

openHPI: **Wie funktioniert eine Suchmaschine?**
Neue Aufgaben und Anwendungen

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Neue Aufgaben und Anwendungen Spezialsuchmaschinen

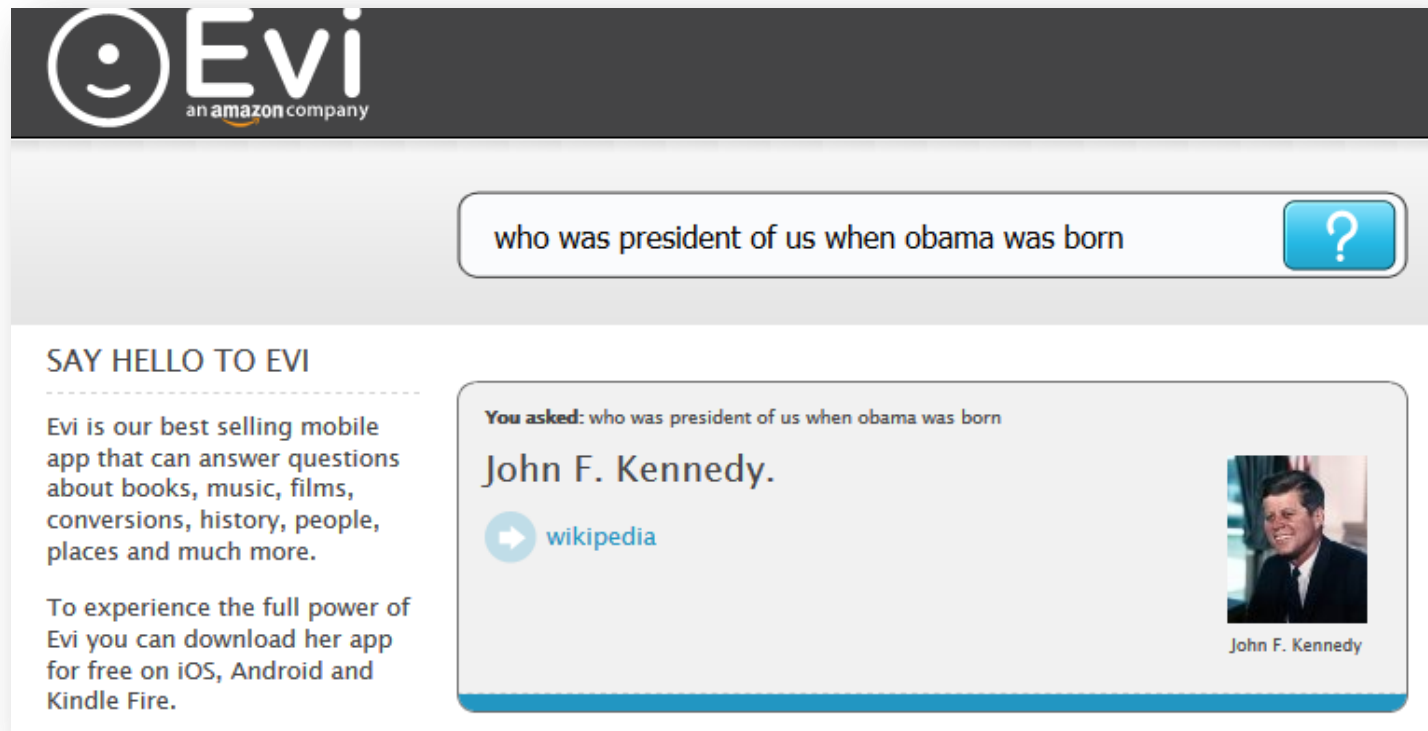
- Multimediasuche
 - Bildersuche
 - Videosuche
 - Audiosuche
- Nachrichtensuche
- Faktensuche
- Spezialliteratursuche
 - Wissenschaft
 - Patente
 - Chemie
 - Mathematik
 - Kunst
- Objektsuche
 - 3d Modelle

The screenshot shows the Musipedia website interface. At the top, there are navigation links for "Deutsch", "English", "Français", and "中文". Below this is the Musipedia logo and a search bar. The main navigation bar includes "KEYBOARD SEARCH", "CONTOUR SEARCH", "FLASH PIANO", "BY MICROPHONE", and "RHYTHM SEARCH". A secondary bar lists search methods: "WITH FLASH PIANO", "WITH JAVASCRIPT PIANO", "WITH MOUSE", "WITH MICROPHONE", "BY MELODIC CONTOUR", "BY RHYTHM", and "WITH SOAP". The search results section shows "Searched Musipedia for:" followed by a musical notation snippet. Below this, the search query is displayed: "c'4 d'4 e'4 f'4 g'4. g'4. a'8 a'8 a'8 a'8 g'4". There are buttons for "Edit Query", "New Search", and "Search the Web for this". A section for "Keywords/phrases" and "Importance" (Pitch, Rhythm) is also visible. At the bottom, there is a suggestion to search for the melodic contour of the query, with a link to "view details, edit, or delete this entry" and a "Buy MP3" button.

Neue Aufgaben und Anwendungen

Question Answering

- Semantische Suche
 - Inhaltliches „Verstehen“ der Frage notwendig



Neue Aufgaben und Anwendungen

Question Answering



population development in germany and france



Web Apps Examples Random

Input interpretation:

Germany

France

population

time series

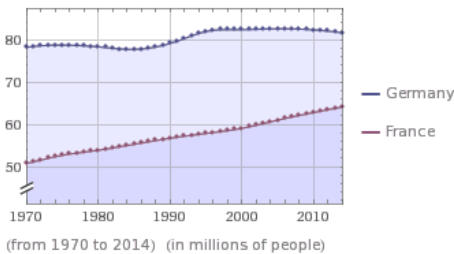
Open code

Results:

Germany	mean	65.37 million people
	lowest	15 million people (1700)
	highest	82.54 million people (2005)
France	mean	43.22 million people
	lowest	18.5 million people (1600)
	highest	64.1 million people (2014)

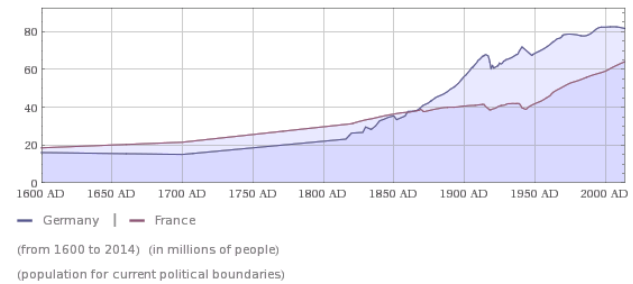
Recent population history:

Show projections Log scale

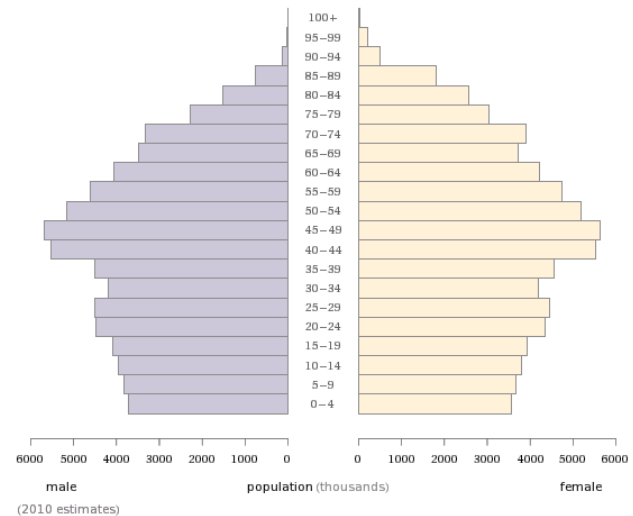


Long-term population history:

Show projections Log scale



Age distribution:



Sources Download page

POWERED BY THE WOLFRAM LANGUAGE

Related Queries:

- fertilizer consumption of Germany vs Fra...
- population of the world
- freshwater withdrawals for agriculture in ...
- percent of employment in agriculture Ger...
- Weimar Triangle

Neue Aufgaben und Anwendungen

Community-Based Question Answering

■ Gemeinschaftsbasiertes Beantworten von Fragen

The screenshot shows the Answers.com website interface. At the top, there's a search bar with the text "Ask us anything" and a "GO" button. To the right are "LOG IN" and "SIGN UP" buttons. Below the search bar is a navigation menu with categories: ENTERTAINMENT, TECH, LIFESTYLE, FOOD, HEALTH, POLITICS, MONEY, SPORTS, and ALL SECTIONS.

The main content area features a question: "How do you get a search engine to index other pages of your website and not just the homepage?". It is answered by "sandeep singh" with 5 confidence votes. The answer text is: "You need to submit the sitemap of your website to google webmaster tools so that google bot can crawl your site & index the pages on your website.. to submit a sitemap you need to create a sitemap first (their were many online tools available to generate sitemap)". Below the answer, it says "3 people found this useful". There are buttons for "Was this answer useful?" with options "YES", "SOMEWHAT", and "NO".

On the left side, there are two sidebar sections. The "Categories" section lists: Android OS, Bing, CSS Cascading Style Sheets, Computers, Google, and a "MORE" link. The "Home" section lists: New questions, Recent site activity, Random question, Promoted questions, Community forums, Advanced search, Top contributors, and Q&A categories. At the bottom left, there's a footer section with "© 2017 Answers" and links for About, Contact Us, Help Center, Careers, Terms of Use, Privacy Policy, Consumer Choice, IP Issues, Disclaimer, and Directory.

On the right side, there's a user profile for "Geoff Canyon" (Supervisor) with a bio: "WEB DESIGN AND PUBLISHING" and "3,697 CONTRIBUTIONS". Below this is a section "Categories you should follow" with "Relationships" and "Sports" categories, each with a "FOLLOW" button. At the bottom right, there's a section "Answer these" with a question: "In: ALGEBRA How do you solve systems by using the substitution method?" and an "ANSWER IT!" button.

- Einige komplizierte Anfragen können nicht einfach mit einer klassischen Suchmaschinen beantwortet werden
 - Zusammenführen von Informationen von verschiedenen Quellen
 - Menschliche Expertise
- Vorteile
 - Auch **komplexe** Fragen können beantwortet werden
 - Antworten kommen von **Menschen**, nicht Algorithmen
 - Durchsuchen von **Archiven**, ob Frage bereits beantwortet wurde
- Nachteile
 - **Dauert** eine Weile, bis Antwort kommt
 - Manche Fragen werden **nicht** beantwortet
 - Antworten können **falsch** sein

Neue Aufgaben und Anwendungen

Mobile Suche

- Wichtigster Unterschied zu traditionellen Websuchmaschinen
 - **Kontext** (insbesondere **Zeit** und **Ort**)



■ Weitere Faktoren

- Personalisierung
- Natürliche Sprache
- Kurze, genaue Antworten
- Soziale Netzwerke
- Reduzierte Benutzerschnittstelle
- Einfache Anfrageeingabe
 - Suche anhand eines Bildes/Photos
 - QR-Codes



The screenshot shows a Google search interface with the query 'female jaguar'. The search results include a main image of a female jaguar, a 'Best guess' label, and several text-based results from Reference.com and Wikipedia. Below these, there is a section for 'Visually similar images' showing a grid of 10 related images, and a section for 'Pages that include matching images' featuring a news article from the Daily Mail Online about a jaguar spotted near Tucson.

Google female jaguar

All **Images** Maps Shopping More Settings Tools

About 25,270,000 results (1.15 seconds)

Image size: 624 × 391
Find other sizes of this image: All sizes - Small - Medium - Large

Best guess for this image: **female jaguar**

What is a female jaguar called? | Reference.com
<https://www.reference.com › Pets & Animals › Mammals › Large Cats> ▼
The female jaguar is called a female jaguar. There is no name that defines her, unlike her lioness and tigress counterparts. Jaguars are the largest cats in the

Jaguar - Wikipedia
<https://en.wikipedia.org/wiki/Jaguar> ▼
The jaguar (*Panthera onca*) is a big cat, a feline in the *Panthera* genus, and is the only extant The last female jaguar in the United States was shot by a hunter in Arizona's White Mountains in 1963. Arizona outlawed jaguar hunting in 1969, ...

Visually similar images

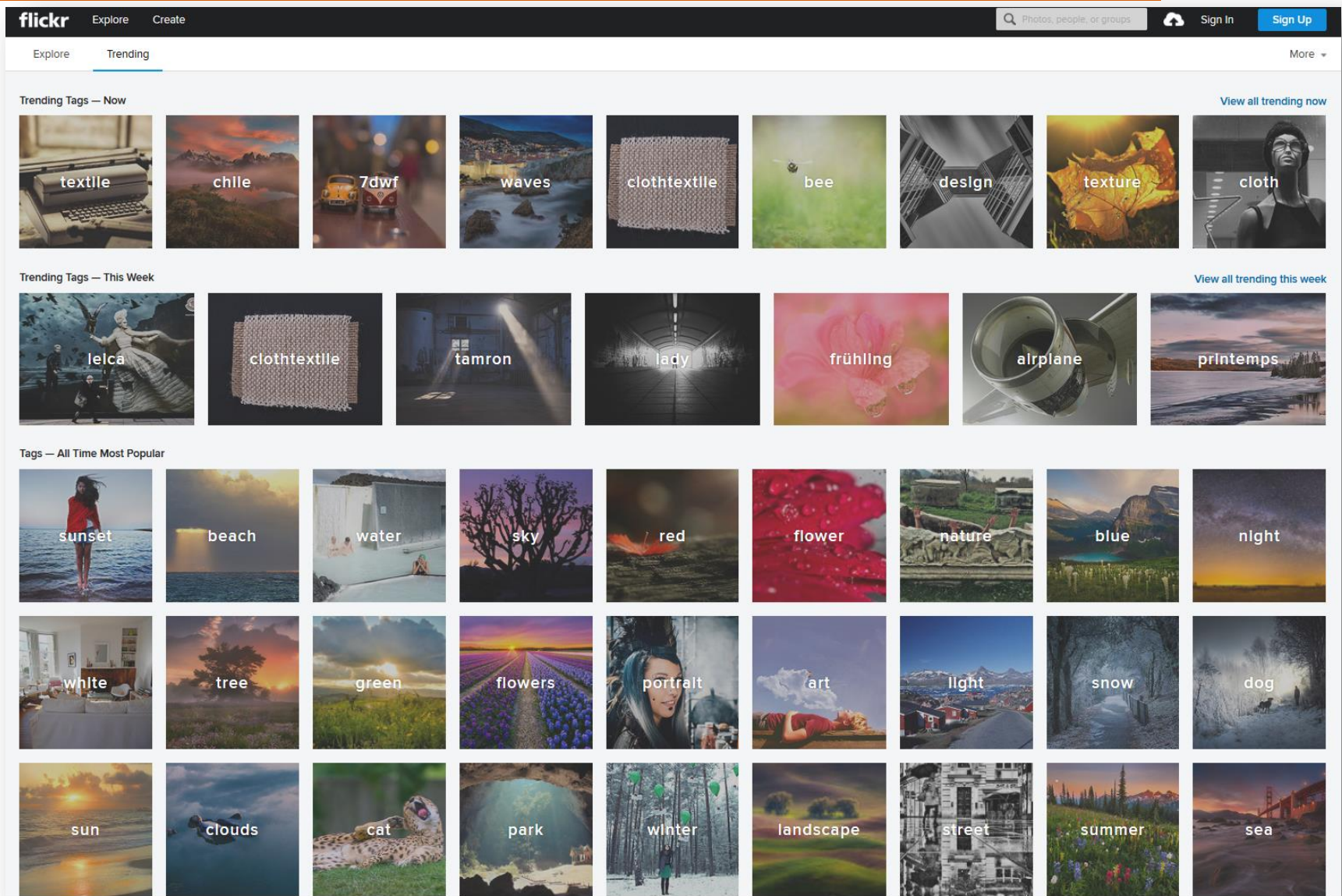
Report images

Pages that include matching images

Arizona army base spots Jaguar just south of Tucson | Daily Mail Online
www.dailymail.co.uk/.../America-SECOND-jaguar-Camera-Army-base-captu...
624 × 391 - Dec 8, 2016 - A jaguar was spotted 75 miles south-east of Tucson on a military base; A killed the last verified female jaguar in the U.S. in 1963 in northern ...

- Verschlagwortung
 - Ursprünglich aus dem Bibliothekskontext
 - Manuelles Indexieren zum Zwecke des Wiederfindens
 - Experten legen zu verwendende Schlagworte (Indexterme) fest
 - Terme haben eine sehr hohe Qualität
 - Terme kommen aus kontrollierten Vokabular
 - Jetzt im Kontext von Web 2.0 und Sozialen Medien
 - Schlagworte werden nicht nur zum Wiederfinden vergeben
 - Benutzer wählen Schlagworte frei aus
 - Tags können ungenau, unpassend und sogar falsch sein
 - Taggingssysteme definieren einen Folksonomy (Folk + Taxonomie)

Neue Aufgaben und Anwendungen Tagging



■ Klassische **Ad-hoc-Suche**

- Dokumentensammlung und das Informationsbedürfnis ändern sich mit der Zeit
- Ergebnisse werden nach Eingabe der Anfrage geliefert

■ **Filtern von Dokumenten**

- Dokumentensammlung ändert sich mit der Zeit, aber das **(langfristige) Informationsbedürfnis bleibt gleich**
 - Langfristiges Informationsbedürfnis wird als **Profil** gespeichert
 - Werden Dokumente der Sammlung hinzugefügt, welche auf das Profil passen, so werden diese dem Nutzer **empfohlen**

■ Profile können unterschiedliches beinhalten:

- Stichwortanfragen
- Menge von relevanten und nicht relevanten Dokumenten
- Relationale Beschränkungen („vor 1990“, „Preis < 30€“)

- Suche über **mehrere Knoten** (Server, Rechner) in einem Netzwerk

- Jeder Knoten enthält suchbare Daten

- **Metasuche:**

- Knoten: Suchmaschinen
- Daten: Indexe

- **Peer-to-Peer-Suche:**

- Knoten: Desktoprechner
- Daten: Indexe, Dateien, etc.

- Aufgaben

- Wie wird ein Knoten **repräsentiert**?
- **Welcher** Knoten sollte für welches Informationsbedürfnis angefragt werden?
- Wie kann man die Ergebnisse aller Knoten **kombinieren**?

