e	

(Semi) Automatically add new keyword suggestions from ChatGPT to ad groups that have good ROAS/CPA and un-used budget.

Google Ads Scripts that use GPT

- write RSA Headlines and Descriptions

- Automatically create Google Sheet with suggestions for missing headlines and descriptions
- **IDEA**
 - Run an experiment and have the script automatically replace assets with “low” performance score.

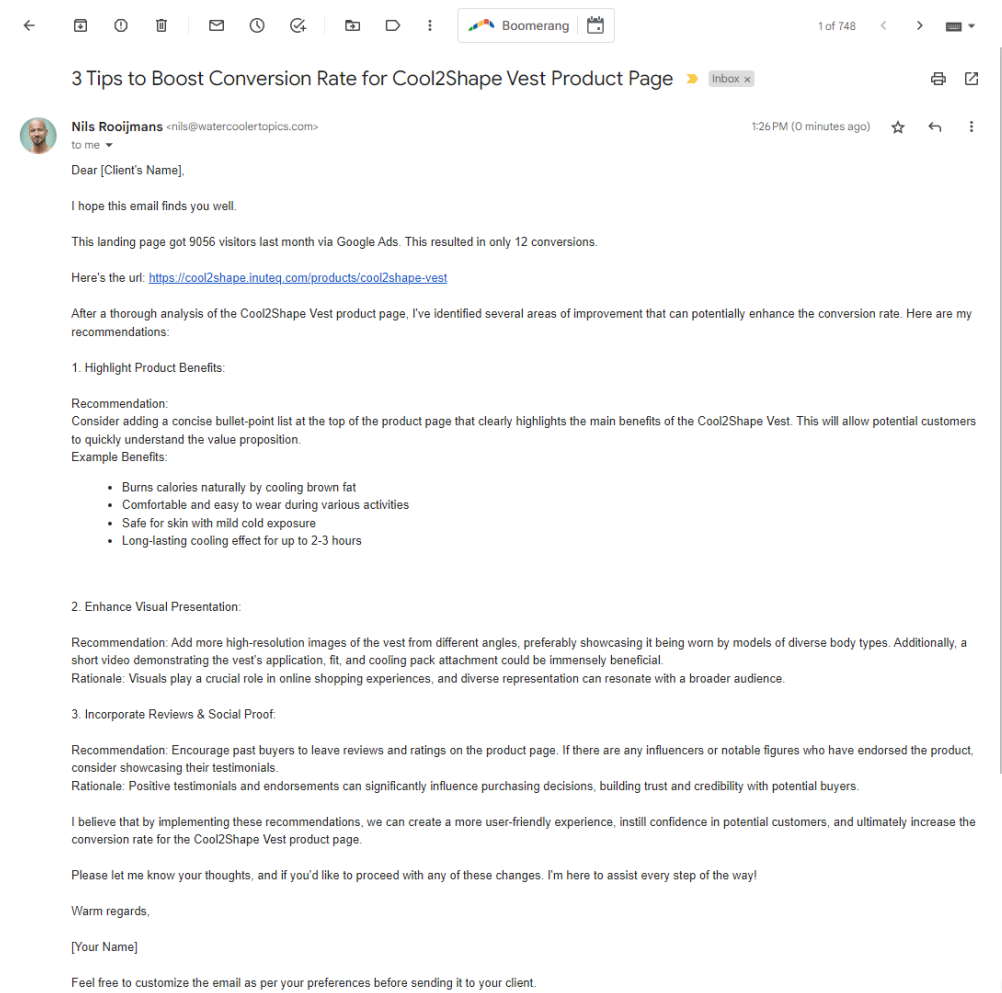
S	T	U	V	W
Headline 11	Headline 12	Headline 13	Headline 14	Headline 15
1 Platform For 4 A	Trusted By 75K+ A	75K+ Users Across	PPC Users In 30+ C	Rated 4.7+ On Top
Designed for all te	Try Optmyzr for fr	Start free trial - Fu	Start 14-day free t	Free trial - Get sta
Start Free Trial - Fu	Start 14-Days Free	PPC Users in 30+ C	Rated 4.7+ on Top	Trusted by 75K+ A
75K+ Users Across	PPC Users in 30+ C	Rated 4.7+ on Top	PPC Ads Made Eas	Maximize Ad Perfo
Free Trial - Get Sta	Try Optmyzr for Fr	Advanced Ads Solu	Boost Paid Ad Carr	Better PPC Perform
Try Optmyzr for Fr	Boost PPC Profits	Effortlessly Autom	Simplify Google Ad	Try Optmyzr's PPC
75K+ Users Across	Rated 4.7+ on Top	1) Boost PPC Perf	2) Master Your PP	3) Dominate with
Start Free Trial - Fu	Free Trial - Get Sta	Maximize Your PP	Effortlessly Manag	Revolutionize Your
1 Platform for 4 A	Tool that Experts U	Start Free Trial - Fu	Start 14-Days Free	Free Trial - Get Sta
Get control over a	Start free trial - Fu	Start 14-day free t	Free trial - Get sta	Try Optmyzr for fr
Maximize your Arr	Rated 4.7+ on top	PPC users in 30+ c	75K+ users across	Trusted by 75K+ a
Get control over a	Start free trial - Fu	Start 14-day free t	Free trial - Get sta	Try Optmyzr for fr

LINK: <https://searchengineland.com/google-ads-script-gpt-responsive-search-ads-395548>

Google Ads Scripts that use GPT

- generate monthly CRO tips for your client

- Automatically generate monthly CRO tips for the top landing pages.
- Receive an email you can easily forward to your client/colleagues
- Use landing page stats and search term stats as input for GPT

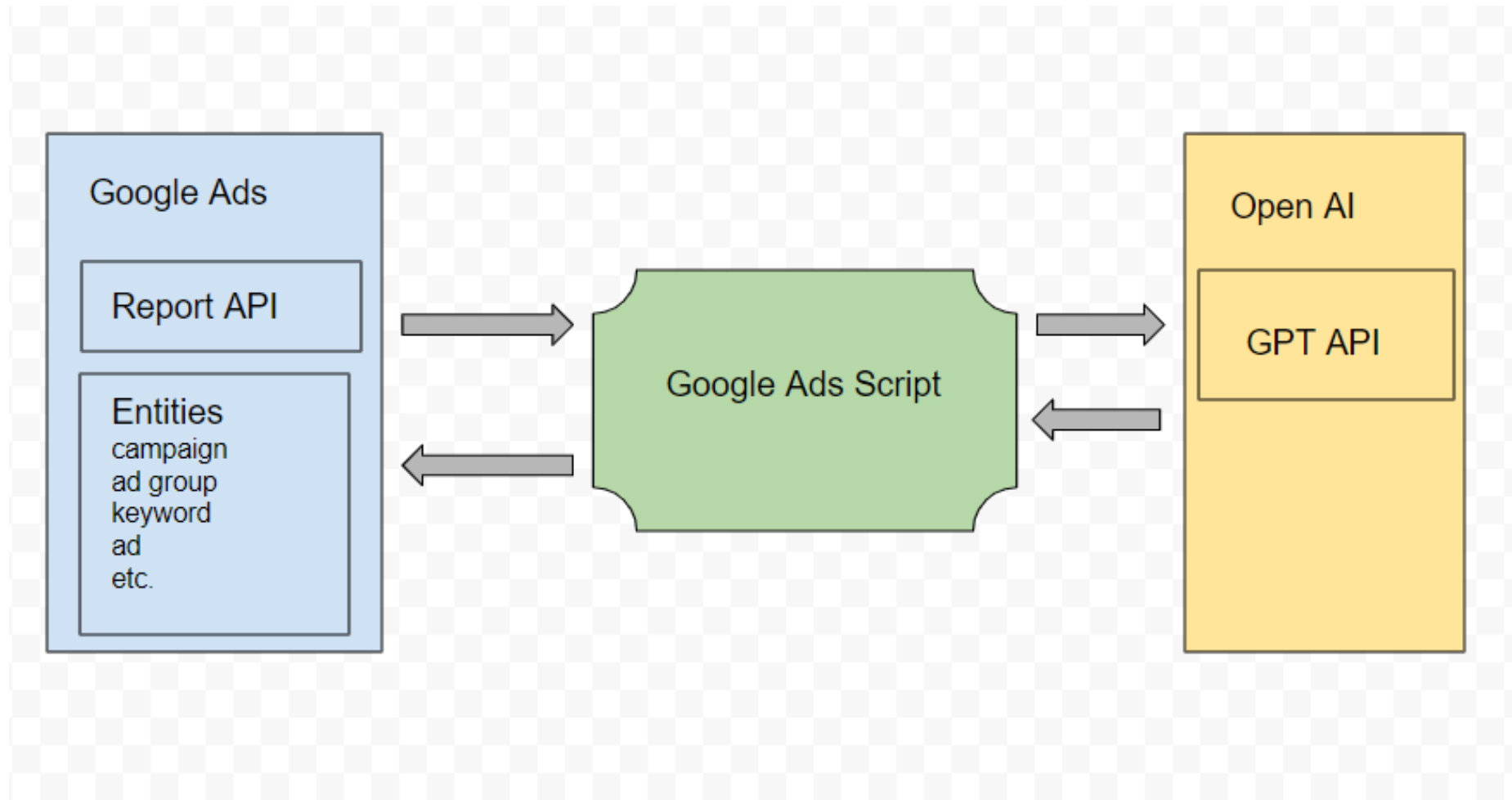


Google Ads Scripts that use GPT



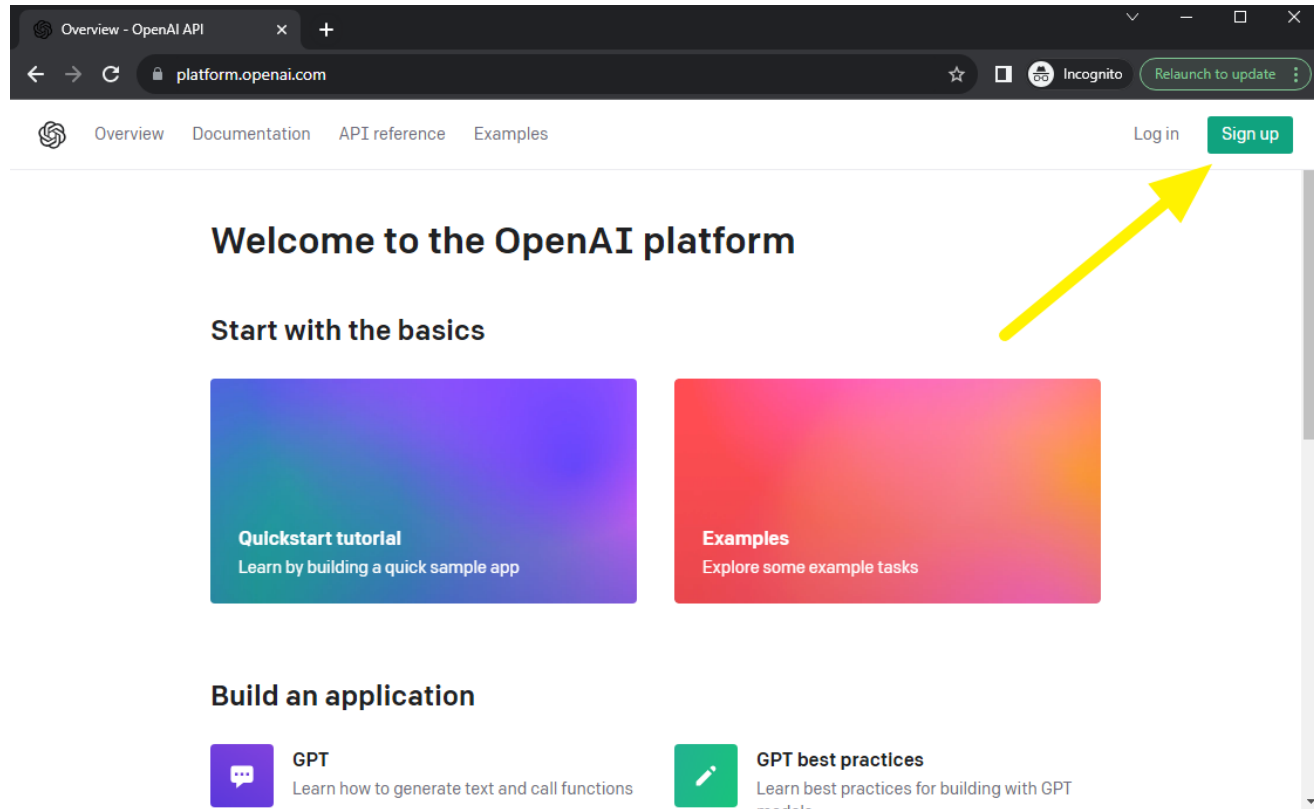
Google Ads Scripts + GPT

How does it work?



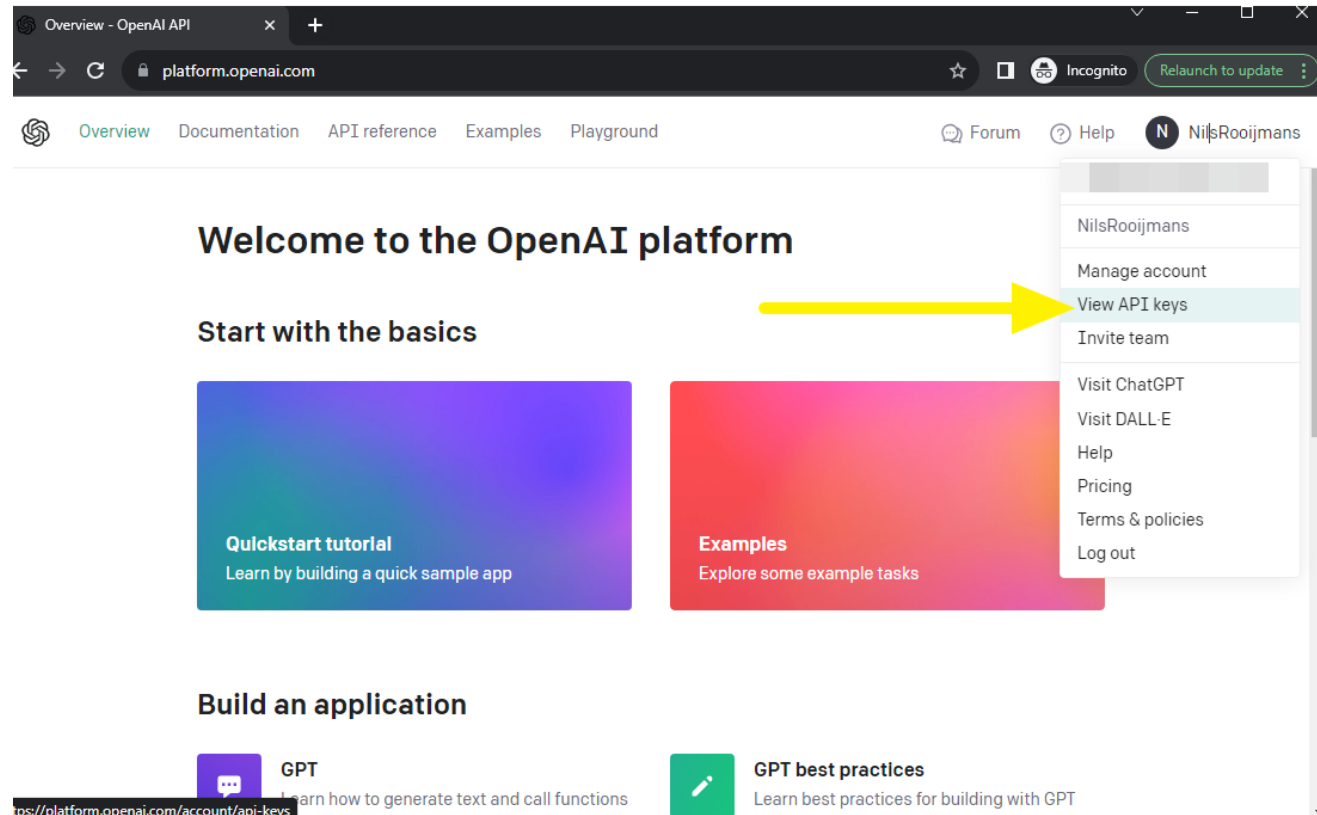
Open AI account and API

1) Create Open AI account



Open AI account and API

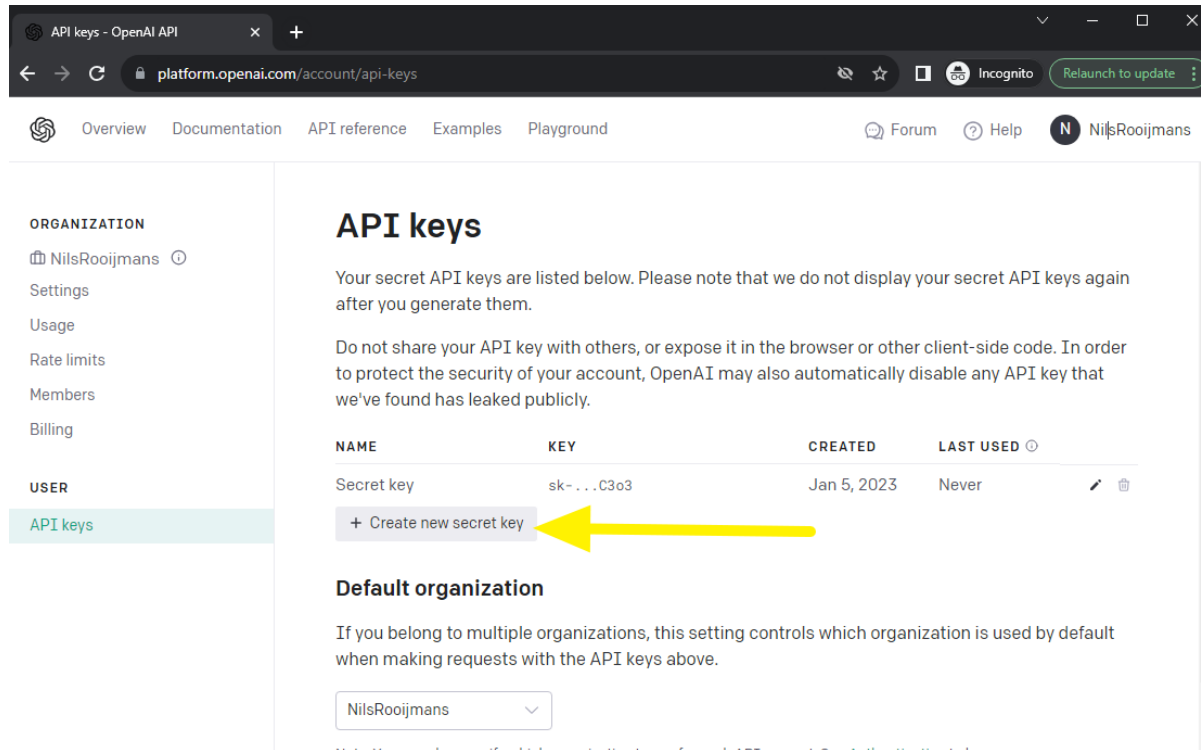
2) View API keys



Open AI account and API

3) Create new key

! MAKE SURE TO COPY PASTE !



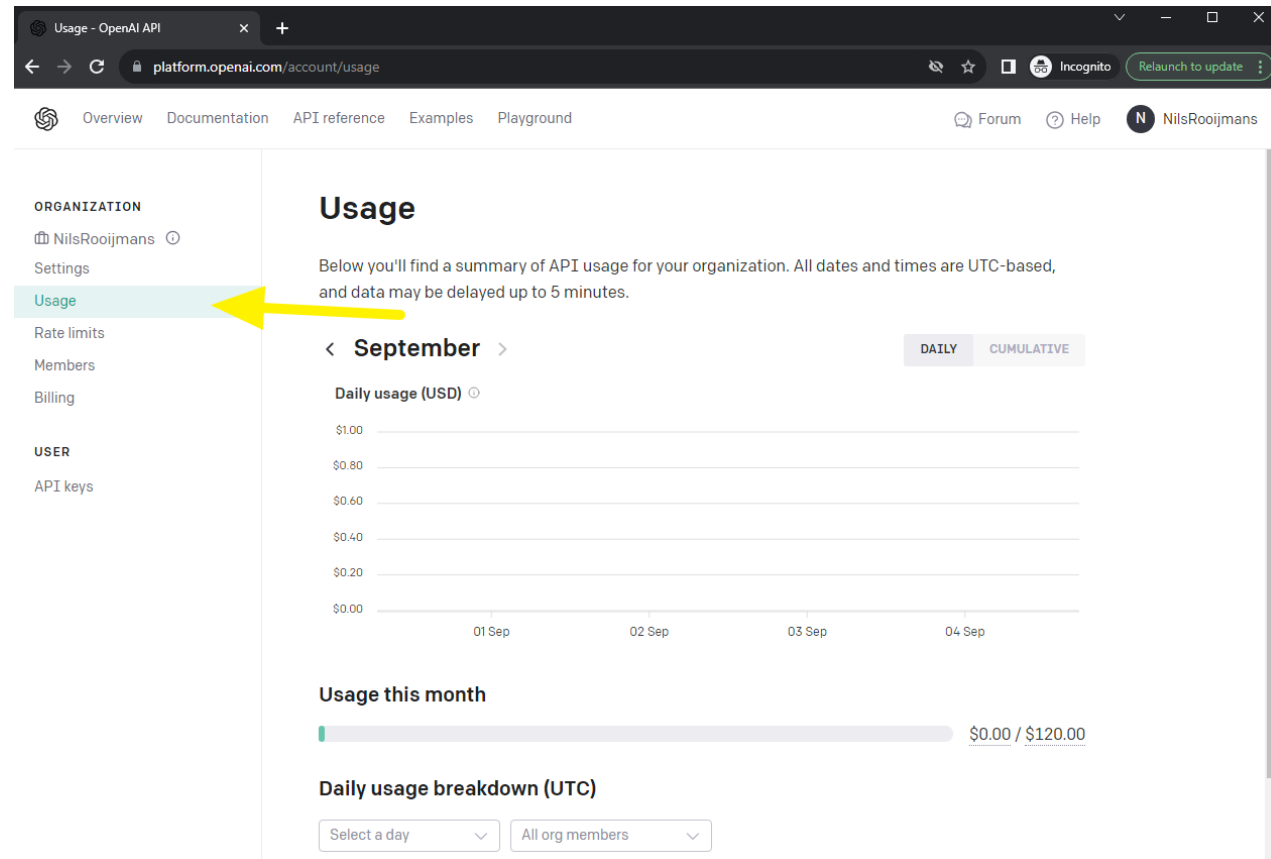
The screenshot shows the OpenAI API keys management interface. The browser address bar indicates the URL is `platform.openai.com/account/api-keys`. The page title is "API keys - OpenAI API". The left sidebar shows the "API keys" option under the "USER" section. The main content area is titled "API keys" and contains a warning about not sharing API keys. Below the warning is a table with the following data:

NAME	KEY	CREATED	LAST USED
Secret key	sk-...C3o3	Jan 5, 2023	Never

Below the table is a button labeled "+ Create new secret key", which is highlighted by a yellow arrow. At the bottom of the page, there is a "Default organization" section with a dropdown menu set to "NilsRoijmans".

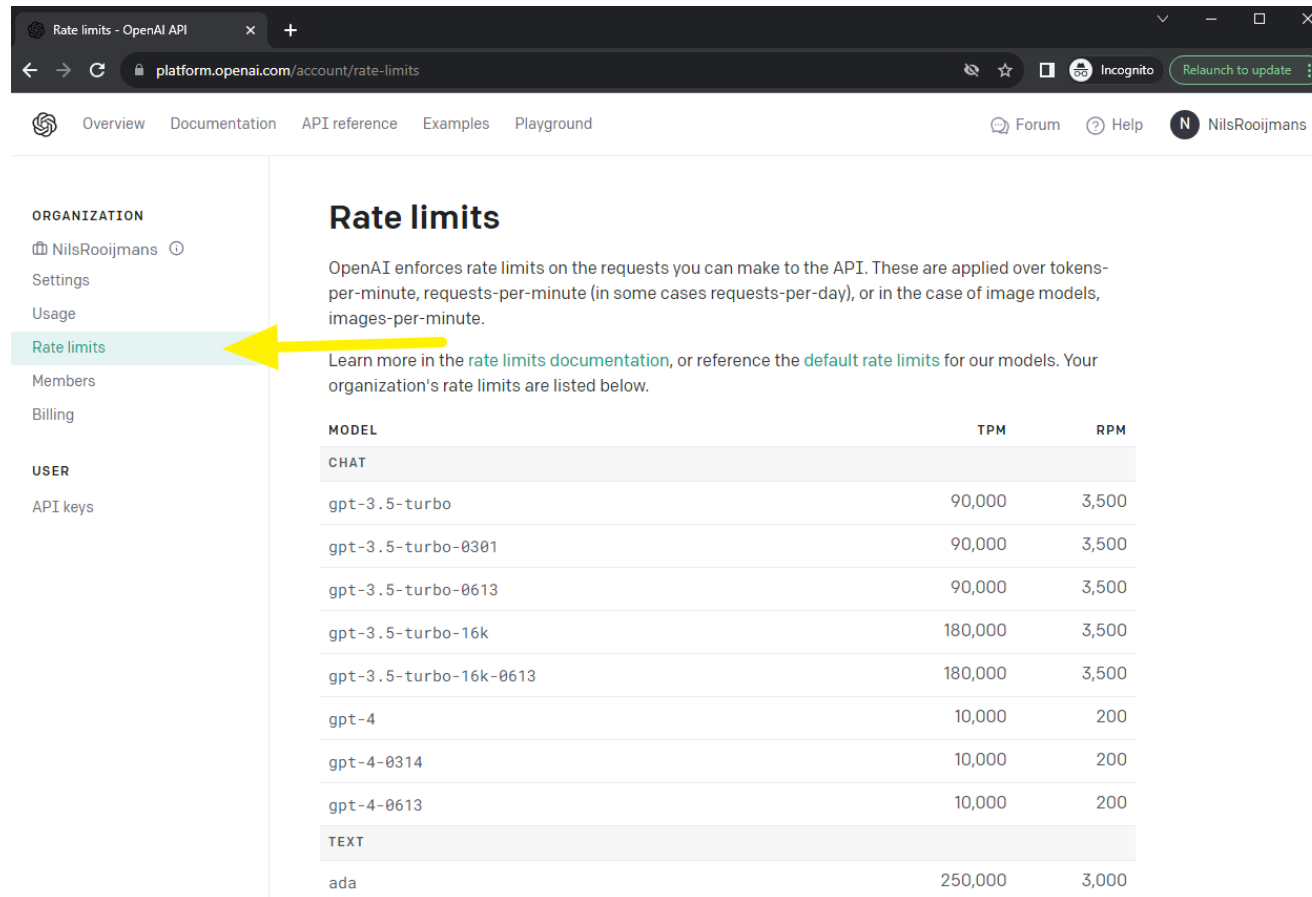
Open AI account and API

4) Keep track of usage and costs



Open AI account and API

5) Rate limits for different models



The screenshot shows the OpenAI API Rate Limits page. The left sidebar contains the following navigation items:

- ORGANIZATION
 - NilsRoijmans ⓘ
 - Settings
 - Usage
 - Rate limits**
 - Members
 - Billing
- USER
 - API keys

The main content area displays the 'Rate limits' title and a table of rate limits for various models. The table has three columns: MODEL, TPM, and RPM.

MODEL	TPM	RPM
CHAT		
gpt-3.5-turbo	90,000	3,500
gpt-3.5-turbo-0301	90,000	3,500
gpt-3.5-turbo-0613	90,000	3,500
gpt-3.5-turbo-16k	180,000	3,500
gpt-3.5-turbo-16k-0613	180,000	3,500
gpt-4	10,000	200
gpt-4-0314	10,000	200
gpt-4-0613	10,000	200
TEXT		
ada	250,000	3,000

How to connect to API via Google Ads script

Script name: Chat GPT for Google Ads Scripts

Code.gs

GPT API.gs

```

1 // 1. Set API endpoint
2 const ENDPOINT_URL = 'https://api.openai.com/v1/chat/completions';
3
4 // 2. Insert API key, get your key at https://platform.openai.com/account/api-keys
5 const CHAT_GPT_API_KEY = 'sk-XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX';
6
7 // 3. Choose your model, see details https://platform.openai.com/docs/models/overview
8 // Possible models: gpt-4, gpt-4-0613, gpt-4-32k, gpt-4-32k-0613, gpt-3.5-turbo, gpt-3.5-turbo-0613, gpt-3.5-turbo-16k, gpt-3.5-turbo-16k-0613
9 const GPT_MODEL = 'gpt-4';
10
11 // 4. Set temperature, What sampling temperature to use, between 0 and 2. Default is 1.
12 // Higher values like 1.8 will make the output more random, while lower values like 0.2 will make it more focused and deterministic.
13 const TEMPERATURE = 1;
14
15 // 5. Set nucleus sampling. The model considers the results of the tokens with top_p probability mass.
16 // So 0.1 means only the tokens comprising the top 10% probability mass are considered. Default is 1.
17 const TOP_P = 1;
18
19 // For more details on the parameter options, visit https://platform.openai.com/docs/api-reference/chat/create
20
21

```

URL: <https://nilsrooijmans.com/chatgpt-for-google-ads-scripts>



How to connect to API via Google Ads script

```
function getGPTResponse(systemPrompt, userPrompt) {
  try {
    const messages= [
      {"role": "system", "content": systemPrompt},
      {"role": "user", "content": userPrompt}
    ];

    const headers = {
      "Content-Type": "application/json",
      "Authorization": `Bearer ${CHAT_GPT_API_KEY}`
    };

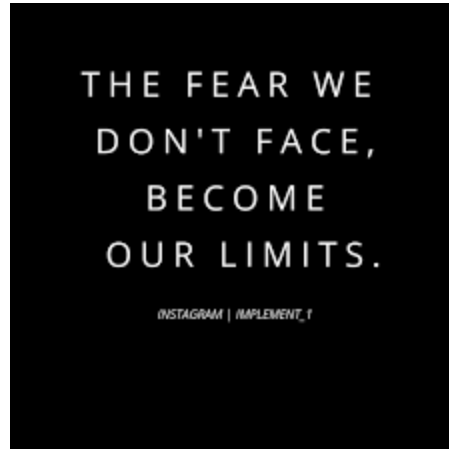
    const payload = {
      "model": GPT_MODEL,
      "messages": messages,
      "temperature": TEMPERATURE,
      "top_p": TOP_P
    };

    const httpOptions = {
      "method" : "POST",
      "muteHttpExceptions": true,
      "headers" : headers,
      'payload': JSON.stringify(payload)
    };

    const response = JSON.parse(UrlFetchApp.fetch(ENDPOINT_URL, httpOptions));

    const responseContent = response.choices[0].message.content;
    //console.log("responseContent = "+responseContent);

    return responseContent;
  } catch (e) {
    console.log("### ERROR: some error occurred. Please check and try again.\n "+e);
  }
}
```



```
function main() {
  var systemPrompt =
    "You are a senior Google Ads consultant with excellent skills in creating and optimizing Google Ads campaigns.";

  var userPrompt =
    "Give me 3 tips to improve the CTR of my display ads.";

  var gptResponse = getGPTResponse(systemPrompt, userPrompt);

  console.log("gptResponse : \n"+gptResponse);
}
```

Changes	Logs	Done (0:30)
9/4/2023 3:53:54 PM	<pre>gptResponse : 1. Effective Ad Design: Your Google Display Ads should be visually appealing to catch the viewer's attention among the clutter of online content. 2. Compelling Call-To-Action: Your Display Ads should have a compelling and clear Call-To-Action (CTA) that prompts users to take a desired action. 3. Precise Targeting: Make sure you're targeting the right audience. Google Display Network (GDN) allows you to target ads based on demographics, Lastly, remember to rigorously split test various ad elements (like headlines, images, CTAs etc.) to know what works best for your campaign and c</pre>	

URL: <https://nilsrooijmans.com/chatgpt-for-google-ads-scripts>

Use Chat GPT to create Gads Scripts for you

1. Use ChatGPT as your JavaScript tutor
2. Use ChatGPT to fix broken scripts
3. Use ChatGPT to write complete scripts from scratch



Chat GPT as your private JavaScript teacher

Learn the basics of JavaScript and Google Ads Scripts by having Chat GPT as your tutor



Chat GPT as your private JavaScript teacher

system prompt

You are an experienced Google Ads Script developer with excellent educational skills.

It is your job to teach me the very basics of Javascript.

I do not have any experience in programming.

Explain every concept like I am a ten-year-old.

Insert age here



Give plenty of examples in the form of little Google Ads Scripts I can preview in the Google Ads Script environment.

Chat GPT teaches basic JS concepts

- PROMPT: What is a variable in JavaScript and how do I declare it?



In JavaScript, a **variable** is a symbolic name for a value. Variables are used to store data that can be used and manipulated throughout a program. They can hold values like numbers, strings, objects, functions, and more.



Declaring a Variable in JavaScript:

1. Using `var` (older method):

The `var` keyword was traditionally used to declare variables in JavaScript. However, it has some quirks, especially in terms of scope, so the newer `let` and `const` keywords (introduced in ES6) are now preferred in many cases.

javascript

Copy code

```
var myVariable = "Hello, World!";
```

2. Using `let` (modern method):

The `let` keyword allows you to declare a block-scoped local variable, optionally initializing it to a value.

javascript

Copy code

```
let age = 25;
```

Thank you
for being
such a
GREAT
TEACHER

Chat GPT teaches Google Ads Script concepts

PROMPT: Explain to me how I can get access to the keywords in my Google Ads campaigns using Google Ads Scripts. Limit your answer to the javascript code and its explanation.



Of course! Here's a basic Google Ads Script to fetch keywords from your campaigns, followed by an explanation:



JavaScript Code:

javascript

Copy code

```
function listKeywords() {  
  // Get an iterator (a list) of all keywords in your account  
  var keywordIterator = AdsApp.keywords().get();  
  
  // Loop through each keyword  
  while (keywordIterator.hasNext()) {  
    var keyword = keywordIterator.next();  
  
    // Log keyword text, its campaign, and its ad group  
    Logger.log("Keyword: " + keyword.getText() +  
              ", Campaign: " + keyword.getCampaign().getName() +  
              ", Ad Group: " + keyword.getAdGroup().getName());  
  }  
}
```

Explanation:

1. `function listKeywords() { ... }`: This defines a new function named `listKeywords`. When this function is run, it will execute the code inside the curly braces `{ ... }`.



Chat GPT fixes bugs in your code

Script name: Chat GPT for Google Ads Scripts


Code.gs

GPT API.gs

```
1 function main() {  
2  
3   var systemPrompt = "You are a senior Google Ads consultant with excellent skills in creating a  
4   var userPrompt = "Give me 3 tips to improve the CTR of my display ads.";  
5  
6   var gptResponse = getGPTResponse(systemPrompt, userPrompt);  
7  
8   console.log("gptResponse : \n"+gptResponses);  
9 }
```

Changes Logs Done (0:39)

9/4/2023 5:30:27 PM ReferenceError: gptResponses is not defined
at main (Code:8:34)
at Object.<anonymous> (adsapp_compiled:20173:54)



Chat GPT fixes bugs in your code

PROMPT: Here's my Google Ads Script {insert code here}. When I try to run the script I get this error: {insert error message}. Can you fix this for me and explain how you fixed it?

NI

Here's my Google Ads Script:

```
function main() {  
  
    var systemPrompt = "You are a senior Google Ads consultant with excellent skills in  
creating and optimizing Google Ads campaigns.";  
    var userPrompt = "Give me 3 tips to improve the CTR of my display ads.";  
  
    var gptResponse = getGPTResponse(systemPrompt, userPrompt);  
  
    console.log("gptResponse : \n"+gptResponses);  
}
```

When I try to run the script I get this error:

```
ReferenceError: gptResponses is not defined  
    at main (Code:8:34)  
    at Object.<anonymous> (adsapp_compiled:20173:54)
```

Can you fix this for me and explain how you fixed it?



Chat GPT fixes bugs in your code



PROMPT: Here's my Google Ads Script {insert code here}. When I try to run the script I get this error: {insert error message}. Can you fix this for me and explain how you fixed it?



Certainly! The error you're seeing is due to a typo in your code. Let's address the issue:

Problem:

In your script, you've declared a variable named `gptResponse`:

javascript

Copy code

```
var gptResponse = getGPTResponse(systemPrompt, userPrompt);
```

However, when you're trying to log the response, you've mistakenly referred to it as `gptResponses`:

javascript

Copy code

```
console.log("gptResponse : \n"+gptResponses);
```

The error message you received indicates that `gptResponses` is not defined, which is accurate because the correct variable name is `gptResponse` (without the "s" at the end).

Solution:

To fix the error, you should correct the variable name in the `console.log` statement to match the declared variable name. Here's the corrected code:

javascript

Copy code

```
function main() {  
  
    var systemPrompt = "You are a senior Google Ads consultant with excellent  
    var userPrompt = "Give me 3 tips to improve the CTR of my display ads.";  
  
    var gptResponse = getGPTResponse(systemPrompt, userPrompt);  
  
    console.log("gptResponse : \n" + gptResponse); // Fixed the variable name  
}
```

Explanation:

In programming, it's crucial that variable names are consistent throughout the code. A small typo, like adding or omitting a character, can lead to errors. In this case, the discrepancy between `gptResponse` and `gptResponses` caused the error. By ensuring that the variable name used in the `console.log` statement matches the declared variable name, the error is resolved.

Regenerate

Chat GPT creates scripts from scratch



Chat GPT creates scripts from scratch

SYSTEM PROMPT

You are an experienced Google Ads Script developer with excellent JavaScript skills.

It is your job to create Google Ads scripts using basic Javascript.

You explain your thinking and every part of the code and use comments to make the code readable.

Chat GPT creates scripts from scratch



Certainly! Google Ads Scripts allow advertisers to manage their Google Ads data more flexibly. Let's say, as an example, you'd like to pause keywords that have spent more than \$100 without generating a conversion.



Here's a script to do that:

javascript

Copy code

```
function main() {  
  // Get all keywords in your account.  
  var keywords = AdsApp.keywords()  
    .withCondition('Status = ENABLED')  
    .withCondition('Cost > 100')  
    .withCondition('Conversions = 0')  
    .get();  
  
  // Loop through each keyword.  
  while (keywords.hasNext()) {  
    var keyword = keywords.next();  
    keyword.pause(); // Pause the keyword  
  
    Logger.log('Keyword [' + keyword.getText() + '] with ID ' + keyword.getId());  
  }  
}
```



IT WORKS
ON MY MACHINE

Chat GPT creates scripts from scratch

Let's break down the code step by step:

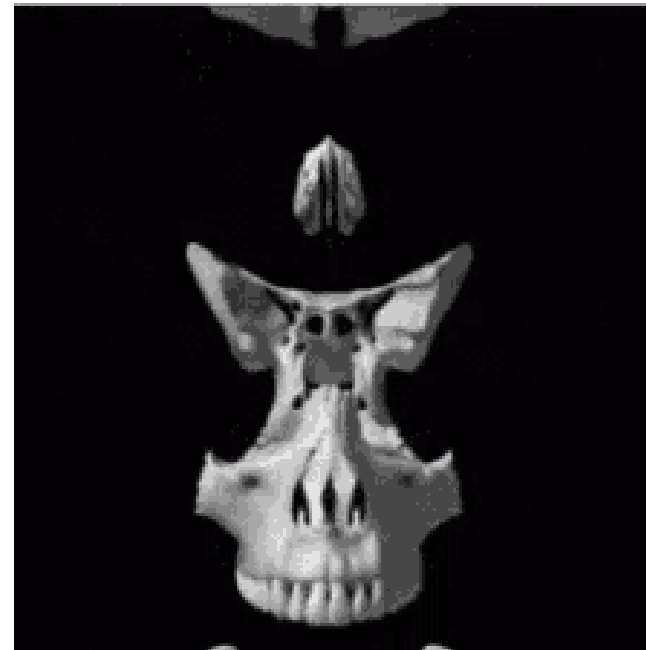
1. `function main() {}`: This is the main function that Google Ads Script will run.
2. Inside the main function:
 - a. We are fetching all the keywords with a few conditions:
 - i. `Status = ENABLED`: We want keywords that are currently active.
 - ii. `Cost > 100`: Keywords that have spent more than \$100.
 - iii. `Conversions = 0`: Keywords that have zero conversions.
 - b. `AdsApp.keywords()`: This fetches all keywords in your account.
 - c. `.withCondition()`: This is used to filter your keywords by the conditions provided.
 - d. `.get()`: This finalizes the query and gets the data.
1. Once we have all the keywords that meet these conditions, we loop through each of them with the `while (keywords.hasNext())` loop.
2. Inside the loop:
 - a. `var keyword = keywords.next();`: This fetches the next keyword in the list.
 - b. `keyword.pause();`: This method pauses the keyword.
 - c. `Logger.log();`: This logs a message to the script log which you can view to see which keywords were paused.

You'd add this script to your Google Ads account, and when run, it would look through your account for any keywords that have spent more than \$100 without a conversion, and then pause them.

Please make sure to test any script in a safe environment before deploying it in your live Google Ads account to prevent unintended changes.

🔄 Regenerate

**ah ok now I
understand now**



Chat GPT creates scripts from scratch

PROMPT

Now I need a script that warns me when 80% of my monthly budget has been spent.


Create a script that

1. allows me to easily set the monthly budget for the account and provide my email address

2. checks the total cost for this account during this month

3. send an email alert if the cost is >80% of my monthly budget

Chat GPT creates scripts from scratch

 Absolutely! I'll guide you through the creation of this Google Ads Script:

1. We'll define two variables at the start of the script: one for the monthly budget and another for your email address. This makes it easy to update them.
2. We'll get the current month's total spend from the account.
3. If the spend exceeds 80% of the monthly budget, the script will send an email alert.

Here's the script:

javascript

```
function main() {  
  // Define your monthly budget and email address here  
  var MONTHLY_BUDGET = 1000; // For example: 1000 for $1,000  
  var EMAIL_ADDRESS = 'youremail@example.com';  
  
  // Get the total cost for the account for this month  
  var today = new Date();  
  var firstDayOfMonth = new Date(today.getFullYear(), today.getMonth(), 1);  
  var lastDayOfMonth = new Date(today.getFullYear(), today.getMonth() + 1, 0);  
  
  var stats = AdsApp.currentAccount().getStatsFor(firstDayOfMonth, lastDayOf  
  var totalCost = stats.getCost();  
  
  // Check if cost is >80% of the monthly budget
```

Copy code

Regenerate

Script name: Chat GPT for Google Ads Scripts

Code.gs

GPT API.gs

```
1 function main() {  
2   // Define your monthly budget and email address here  
3   var MONTHLY_BUDGET = 1000; // For example: 1000 for $1,000  
4   var EMAIL_ADDRESS = 'youremail@example.com';  
5  
6   // Get the total cost for the account for this month  
7   var today = new Date();  
8   var firstDayOfMonth = new Date(today.getFullYear(), today.getMonth(), 1);  
9   var lastDayOfMonth = new Date(today.getFullYear(), today.getMonth() + 1, 0);  
10  
11   var stats = AdsApp.currentAccount().getStatsFor(firstDayOfMonth, lastDayOfMonth);  
12   var totalCost = stats.getCost();  
13  
14   Logger.log("totalCost: "+totalCost);  
15  
16   // Check if cost is >80% of the monthly budget  
17   if (totalCost > (0.8 * MONTHLY_BUDGET)) {  
18     // Send an email alert  
19     var subject = 'Google Ads Spend Alert!';  
20     var body = 'Your Google Ads account has spent more than 80% of its monthly budget. Total  
21     MailApp.sendEmail(EMAIL_ADDRESS, subject, body);  
22   }  
23 }
```


Changes

Logs

Done (0:10)

9/6/2023 2:06:06 PM

Ga: Invalid input: Fri Sep 01 2023 00:00:00 GMT-0700 (GMT-07:00)
Expected a string or an object with fields {
 year: an integer which is at least 1990 and at most 2037
 month: an integer which is at least 1 and at most 12
 day: an integer which is at least 1 and at most 31
}
at main (Code:11:39)



Chat GPT creates scripts from scratch

PROMPT

I got this error, please fix:

\\

```
Ga: Invalid input: Fri Sep 01 2023 00:00:00 GMT-0700
(GMT-07:00). Expected a string or an object with
fields { year: an integer which is at least 1990 and
at most 2037 month: an integer which is at least 1
and at most 12 day: an integer which is at least 1
and at most 31 } at main (Code:11:39
```

\\

Chat GPT creates scripts from scratch



I see the issue. The error is arising because the `getStatsFor()` method expects dates to be formatted in a certain way. It seems the format we're providing isn't compatible.

Let's modify the script to reformat the dates to make them compatible:

```
javascript Copy code

function main() {
  // Define your monthly budget and email address here
  var MONTHLY_BUDGET = 1000; // For example: 1000 for $1,000
  var EMAIL_ADDRESS = 'youremail@example.com';

  // Get the current month and year
  var today = new Date();
  var currentMonth = today.getMonth() + 1; // JavaScript months are 0-indexed
  var currentYear = today.getFullYear();

  // Get the total cost for the account for this month
  var firstDayOfMonth = {
    year: currentYear,
    month: currentMonth,
    day: 1
  };
}
```

Regenerate

Script name: Chat GPT for Google Ads Scripts

Code.gs

GPT API.gs

```
22   day: lastDayOfMonth.getDate()
23 };
24
25 var stats = AdsApp.currentAccount().getStatsFor(firstDayOfMonth, lastDate);
26 var totalCost = stats.getCost();
27
28 Logger.log("totalCost: "+totalCost);
29
30 // Check if cost is >80% of the monthly budget
31 if (totalCost > (0.8 * MONTHLY_BUDGET)) {
32   Logger.log("ALERT SENT");
33   // Send an email alert
34   var subject = 'Google Ads Spend Alert!';
35   var body = 'Your Google Ads account has spent more than 80% of its monthly budget.';
36   MailApp.sendEmail(EMAIL_ADDRESS, subject, body);
37 }
38 }
39
40
41
```

Changes

Logs

Done (0:08)

9/6/2023 2:14:58 PM totalCost: 15499.557945
9/6/2023 2:14:58 PM ALERT SENT



“Look Mom! I created a Google Ads script!!!”



LIVE DEMO / VIDEO RECORDING

Use Chat GPT to create scripts that use the GPT API

1. Ask Chat GPT if it understands the code to connect to the API
2. Ask Chat GPT for some ideas to use the API to improve Gads performance
3. Pick an idea
4. Instruct Chat GPT to create the script
5. Run script in account

Summary

Chat GPT is a tool that provided superpowers for PPC Pros that learn how to use it.

Chat GPT + Advanced Data Analyses amplifies these powers even further.

Google Ads Scripts can use the GPT API to automatically apply these superpowers to optimize your accounts

Chat GPT can teach you how to create Google Ads Scripts

Chat GPT can create these scripts for you!

You can do this too!



Resources

- PDF with prompts to recreate the ADA results
- PDF with prompts to have Chat GPT teach you the basics of JS
- Link to Javascript code to connect to GPT API
- Links to some of the scripts
- Link to signup page for workshop on ChatGPT + Scripts
- <https://nilsrooijmans.com/smx-advanced-2023>

