Search the Web—Beyond Convention

4

INFORMATION IN THIS CHAPTER

- Search engines
- Unconventional search engines
- Unconventional search engine categories
- Examples and usage

INTRODUCTION

So in the second chapter we learned how to utilize advanced search of some of the social network platforms to get precise results, then in the third chapter we moved on to see how to better utilize our common browsers in uncommon ways and now this chapter is about search engines.

We all are familiar with search engines and use them for our day to day research. So as discussed in previous chapters, what search engines basically do is crawl through the web using web spiders and index the web pages based on a wide range of parameters, such as keywords, backlinks, etc. and based on this indexing we get our results for the keywords we supply. Some of the most popular search engines are Google, Yahoo, and Bing.

Different search engines use different methods to rate different links and based upon their algorithm, assign different websites and different ranks. When we search for a term(s), the search engines provide results based upon these ranks. These ranks keep on changing based upon various different factors and this is why we might get different results for same query on different dates.

So now it is safe to say that as an average user we are familiar with search engines and their usage. As stated earlier this chapter is about search engines; but not the conventional ones we use daily. The search engines we will be dealing with in this chapter are specialized, some of these perform their search operations in a different manner and some of them provide search facility for specific domain. But are they really required when we have search engines like Google which are very advanced and keep on updating with new features? The short answer is yes. Though search engines like Google are very good at what they do, they provide generic results in the form of website links which according to them are relevant for the query keywords, but sometimes we need specific answers related to specific domain, this is when we need specific types of search engines. Let's go ahead and get familiar with these and find out how useful they are.

META SEARCH

When we send a request to a regular search engine, it looks up into its own database for the relevant results and presents them, but what if we want to get results from multiple search engines. This is where meta search engines comes in. What meta search engines do is that they send the user's query to multiple data sources, such as search engines, databases, etc. at once and aggregates the results into a single interface. This makes the search results more comprehensive and relevant and also saves the time of searching multiple sources one at a time. Meta search engines do not create a database of their own, but rely on various other databases for collecting the results.

Polymeta (*http://www.polymeta.com/*)

Polymeta is a great meta search engine which sends the search query to a wide range of sources and then takes the top result from each one of them and further ranks them. The search results of Polymeta not only contain the URLs but also its social network likability through number of Facebook likes for that URL. We can further drill down into the results through the search within feature which allows us to search for keywords inside the already aggregated results.
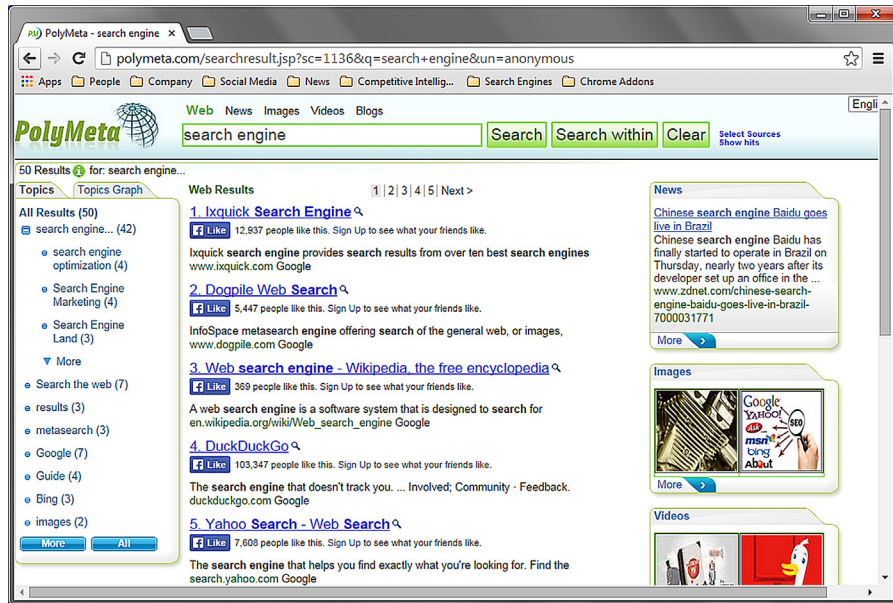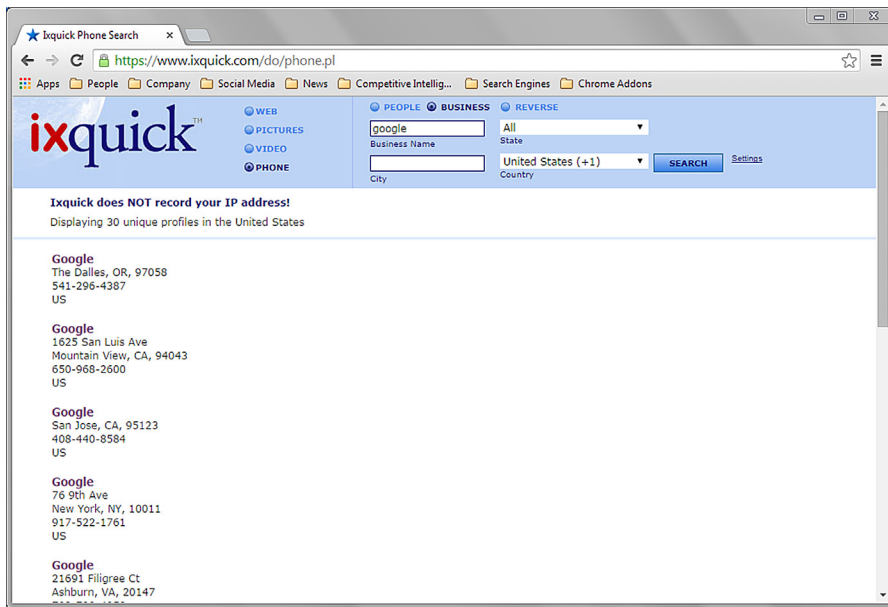

FIGURE 4.1

Meta search engine—Polymeta.

Polymeta categorizes the results into topics, which are displayed inside a panel on the left; results for news, images, videos, blogs are displayed in separate panels on the right. It also allows us to select the sources from a list for different categories.

Ixquick (*https://www.ixquick.com*)

Ixquick is another meta search engine and in its own words is "the world's most private search engine." Apart from its great capability to search and present results from various sources it also provides a feature to use Ixquick proxy to access the results. In the search results itself, below every result there is an option named as "proxy," clicking on which will take us to the result URL but through the proxy (https://ixquick-proxy.com), which allows us as a user to maintain our anonymity.

Apart from the regular web, images, and video search, Ixquick provides a unique search capability, i.e., phone search. We can not only search for the phone number of people but can also do a reverse phone search. It means that we need to provide the phone number and choose the country code and it will fetch the information of the owner. Not only this, this phone search functionality also allows us to search for phone numbers of businesses, we simply need to provide the business name and location details. Ixquick also provides advanced search, which can be accessed by the following URL https://www.ixquick.com/eng/advanced-search.html.

FIGURE 4.2

Ixquick phone search.

Mamma (*http://mamma.com/*)

Mamma is yet another meta search engine. Similar to any meta search engine it also aggregates its results from various sources, but that is not all what makes it stand out. The clean and simple interface provided by Mamma makes it very easy to use even

for a first time user. The result page is clean and very elegant. We can access various categories such as news, images, video, etc. through simple tabs which are integrated into the interface itself once used. Clicking on the Local button allows us to get the region specific results.

The tabulation feature we discussed not only creates different tabs for categories but also for different queries which allows us to access results from previous search easily.
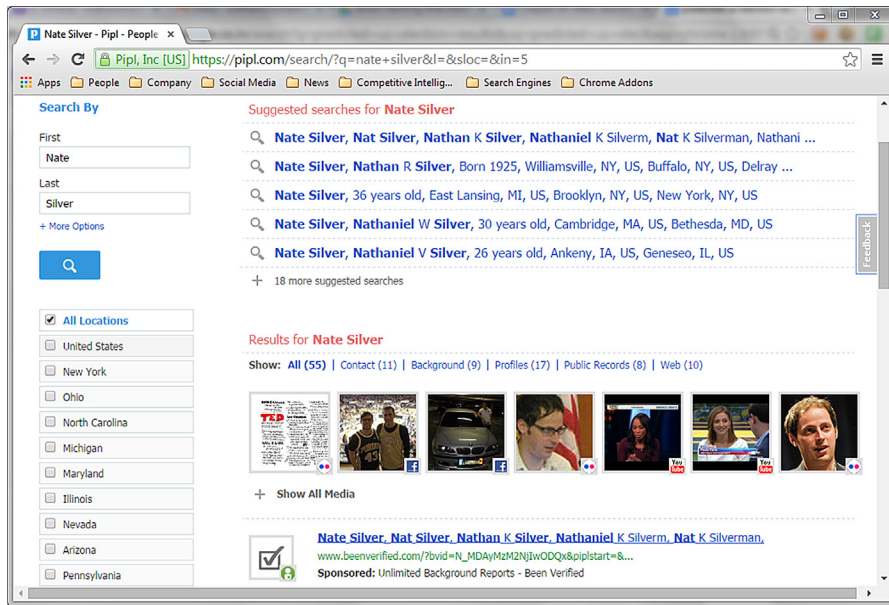
PEOPLE SEARCH

Now we have a fair understanding of how meta search works, let's move on to learn how to lookout for people online. There are many popular social media platforms like Facebook (facebook.com), LinkedIn (linkedin.com), etc. where we can find out a lot about people, here we will discuss about search engines which index results from platforms like these. In this section we will learn how to search for people online and find related information. The information we expect from this kind of engagements is full name, e-mail address, phone number, address, etc.; this all information can be used to extract further information. This kind of information is very relevant when we require information about person to perform a social engineering attack for an InfoSec project or need to understand the persona of a potential client.

Spokeo (*http://www.spokeo.com*)

When it comes to searching people, especially in the US no one comes close to this people search engine. Though most of the information provided by it is now paid as opposed to its previous versions, but speaking from past experience it is a great platform which provides a variety of information related to a person ranging from basic information such as name, e-mail, address to information like neighborhood, income, social profiles, and much more. It allows to search people by name, e-mail, phone, username, and even address. The price package of the information provided by it seems reasonable and is recommended for anyone who deals with digging information about people.

Pipl (*https://pipl.com/*)

Pipl is a great place to start looking for people. It allows us to search using name, e-mail, phone number, and even username. The search results can be further refined by providing a location. Unlike most search engines which crawl through the surface web only, Pipl digs the deep web to extract information for us (concept of deep web will be discussed in detail in a later chapter), this unique ability allows it to provide results which other search engines won't be able to. The results provided are pretty comprehensive and are also categorized into sections such as Background, Profiles, Public Records, etc. The results can be filtered based upon age also. All in all it is one of the few places which provide relevant people search results without much effort and hence must be tried.

FIGURE 4.3

Searching people using Pipl.

PeekYou (*http://www.peekyou.com/*)

PeekYou is yet another people search engine which not only allows to search using the usual keywords types such as name, e-mail, username, phone, etc. but also using terms of the type interests, city, work, and school. These unique types make it very useful when we are searching for alumni or coworkers or even people from past with whom we lived in the same city. The sources of information it uses are quite wide and hence the results and the best part is it's all free.

Yasni (*http://www.yasni.com/*)

Yasni is a tool for people who want to find people with specific skill sets. It not only allows us to search people by their name but also by the domain they specialize in or profession. The wide range of categories of results provided by Yasni makes it easy to find the person of interest. Some of the categories are images, telephone and address, interests, business profile, interests, documents, and much more. This platform provides a one stop shop for multiple requirements related to searching people online.

LittleSis (*http://littlesis.org/*)

LittleSis is exactly not a general people search, but is more focused on people at the top of the business and political food chain, so searching for common people here would be a waste of time. Although it is good at what it does and can reveal

interesting and useful information about business tycoons and political czars. Apart from the basic information such as introduction, DoB, sex, family, friends, education, etc., it also shows information like relationships, which lists down the positions and memberships that the person holds or ever held; interlocks, which lists people with position in the same organizations, etc. It is a good place to research about people with power and who they are associated with.

MarketVisual (*http://www.marketvisual.com/*)

MarketVisual is also a specialized search engine which allows us to search for professionals. We can search for professionals by their name, title, or company name. Once the search is complete it presents a list of entities with associated information such as number of relationships, title, and company. The best part about MarketVisual is the visualization it creates of the relationships of the entity once we click on it. These data can further be downloaded in various forms for later analysis. It is a great tool for market research.
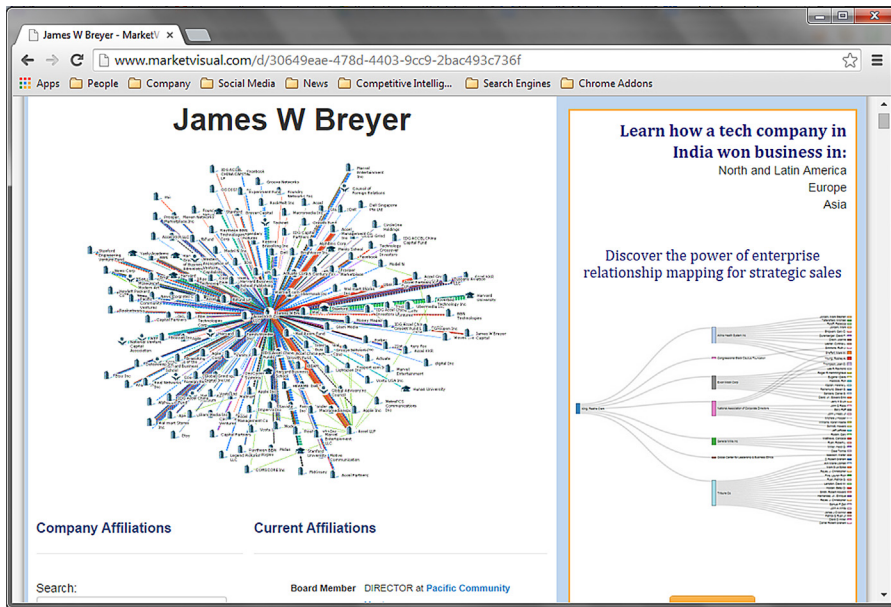
FIGURE 4.4

MarketVisual displaying connection graph.

TheyRule (*http://theyrule.net/*)

Similar to MarketVisual, TheyRule also provides the medium to search professionals across top global corporates. First look at the interface, it makes us doubt if there is actually any information, as there is a small list of links on the top left

corner, that too in smaller than average font size; but once we start to explore these links we can find an ocean of interesting information. Clicking on the companies link provides a huge list of companies, once we click on a company it will present a visual representation of it. Hovering over this icon provides option to show directors and research further. The directors are further represented through the visualization. If any director is on more than one boards, then hovering over his/her icon provides the option to show that as well. It also provides an option to find connections between two companies, Apart from this it also lists interesting maps created by other such as Too Big To Fail Banks and also lets us save ours.

BUSINESS/COMPANY SEARCH

Today almost every company has an online presence in the form of a website, one or more social media profile, etc. These mediums provide a great deal of information about the organization they belong to, but sometimes we need more. Be it researching a competitive business, potential client, potential partner, or simply the organization where we applied for an opening, there are platforms which can help us to understand them better. Let's learn about some of them.

LinkedIn (*https://www.linkedin.com/vsearch/c*)
LinkedIn is one of the most popular professional social media website. We have already discussed about LinkedIn search in a previous chapter, but when it comes to searching about companies we simply can't ignore it. Most of the tech savvy corporates do have LinkedIn profiles. These profiles list some interesting information which is usually not found on corporate websites, such as company size, their type, and specific industry. It also shows the number of employees of the company who have a profile on the platform. We can simply see the list of these employees and check their profiles, depending upon who/what we are looking for. Apart from this we can also see regular updates from the company on their profile page and understand what they are onto. It also allows us to follow companies using a registered account so that we can receive regular updates from them.

Glassdoor (*http://www.glassdoor.com/Reviews/index.htm*)
Glassdoor is a great platform for job seekers but it also provides a huge amount of relevant information on companies. Apart from the usual information such as company location, revenue, competitors, etc. we can also find information such as employee review, salary, current opportunities as well as interview experiences. The best part is that the information is provided not just by the organization itself but also its employees, hence it provides a much clear view of the internal structure and working. Similar to LinkedIn, Glassdoor also provides an option to follow company profiles to receive updates.
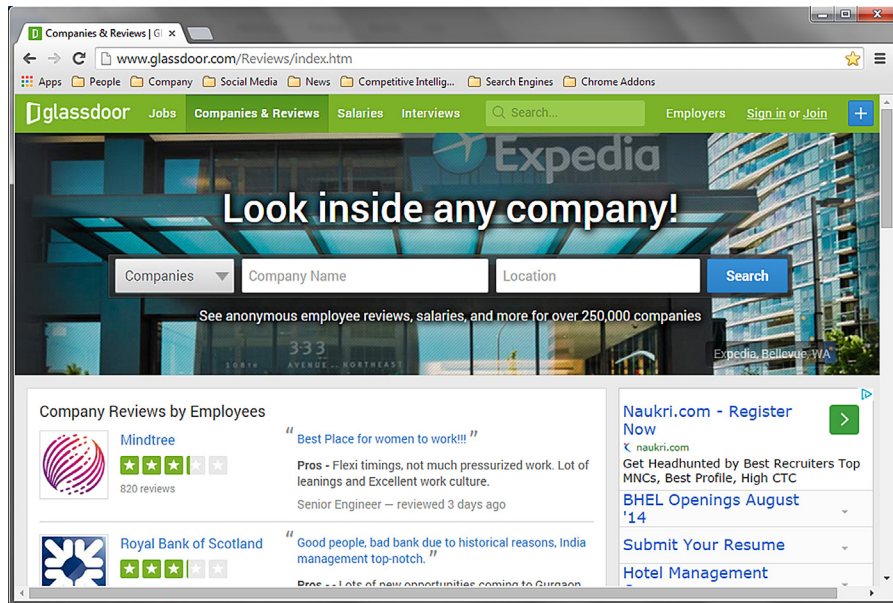
FIGURE 4.5

Glassdoor company search interface.

Zoominfo (http://www.zoominfo.com/)

Zoominfo is a business-to-business platform which is mainly used by sales and marketing representatives to find details about companies as well as people working in them, such as e-mail, phone number, address, relationships, etc. Though the free account has various limitations yet it's a great tool to find information about organizations and their employees.

REVERSE USERNAME/E-MAIL SEARCH

Now as we learned how to extract information related to people and companies, let's take this a step further and see what other information we can extract using the username of a person, which in most cases is the e-mail address of the person.
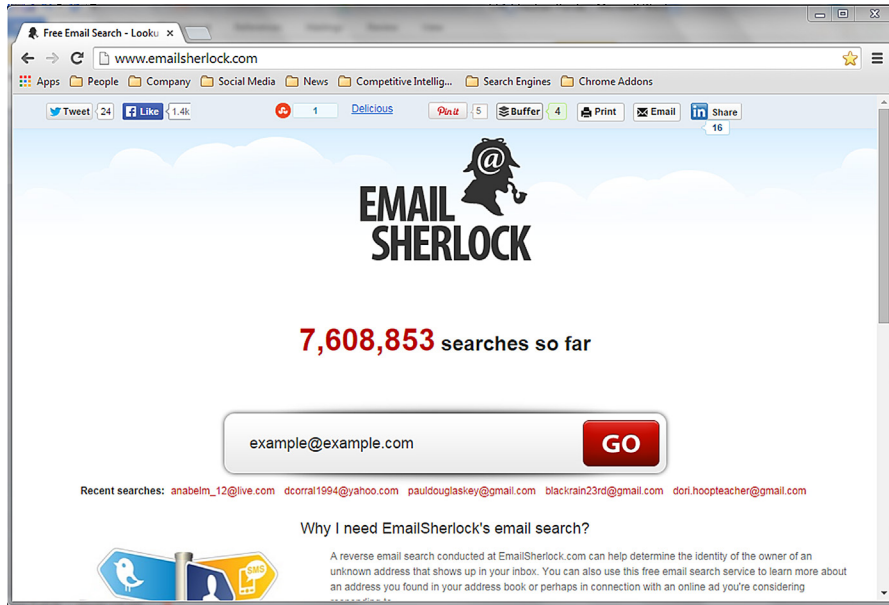
EmailSherlock (http://www.emailsherlock.com/)

EmailSherlock is a reverse e-mail search engine. What it does is that once we provide an e-mail address to it, it looks up if that e-mail has been used to register an account on a wide range of websites, mostly social media and gets us the results in form of any information it can extract from these platforms. This kind of information can be very helpful in case we just have the e-mail address of the person of interest. Once we know the platform on which this particular person is registered, we can go ahead and create an account on it and might be able to extract information which we were not allowed to access otherwise. Similar to EmailSherlock there is another service

called as UserSherlock (http://www.usersherlock.com/) which does the same thing for usernames.

Though the results provided by these services are not 100% accurate, yet they provide a good place to start.

FIGURE 4.6

EmailSherlock interface.

CheckUsernames (http://checkusernames.com/)
Similar to UserSherlock, CheckUsernames also runs the username provided to it through a huge list of social media websites and check if that username is available on them or not.

Namechk (http://namechk.com/)
Like CheckUsernames and UserSherlock, Namechk also checks the availability of the provided username on a huge list of social media sites.

KnowEm (http://knowem.com/)
The website discussed above (checkusernames.com) is powered by KnowEm and similarly it can be used to check for usernames, but it additionally checks for domain names as well as trademark.

Facebook (https://www.facebook.com/)
Unlike most of the social network sites, Facebook allows us to search people using e-mail addresses and being one of the largest social networks it can be very helpful when searching people online.

SEMANTIC SEARCH

In chapter 2, we discussed about semantic web and how it will be an integral part of the web of the future. Let's get familiar with some of the semantic search engines and see how mature they are.

DuckDuckGo (https://duckduckgo.com)

Though the name DuckDuckGo may sound a bit odd for a search engine but the search results provided by it are quite amazing. This new kid on the block is slowly challenging the search giant Google based on its unique selling proposition (USP), i.e., it does not track its users. The search results provided by it are very relevant minus the clutter. There are not many ads and sidebars to fill up the space. It provides meaning for the query which help the user to select the one of his/her intention and get the results accordingly. Similar to Google it also provides the answers to mathematical queries and even provides answers for queries like weather with the weather for our location. The definition tab simply provides the dictionary meaning of the keyword supplied. The bar under the query box is very relevant and provides the categories for topics. It is populated depending upon the search query, such as searching for a music band populates it with related videos, whereas searching for Thailand beaches will display images of the beaches, it also responds to queries like what rhymes with you with relevant results. The rapid growth and incredible features make it a real competition for major search engines like Google, Bing, and Yahoo and is slowly gaining the recognition it deserves. It is a must try for anyone who is enthusiastic about new ways of exploring the web.
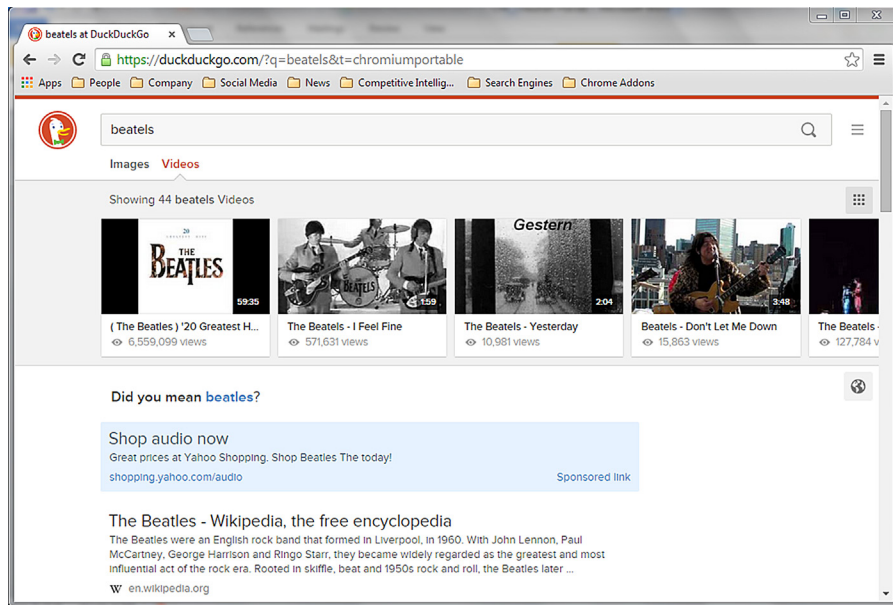
FIGURE 4.7

DuckDuckGo results.

Kngine (*http://kngine.com/*)

Kngine is a great search engine with semantic capabilities. Unlike conventional search engines it allows us to ask questions and tries to answer it. We can input queries like "who was the president of Russia between 1990 and 2010" and it presents us with a list containing the names, images, term years, and other details related to Russia. Similarly searching for "GDP of Italy" gives a great amount of relevant information in form of data and graphs minus the website links. So next time a questions pops up in our mind we can surely give it a try.

FIGURE 4.8

Kngine result for semantic query.

SOCIAL MEDIA SEARCH

Social media is a vast platform and its impact is also similar, be it on personal level or corporate level. Previously we discussed about social media and also how to search through some specific social network platforms, now let's check out some of the social media search engines and their capabilities.

SocialMention (*http://socialmention.com/*)

So what SocialMention provides is basically real-time social media search and analysis, but what does it mean. Let's break it up into two parts search and analysis. As for the search part, SocialMention searches various social media platforms like blogs, microblogs, social networks, events, etc. and even through the comments. The

results provided can be sorted by date and source and can be filtered for timelines like last hour, day, week, etc., apart from this, SocialMention also provides advanced search option, using which we can craft queries to get more precise results. Unlike conventional search engines, searching through social media specifically has a huge advantage, which is to be able to understand the reach and intensity of terms we are searching in the content created by people. Through this we can have a better understanding how people relate to these terms and upto what level.

Now let's move on to the analysis part, SocialMention not only provides the search results for our queries but also indicates the level of sentiments associated with it. It also displays the level of strength, passion, and reach of our query terms in the vast ocean of social media. Apart from this we can also see the top keywords, users, hashtags, and sources related to the query. One of the best features provided by this unique platform is that we can not only see this information, but also download it in the form of a CSV files. If all this was not sufficient, SocialMention also allows us to setup e-mail alerts for specific keywords. The kind of information this platform provides is not only helpful for personal use but can also have a huge impact for businesses as well; we can check how our brand is performing in the social arena and respond to it accordingly.
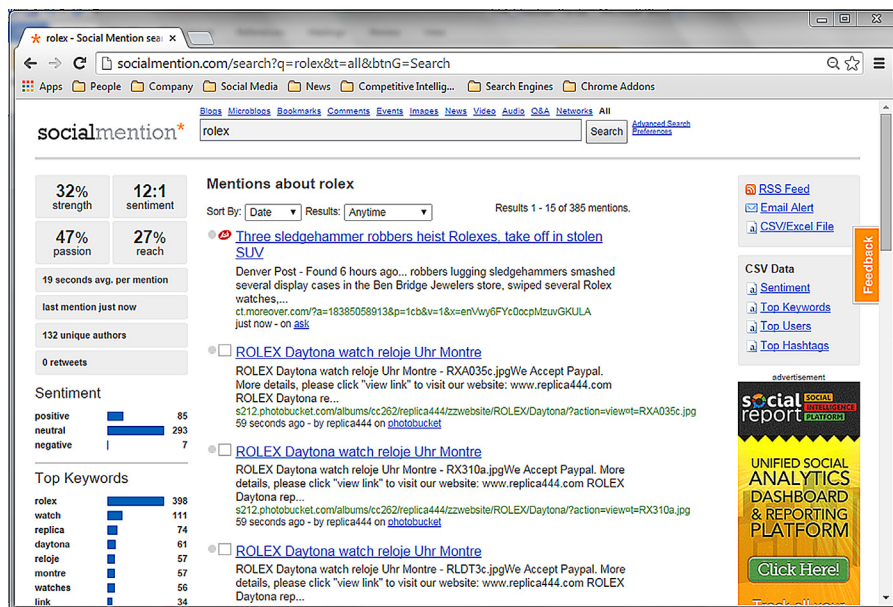
FIGURE 4.9

SocialMention displaying results and associated statistics.

Social Searcher (http://www.social-searcher.com/)

Social Searcher is yet another social media search engine. It uses Facebook, Twitter and Google+ as its sources. The interface provided by this search engine is simple. Under the search tab the search results are distributed into three tabs based on the source,

under these tabs the posts are listed with a preview, which is very helpful in identifying the ones relevant for us. Similar to SocialMention we can setup e-mail alerts also.

Under the analytics tab we can get the sentiment analysis, users, keywords, domains, and much more. One of the interesting of these is the popular tab which lists the results with more interaction such as likes, retweets, etc.

TWITTER

Twitter is one of the most popular social networking sites with huge impact. Apart from its usual functionality to microblog, it also allows to understand the reach and user base of any entity which makes it a powerful tool for reconnaissance. Today it is widely used for market promotion as well as analyze the social landscape.

Topsy (http://topsy.com/)

Topsy is a tool which allows us to search and monitor Twitter. Using it we can check out the trend of any keyword over Twitter and analyze its reach. The interface is pretty simple and looks like a conventional search engine, just the results are only based on Twitter. The results presented by it can be narrowed down to various timeframes such as 1 day, 30 days, etc. We can also filter out the results to only see the images, tweets, links, videos, or influencers. There is another filter which allows us to see only results containing results from specific languages. All in all Topsy is a great tool for market monitoring for specific keywords.
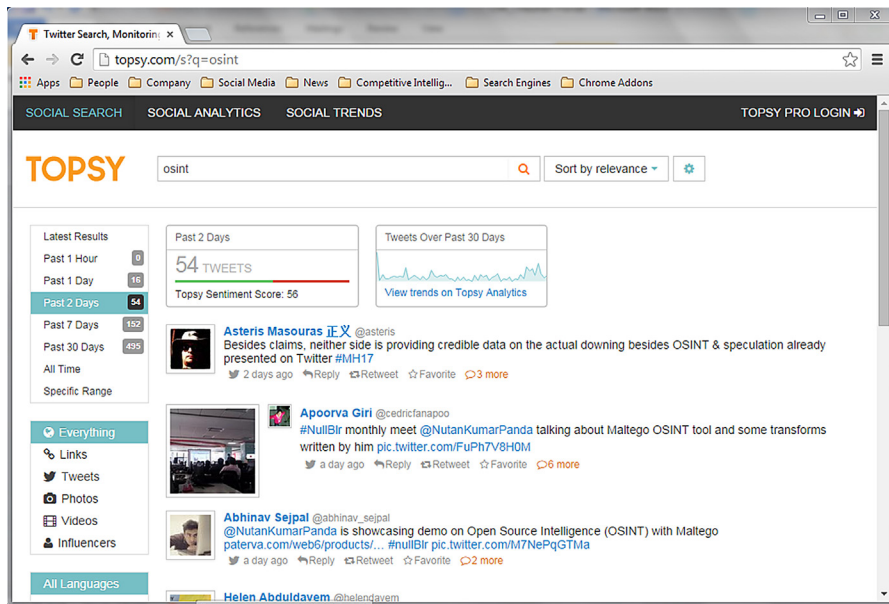

FIGURE 4.10

Topsy search.

Trendsmap (*http://trendsmap.com/*)

Trendsmap is a great visual platform which shows trending topics in the form of key-words, hashtags, and Twitter handles from the Twitter platform over the world map. It is great platform which utilizes visual representation of the trends to understand what's hot in a specific region of the world. Apart for showing this visual form of information it also allows us to search through this information in the form of a topic or a location which makes it easier for us to see only what we want.

Tweetbeep (*http://tweetbeep.com/*)

In its own words, Tweetbeep is like Google alerts for Twitter. It is a great service which allows us to monitor topics of interest on Twitter such as a brand name, product, or updates related to companies and even links. From market monitoring purpose it's a great tool which can help us to quickly respond to topics of interest.

Twiangulate (*http://twiangulate.com/search*)

Twiangulate is a great tool which allows us to perform Twitter triangulations. Using it we can find who are the common people who are followers of and are followed by two different twitter users. Similarly it also provides the feature to compare the reach of two users. It is great tool to understand and compare the influence of different Twitter users.

SOURCE CODE SEARCH

Most of the search engines we have used only look for the text visible on the web page, but there are some search engines which index the source code present on the internet. These kind of search engines can be very helpful when we are looking for specific technology used over the internet, such as a content management system like WordPress. Utilities of such search engines are for search engine optimization, competitive analysis, keyword research for marketing and are only limited by the creativity of the user.

Due to the storage and scalability issues earlier there were no service providers in this domain, but with technological advancements some options are opening up now, let checkout some of these.

NerdyData (*http://nerdydata.com*)

NerdyData is one of the first of its kind and unique search engine which allows us to search the code of the web page. Using the platform is pretty simple, go to the URL https://search.nerdydata.com/, enter the keyword like WordPress 3.7 and NerdyData will list down the websites which contain that keyword in their source code. The results not only provide the URL of the website but also shows the section of the code with the keyword highlighted under the section Source Code Snippet. Apart from this there are various features such as contact author, fetch backlink, and others which can be very helpful but most of these are paid, yet the limited free usage of NerdyData is very useful and is worth a try.
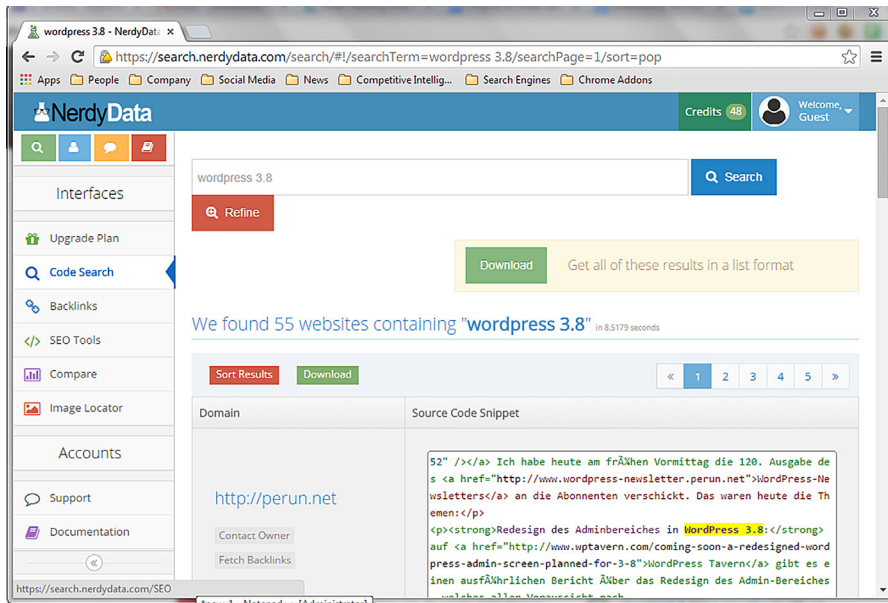
FIGURE 4.11

NerdyData code search results.

Ohloh code (*https://code.ohloh.net*)
Ohloh code is another great search engine for source code searching, but it's a bit different in terms that it searches for open source code. What this means is that its source of information is the code residing in open space, such as Git repositories.

It provides great options to filter out the results based on definitions, languages (programming), extensions, etc. through a bar on the left-hand side titled "Filter Code Results."

Searchcode (*https://searchcode.com*)
Similar to Ohloh, Searchcode also uses open source code repositories as its information source. The search filters provided by Searchcode are very helpful, some of them are repository, source, and language.

TECHNOLOGY INFORMATION
In this special section of search engines we will be working on some unique search engines which will help us to gather information related to various different technologies and much more. In this segment we will be heavily dealing with IP addresses and related terms, so it is advised to go through the section "Defining the basic terms" in the first chapter.

Whois (*http://whois.net/*)

Whois is basically a service which allows us to get information about the registrant of an internet resource such as a domain name. Whois.net provides a platform using which we can perform a Whois search for a domain or IP address. A whois record usually consists of registrar info; date of registration and expiry; registrant info such as name, e-mail address, etc.

Robtex (*http://www.robtex.com*)

Robtex is great tool to find out information about internet resources such as IP address, Domain name, Autonomous System (AS) number, etc. The interface is pretty simple and straightforward. At the top left-hand corner is a search bar using which we can lookup information. Searching for a domain gives us related information like IP address, route, AS number, location, etc. Similarly other information is provided for IP addresses, route, etc.

W3dt (*https://w3dt.net/*)

W3dt is great online resource to find out networking related information. There are various section which we can explore using this single platform. The first section is domain name system (DNS) tools which allows us to perform various DNS-related queries such as DNS lookup, reverse DNS lookup, DNS server fingerprinting, etc. Second section provides tools related to network/internet such as port scan, traceroute, MX record retriever, etc. The next section is web/HTTP which consists of tools such as SSL certificate info, URL encode/decode, HTTP header retrieval, etc., then comes the database lookups section under which comes MAC address lookup, Whois lookup, etc., in the end there are some general and ping-related tools. All in all it is great set of tools which allows to perform a huge list of different useful functions under single interface.

Shodan (*http://www.shodanhq.com/*)

So far we have used various types of search engines which help us to explore the web in all different ways. What we haven't encountered till now is an internet search engine (remember the difference between web and internet explained in chapter 1) or simply said a computer search engine. Shodan is a computer search engine which scans the internet and grabs the service banner based on IP address and port. It allows us to search this information using IP addresses, country filters, and much more. Using it we can find out simple information such as websites using a specific type of web server such as Internet Information Services (IIS) or Apache and also information which can be quite sensitive such as IP cameras without authentication or SCADA systems over internet.

Though the free version without registration provides very limited information, which can be mitigated a bit using a registered account, yet it is sufficient enough to understand the power of this unique search engine. We can utilize the power of this tool through browser add-on or through its application programming interface also. Shodan has a very active development history and comes up with new features all the time, so we can expect much more from it in the future.
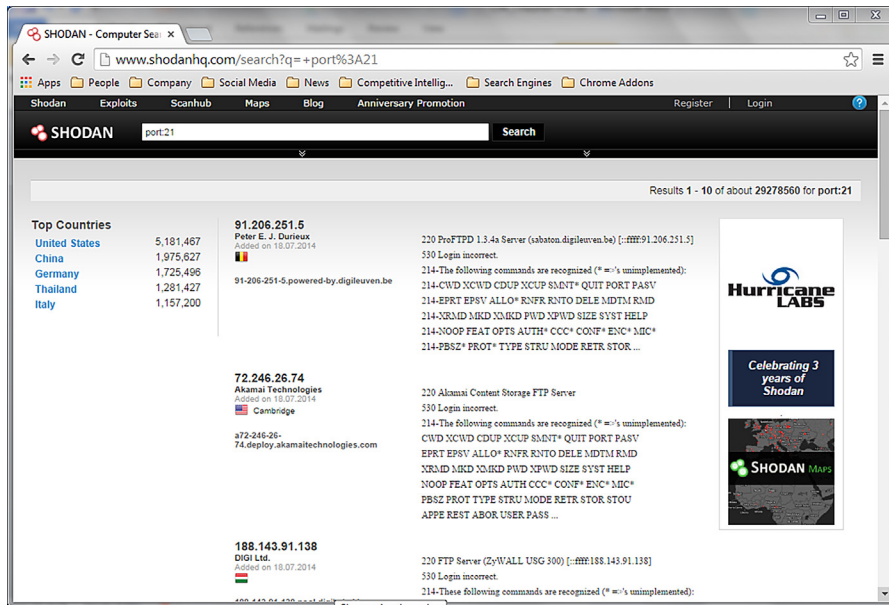
FIGURE 4.12

Shodan results for port 21.

WayBack Machine (http://archive.org/web/web.php)

Internet Archive WayBack Machine is great resource to lookup how a website looked in past. Simply type the website address into the search bar and it will return back a timeline with the available snapshot highlighted on the calendar. Simply hovering over these highlighted dates over calendar will present a link to the snapshot. This is great tool to analyze how a website has evolved and thus monitor its past growth. It can also be helpful to retrieve information from a website which was available in the past but is not now.

REVERSE IMAGE SEARCH

We all are familiar with the phrase "A picture is worth a thousand words" and its veracity and are also aware of platforms like Google Images (http://images.google.com), Flickr (https://www.flickr.com/), Deviantart (http://www.deviantart.com/), which provides us images for keywords provided. Usually when we need to lookup some information, we have a keyword or a set of them in the form of text, following the same lead the search engines we have dealt with till now take text as an input and get us the results, but in case we have an image and we want to see where it appears on the web, where do we go? This is where reverse image search engines come in, which take image as an input and looks up to find its web appearance. Let's get familiar with some of these.

Google Images (*http://images.google.com/*)

We all are aware that Google allows us to search the web for images, but what many of us are unaware of is that it also allows to perform a reverse image search. We simply need to go to the URL http://images.google.com and click on the camera icon and provide the URL of the image on the web or upload a locally stored image file, we can also drag and drop an image file into the search bar and voila Google comes up with links to the pages containing that or similar images on the web.
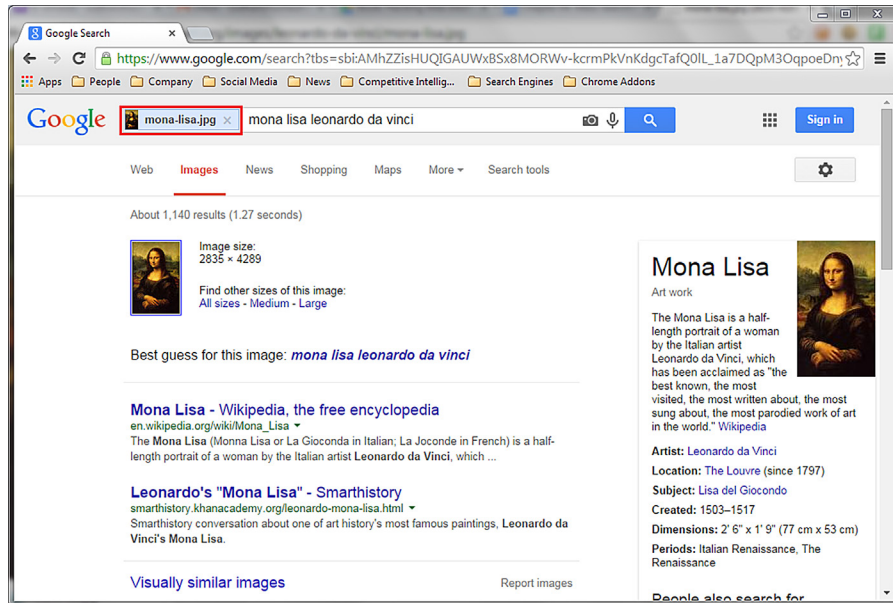
FIGURE 4.13

Google reverse image search.

TinEye (*https://www.tineye.com/*)

TinEye is another reverse image search engine and has a huge database of images. Similar to Google images, searching on TinEye is very simple, we can provide the URL to the image, upload it, or perform a drag and drop. TinEye also provides browser plugin for major browsers, which makes the task much easier. Though the results of TinEye are not as comprehensive as Google images, yet it provides a great platform for the task and must be tried.

ImageRaider (*http://www.ImageRaider.com/*)

Last but not the least in this list is ImageRaider. ImageRaider simply lists the results domain wise. If a domain contains more than one occurrence of the

image then it also tells that and the links to those images are listed under the domain name.

Reverse image search can be very helpful to find out more about someone when we are hitting dead-ends using conventional methods. As many people use same profile picture for various different platforms, making a reverse image search can lead us to other platforms where the use has created a profile and also has previously undiscovered information.

MISCELLANEOUS

We dealt with a huge list of search engines which are specialize in their domain and are popular among a community. In this section we will be dealing with some different types of search platforms which are lesser known but serve unique purposes and are very helpful in special cases.

DataMarket (*http://datamarket.com/*)

DataMarket is an open portal which consists of large data sets and provides the data in a great manner through visualizations. The simple search feature provides results for global topics with list of different visualizations related to the topic, for example, searching for the keyword gold would provide results such as gold statistics, import/export of gold, and much more. The results page consists of a bar on the left which provides a list of filters using which the listed results can be narrowed down. It also allows us to upload our own data and create visualization from it. Refer to the link http://datamarket.com/topic/list/ for a huge list of topics on which DataMarket provides information.

WolframAlpha (*http://www.wolframalpha.com/*)

In this chapter we learned about various search engines which take some value as input and provide us with the links which might contain the answer to the questions we are actually looking for, but what we are going to learn about now is not a search engine but a computational knowledge engine. What this means is that it takes our queries as input but does not provides with the URLs to the websites containing the information, instead it tries to understand our natural language queries and based upon an organized data set, provides a factual answer to them in form of text and sometimes apposite visualization also.

Say, for example, we want to know the purpose of .mil domain, so we can simply type in the query "what is the purpose of the .mil internet domain?" and get the results, to get the words starting with a and ending with e, a query like "words starting with a and ending with e" would give us the results, we can even check the net worth of Warren Buffett by a query like "Warren Buffett net worth." For more examples of the queries of various domains that WolframAlpha is able to answer, checkout the page http://www.wolframalpha.com/examples/.
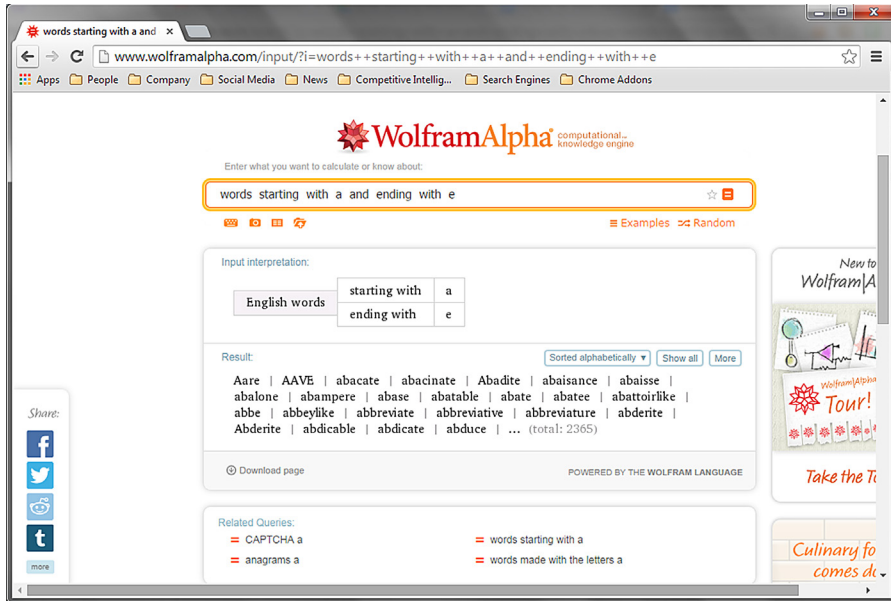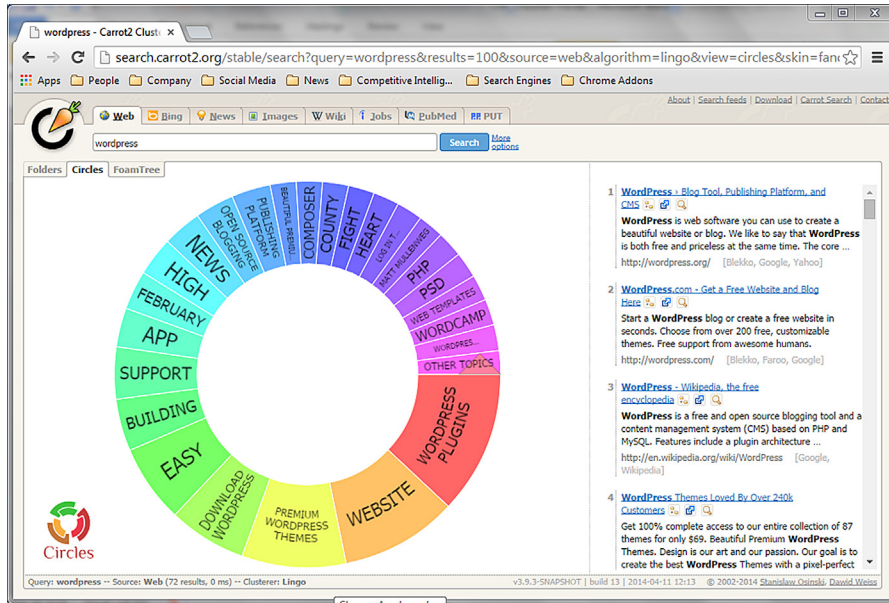
FIGURE 4.14

WolframAlpha result.

Addictomatic (http://addictomatic.com)

Usually we visit various different platforms to search information related to a topic, but addictomatic aggregate various news and media sources to create a single dashboard for any topic of our interest. The content aggregated is displayed in various sections depending upon the source. It also allows us to move these sections depending upon our preference for better readability.

Carrot2 (http://search.carrot2.org/stable/search)

Carrot2 is a search results clustering engine, what this means is that it takes search results from other search engines and organizes these results into topics using its search results clustering algorithms. Its unique capability to cluster the results into topics allows to get a better understanding of it and associated terms. These clusters are also represented in different interesting forms such as folders, circles, and FoamTree. Carrot2 can be used through its web interface which can be accessed using the URL http://search.carrot2.org/ and also through a software application which can be downloaded from http://project.carrot2.org/download.html.

FIGURE 4.15

Carrot2 search result cluster.

Boardreader (http://boardreader.com/)

Boards and forums are rich source of information as a lot of interaction and Q&A goes on in places like this. Members of such platforms range from newbies to experts in the domain to which the forum is related to. In places like this we can get answers to questions which are difficult to find elsewhere as they purely comprise of user-generated content, but how do we search them? Here is the answer Boardreader. It allows us to search forums to get results which contains content with human interaction. It also displays a trend graph of the search query keyword to show the amount of activity related to it. The advance search features provided by it such as sort by relevance, occurrence between specific dates, domain-specific search, etc. adds to its already incredible features.

Omgili (http://omgili.com/)

Similar to Boardreader, Omgili is also a forum and boards search engine. It displays the results in the form of broad bars and these bars contain information such as date, number of posts, author, etc. which can be helpful in estimating the relevance of the result. One such information is Thread Info, which provides further information about a thread such as forum name, number of authors, and replies to the thread, without actually visiting the original thread forum page. It also allows us to filter the results based upon the timeline of their occurrence such as past month, week, day, etc.

Truecaller (http://www.truecaller.com)

Almost everyone who uses or has ever used a smartphone is familiar with the concept of mobile applications, better known as apps and many if not most of them have used the famous app called Truecaller which helps to identify the person behind the phone number, what many of us are unaware of is that it can also be used through a web browser. Truecaller simply allows us to search using a phone number and provides the user's details using it's crowdsourced database.

Other search engines worth trying:
- Meta search engine
  - Search (http://www.search.com/)
- People search
  - ZabaSearch (http://www.zabasearch.com/)
- Company search
  - Hoovers (http://www.hoovers.com/)
  - Kompass (http://kompass.com/)
- Semantic
  - Sensebot (http://www.sensebot.net/)
- Social media search
  - Whostalkin (http://www.whostalkin.com/)
- Twitter search
  - Mentionmapp (http://mentionmapp.com/)
  - SocialCollider (http://socialcollider.net/)
  - GeoChirp (http://www.geochirp.com/)
  - Twitterfall (http://beta.twitterfall.com/)
- Source code search
  - Meanpath (https://meanpath.com)
- Technology search
  - Netcraft (http://www.netcraft.com/)
  - Serversniff (http://serversniff.net)
- Reverse image search
  - NerdyData image search (https://search.nerdydata.com/images)
- Miscellaneous
  - Freebase (http://www.freebase.com/)

So we discussed a huge list of various search engines under various categories which are not conventionally used but as we have already seen these are very useful in different scenarios. We all are addicted to Google for all our searching needs and it being one of the best in its domain has also served our purpose most of the time, but sometimes we need different and specific answers to our queries, then we need these kind of search engines. This list tries to cover most of the aspects of daily searching needs, yet surely there must be other platforms which need to be find out and used commonly to solve specific problems.

In this chapter we learned about various unconventional search engines, their features, and functionalities, but what about the conventional search engines like Google, Bing, Yahoo, etc. that we use on daily basis. Oh! we already know how to

use them or do we? The search engines we use on daily basis have various advanced features which many of the users are unaware of. These features allows users to filter out the results so that we can get more information and less noise. In the next chapter we will be dealing with conventional search engines and will learn how to use them effectively to perform better search and get specific results.