

## Google Rocks

Janice Honeyman-Buck

My bet is that everyone reading this column has used google.com to search the Internet and many use it as their exclusive search engine. But I wonder how many people have tried to use it as a tool to simplify their lives or to provide entertainment. Since I use several different computers in different locations, Google is the common thread that allows me to carry projects in progress wherever I go. I have noted recently that if I show other people how I use it, they are often amazed at the range of available tools. So a Google investigation is my first column for Tech Bits.

Google was the brainchild of two Stanford University graduate students in Computer Science, Larry Page and Sergey Bren. Their original idea was to produce a system that could organize information for rapid searching with minimal computer capability from the user's point of view. They did this with web servers which give us the interface we are familiar with using, index servers holding indexed keywords from World Wide Web sites and document servers holding the indexed documents. There are more than half a million of these servers located around the world. A Google-Bot is a web crawler that searches the web constantly, updating the Google web servers, index servers, and document servers. The name Google is a variation of the word googol which is a number 1 followed by 100 zeros.

Google is a profitable business, even though the searches are free for searchers. Google makes money through advertising. Google's AdWords sells targeted keywords to advertisers, and in turn, when that keyword is searched, the advertisers show up on the results screen as a sponsored listing. Every time someone clicks on the advertiser's link, Google gets paid, usually a few pennies—but that adds up fast. AdSense places a small advertisement on a non-Google website and if someone clicks on it, both Google and the website's owner get paid.

Google has now expanded and can search through images, videos, news, books, blogs, patents, and scholarly publications. They have created Gmail, a free e-mail site, and Google Chrome, a browser to compete with Internet

Explorer and Firefox. GOOG-411 is a tool that finds and connects with businesses from your phone for free. Google Health allows you to organize your medical records online and, as medical care becomes more complex, it is a good idea to keep your own medical records if you have the capability of doing so.

I use many of the tools Google has created, but my favorite Google tool by far is iGoogle. iGoogle allows me to create a home page with all my most-used tools in one place. I decided to open up my "window" for you and show you a screen grab of my iGoogle home page (Fig. 1). I customize the picture at the top whenever I get the urge to change the color or theme, but the meat of the page is the ability to put "stuff" on the page. To add content, from the default iGoogle page, click on "add stuff." As a warning, do this when you have a few hours to spend on this fun and entertaining project. iGoogle has literally hundreds of gadgets that can be added to a home page in categories like finance, sports, lifestyle, technology, politics, and fun and games. In fact, as I'm writing this, I'm finding more gadgets to add, so Figure 1 is no longer my current homepage.

As I search the web or am working on a project, I find websites I want to remember. Google Bookmarks is the perfect way to organize these. When I add a bookmark, I can see this on any computer I'm using, which is a big advantage over the standard browser bookmarks. Figure 2 shows some of the eclectic categories for my literally hundreds of bookmarks. Below my bookmarks, you'll see that I keep a dynamic link to the NY Times top stories. I usually see breaking news there before it shows up on the TV news. In the top-center of my home page, you'll see my RSS

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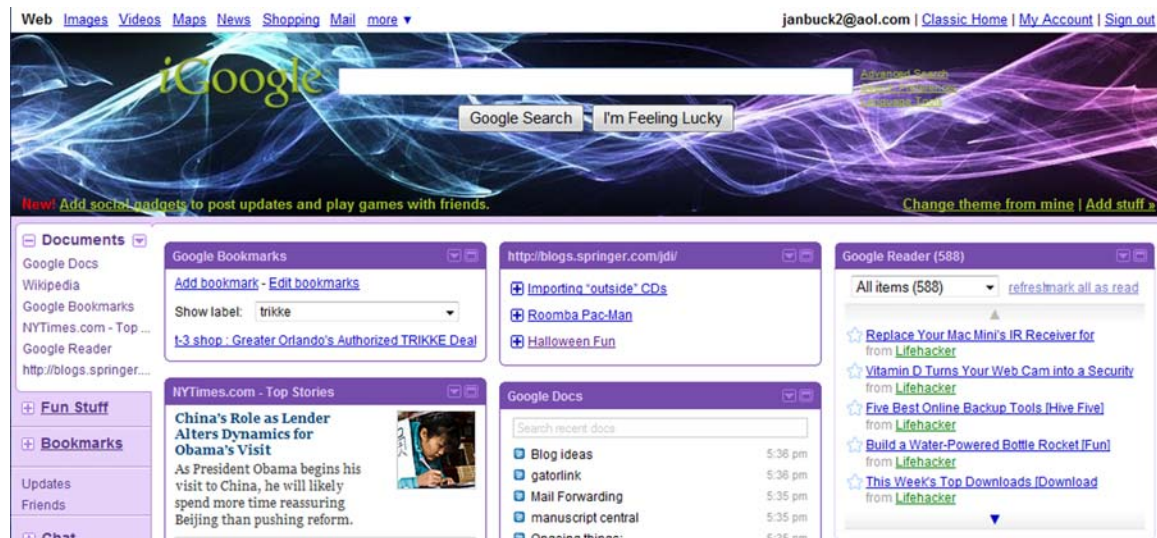


Fig 1. iGoogle homepage with gadgets to reflect the most-used applications.

feed from my JDI blog. I can add other RSS feeds to this page as I find blogs to read regularly. Below my RSS feed is the very best thing about iGoogle and Google tools. Google Docs (Fig. 3) allows me to upload images or documents created by Microsoft Word, Excel, and PowerPoint or to create documents using the Google Docs application. This is where I keep everything from quick notes to myself that I create while I'm working on something else or where I upload material to be used at a meeting or when I'm traveling. I keep these documents on my traveling laptop and on a thumb drive, but to be absolutely sure I have what I need, I also put them on Google Docs and can get to them from any computer by simply logging on to my iGoogle account. In addition to keeping documents for my own use, I can allow them to be shared with collaborators for viewing or editing. iGoogle has a to-do list, but I usually just make notes to myself and place them in short Google Docs. On the far right side of my home page is a Google reader gadget that allows me to subscribe to Atom or RSS feeds. My selected feeds include the very active Lifehacker site as well as News from Healthcare Informatics, Biportal Updates, and Gizmo's Best-ever Freeware. There are dozens of games, cartoons, and other entertainment gadgets that can be added to the desktop or additional desktops with different gadgets can be added, so games can be kept separate from the working or professional environment.

Here's a name to remember—Google Desktop. This little program indexes everything on my computer. So, if I remember there is a document out there and I don't remember how I named or filed it, I can enter words or phrases I think are in the document and Google Desktop finds it. I've

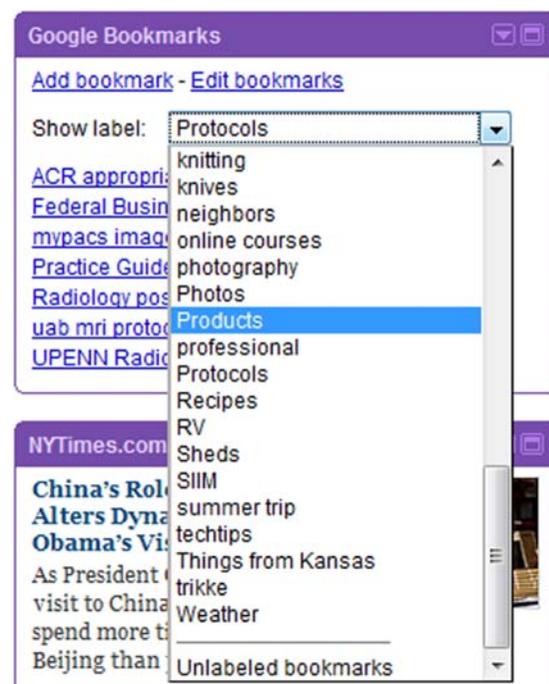


Fig 2. Google bookmarks with categories that can be found from any computer on the Internet after logging into iGoogle.

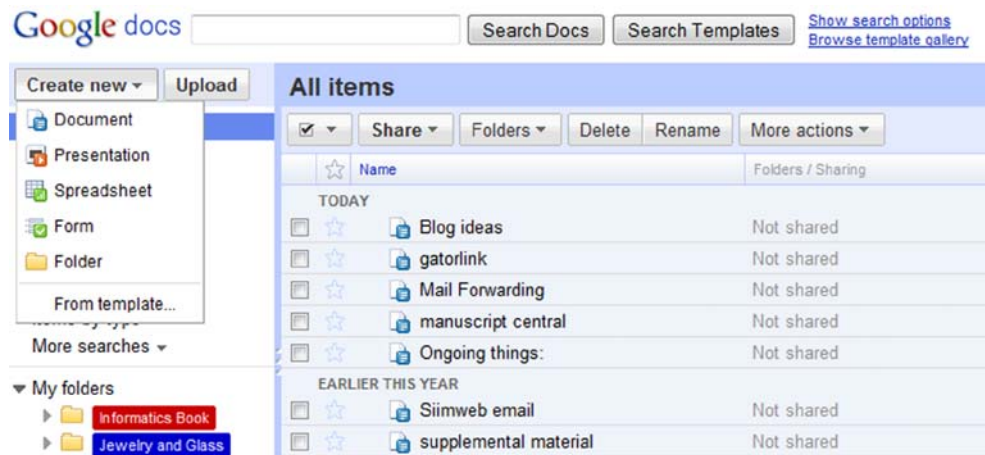


Fig 3. Google documents.

been working on some imaging protocols and their associated appropriateness criteria and found that, if I put in an indication, Google Desktop finds the protocol as in Figure 4. Furthermore, when I search for the same item on Google, it finds my desktop in addition to the references on the Internet.

New features can be found in Google labs (labs.google.com). Fastflip is a blazing fast overview of headline pages of newspapers and magazines. Fastflip told me this morning that a “BIG Google Chrome Extension push is imminent” and “Why Verizon's Droid Falls Short.” The Android Scripting Environment supports programming languages for the new Android phone. Similar Images performs content-based image retrieval in images found on the Internet. I tested this with brain MRI and found remarkably good results, but with a brain wrist, the results were very poor. That's why Similar Images is still in the lab. Picasa is a picture organizer and display for your computer and I use

it on all my computers. Picasa for Mac is available in Google labs.

Google is my go-to application. The ability to customize it to suit my work style makes it about the most valuable asset I've found on the Internet. Basically, Google Rocks!

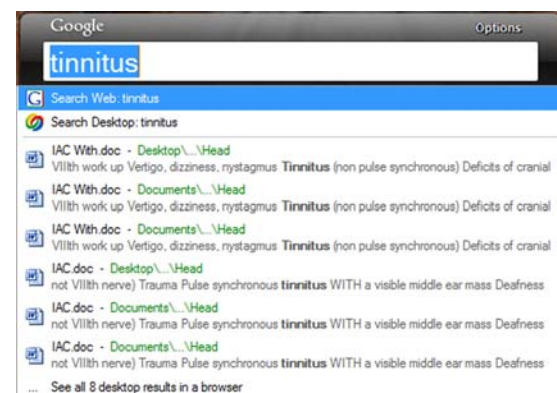


Fig 4. Google desktop search of local computer for keywords.