Google Search History Analysis

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A personal exploration of behavioral analysis using fictional Google search data.

This project uses a fictional dataset of 400 Google search queries over three months. It reflects a wide range of everyday interests from fitness, relationships, and mental health to food, technology, and career development. While the data is synthetic, it is designed to mimic real-life individual search behavior, providing a useful basis for behavioral and lifestyle analysis.

Goal: To explore what can be inferred about a person's personality and lifestyle through their Google search history.

Level 1 - Descriptive statistics:

1. **What time of day does this person search the most?**

I used pandas and found that the time this person usually searches is from 6am to 11pm. And 7pm is the time that they search the most (31 searches).

This person seems to have a regular routine. They don't go online late at night, or at least they don't search after 11pm. (though we can't be 100% sure, maybe they just watch YouTube or scroll social media after that). One thing that's pretty clear: they often wake up early - they've searched as early as 6 am. So if they really go to bed before 11pm and wake up at 6, they might be someone who lives on a steady schedule. Also, 7pm seems to be the time this person is most free during the day.

Number of Google Searches by Hour of Day
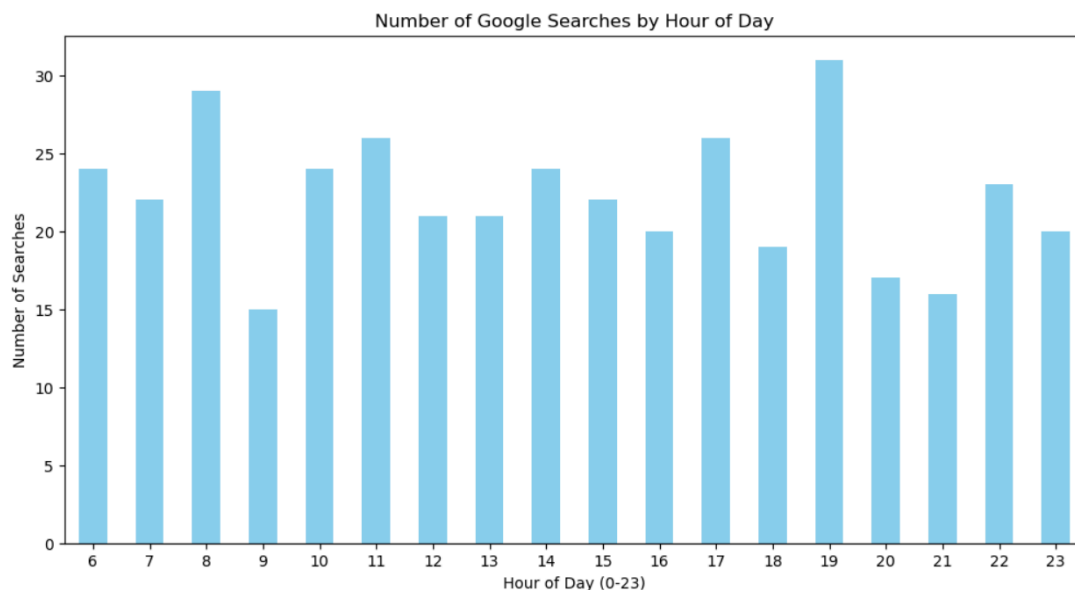
2. **What topics do they search for most often?**

I found the top three search categories:

- **Mental health**: 68 searches

- **Relationship**: 54 searches

- **Career**: 53 searches
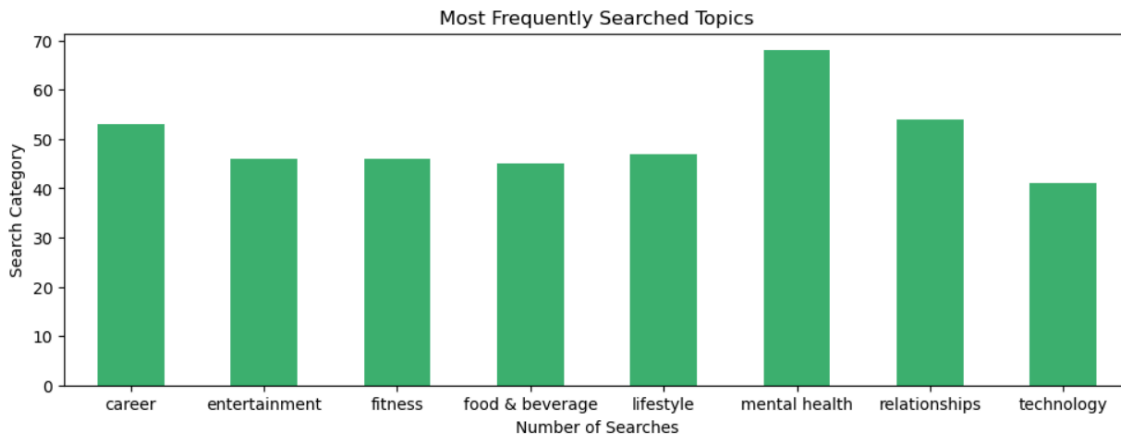
This pattern suggests the person may be experiencing stress or emotional challenges, possibly due to relationship difficulties or work-related issues. The high number of searches related to **mental health** indicates a possible effort to understand or cope with stress, anxiety, or burnout.

Without yet analyzing the specific queries, we can tentatively infer that this person may be considering a job change, struggling at work, or feeling unfulfilled with their current role.

They also search frequently about **technology** (41 searches), which could suggest interest in transitioning to or advancing within a tech-related field. Though that's just initial thought, the motivation isn't immediately clear as it's equally possible that they're simply **tech-curious**, not necessarily pursuing a career in tech.

3. **Do they tend to Google more on weekends or weekdays?**

The result shows:

- Weekend searches: 187 searches

- Weekday searches: 213 searches

Although it looks like they search more on weekdays than weekends, don't be fooled by that. Specifically, they search the most on Wednesday, but the 2nd, 3rd and 4th are Saturday, Friday and Sunday (only differing from Wednesday by about 2-6 searches).

Number of Google Searches by Day of the Week
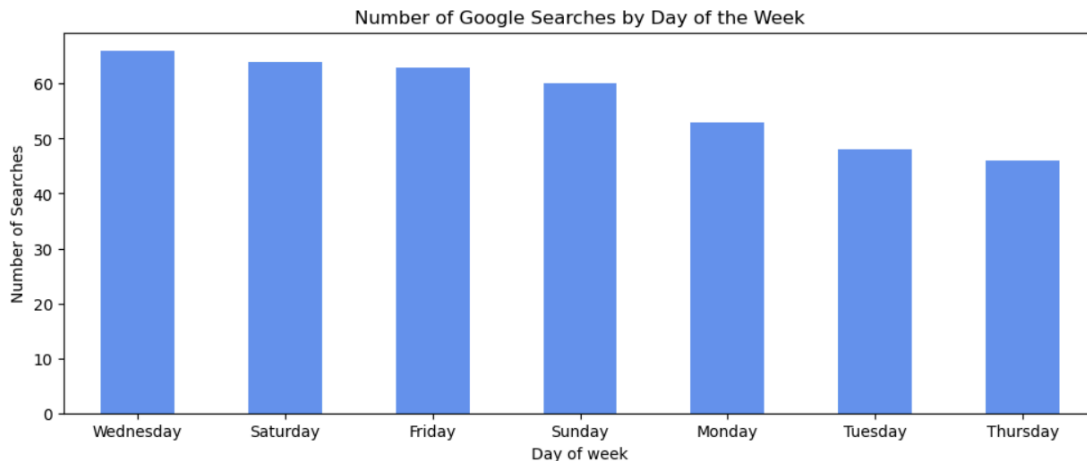
They appear to engage in active searching on both weekdays and weekends, which may indicate flexible schedules, frequent emotional or cognitive involvement, or personal interests that extend throughout the week.

4. **Are there any repeated keywords?**

The answer to this question can help us understand the prominent concerns or issues that haunt this person, because if they repeat a word/phrase over and over again, it is often a sign of deep concern or recurring stress.

I created bigrams for all of this person's search queries and filtered out the top 50 most popular phrases. The result shows that:

- "How to" appears 83 times!!! - this is the type of person who often searches Google to learn something or solve a specific problem. They seem to be self-motivated, self-taught, or in a period of major change (work, relationships, health...)

- Phrases like "symptoms of," "of anxiety," "anxiety vs," "vs stress," "online therapy," "therapy reviews," "meditation music," "for focus," "yoga for," and "back pain" show up in the top 50, which suggests the person is dealing with mental health and stress issues.

- Phrases like "best gifts," "gifts for," "for girlfriend," "girlfriend birthday," "how to apologize," and "apologize sincerely" show that this person is probably in a relationship (or just broke up) and wants to make things better or fix things up.

- Phrases like "write a resume," "resume 2025," "negotiate salary," "project management," and "vpn recommendation reddit" show up pretty often in this person's searches, which suggests they might be focused on career development, job hunting, and online privacy.

- Searches like "upcoming marvel," "marvel movies," "vpn," "minimalist home office," "cold brew," "vegan recipes," "breakfast," "netflix," and "reddit" show this person is into pop culture (especially Marvel), cares about online privacy, likes a simple stylish workspace, enjoys good food and drinks, and spends time on entertainment and online communities.

Level 2 - Behavioral Inference:

5. **What do they care about?**

Based on the most common search phrases, this person seems to be into five main things:

- **Mental Health & Stress:** They search a lot about anxiety, stress, therapy, meditation, and how to focus, so maybe they're dealing with some emotional stuff or just really care about feeling good.

- **Relationships:** Searching for gifts, apologies, and birthdays means they're probably in a relationship or figuring things out with someone special.

- **Career Stuff:** Looking up resumes, salary negotiation, and project management shows they want to move up in their career or maybe find a new job.

- **Lifestyle & Fitness:** Yoga, workouts, back pain, healthy recipes, and cold brew — they seem to care about staying healthy and living well.

- **Entertainment & Tech:** Marvel movies, setting up a nice home office, and VPNs suggest they like to balance work and fun, and are pretty into tech.

6. **Are they facing any problems?**

Yes, looking at their search patterns, it seems like this person is juggling a lot of stress, probably from mental health stuff, career worries, and relationship problems.

Mental Health: They keep searching things like "symptoms of anxiety," "anxiety vs stress," "meditation music for focus," and "online therapy reviews." That tells me they might be feeling emotionally overwhelmed or trying hard to manage their mental well-being.

Career Struggles or Change: Searches like "how to write a resume 2025," "is project management a good career," "remote jobs entry level," and "certifications for data analyst" suggest they're thinking about switching careers or unsure about their job path. Maybe they're jumping into tech or trying to level up, which usually comes with its own set of stress and doubts.

Relationship Trouble: Looking up "best gifts for girlfriend birthday" and then "how to apologize sincerely" shows there might be some tension with someone important in their life. The fact they Googled how to apologize sincerely means it's probably a serious issue, and that relationship matters a lot to them.

Level 3 – Personal Attributes:

7. **They might be male or female? Why?**

It sounds like this person is in or has recently gotten out of a romantic relationship with a woman.

The fact that they are constantly searching for "best gifts for girlfriends" seems to indicate that. But honestly, we can't be 100% sure of their gender just from that.
They could be male in a heterosexual relationship, or female in a same-sex relationship, or they could just be looking for a gift for a friend or sibling.
Other searches like "how to apologize sincerely" and "how to start a conversation on a first date" also sound romantic, but they don't tell us for sure who the searcher is.

So any guesses about their gender are highly
speculative.

8. **What is the likely age range?**

Phrases	Age Suggestion
"how to write a resume 2025"	Students, early career (18–25)
"certifications for data analyst"	People learning or switching jobs (~20–30)
"remote jobs entry level"	New workers or career changers (20–30)
"project management a good career"	Early to mid career (~25–35)
"best gifts for girlfriend"	Young people (teens–30s)
"marvel movies", "netflix shows"	Gen Z / Millennials (18–35)
"how to apologize sincerely"	Probably young, less social experience
"morning habits of successful people"	Young people working on self-growth (~20–35)
"vegan breakfast", "cold brew coffee"	Modern lifestyle, adventurous (Gen Z / Millennials)

> 💡 **Likely age range: 20–30**

They keep looking up stuff about entry-level jobs, writing resumes, certifications, and mental health, so maybe they're a student, just graduated, or starting out in their career.
They're also into personal growth, gift ideas for a girlfriend, and pop culture stuff like Marvel movies and Netflix shows, which fits well with someone from Gen Z or a young Millennial.

9. **What are their personalities like?**

Based on their searches, this person seems to be:

> "how to sleep better", "how to write a resume", "how to negotiate salary", "daily routine for productivity", "morning habits of successful people"

→ **Curious and self-driven:** They often look up self-improvement, productivity tips, and career advice, showing they really want to grow and get better.

> "symptoms of anxiety", "burnout", "therapy reviews", "meditation music"

→ **Emotionally sensitive and thoughtful:** Searching about mental health, meditation, and burnout means they're pretty aware of their feelings and deal with emotional ups and downs.

> "best gifts for girlfriend", "how to apologize sincerely", "first date conversation starters"

→ **Empathetic and relationship-focused:** Looking up how to apologize and gift ideas shows they care about their relationships and want to handle them well.

> "resume", "certifications for data analyst", "is project management a good career"

→ **Career-focused and practical:** They're checking out new career options and planning ahead, which tells us they're ambitious and thinking about their future.

10. **Interests/Lifestyles?**

Category	Example Searches	Lifestyle Insight
Entertainment	Marvel, Netflix, Taylor Swift	Culturally engaged, follows trends
Minimalism	Minimalist home office, clean setup	Appreciates simplicity and design
Wellness	Yoga, vegan food, cold brew, HIIT	Health-conscious and self-caring
Tech-savvy	VPN, AI tools, online therapy	Digital native, uses tech for personal growth

This person seems to have a pretty young and modern lifestyle. They watch Marvel, Netflix, probably enjoy pop culture stuff. They're into cold brew coffee that kind of trendy, chill vibe.

They also seem to like things that are clean and simple, they searched for "minimalist home office setup", which suggests they care about how their space looks. There's also "vegan breakfast recipes", so maybe they cook at home too, not just eat out. And with searches like "chest workout" and "HIIT workout", they probably go to the gym or at least care about staying active.

They seem kinda tech-savvy, they look up VPNs, AI tools, using Reddit to find recommendations. Feels like the kind of person who's comfortable living online, knows how to use tech to improve life.

11. **Can sexual orientation be predicted from the data?**

> 💡 **No**. There's nothing in the search data that clearly shows this person's sexual orientation.

Just because they searched something like "best gifts for girlfriend" doesn't mean much on its own, that could be anyone, in any kind of relationship.

Sexual orientation is super personal, and unless they searched something really specific or said it themselves, there's no real way to know for sure just based on this info.