

July 16, 2019

The Honorable Ted Cruz, Chairman  
The Honorable Maxie Hirono, Ranking Member  
U.S. Senate Committee on the Judiciary  
Subcommittee on the Constitution  
Dirksen Senate Office Building 224  
Washington, DC 20510

Dear Chairman Cruz and Ranking Member Hirono:

We write to you regarding the “Google and Censorship through Search Engines” hearing.<sup>1</sup> The Electronic Privacy Information Center (“EPIC”) is a public interest research center established in 1994 to focus public attention on emerging privacy and civil liberties issues.<sup>2</sup> EPIC has promoted “Algorithmic Transparency” for many years.<sup>3</sup> This is a core principle in the field of data protection that helps ensure that automated decisions about individuals are fair, transparent, and accountable. Algorithmic transparency could also help establish fairness, transparency, and accountability for dominant Internet firms that determine much of what users see online without the need to limit speech or mandate the publication of competing views.

Free speech rights are curtailed when platforms use secret algorithms to automatically filter online content.<sup>4</sup> Without accountability and transparency for such techniques, the free exchange of ideas on the web would be severely obstructed by automated, extrajudicial filtering techniques. Algorithmic transparency is imperative to identify potential biases, and also to identify anticompetitive behavior that could favor the content of a platform over the content of a competitor. Transparency safeguards the cultural diversity of the Internet by upholding the exercise of free expression, and ensures an open web where ideas can be exchanged without the domination of one particular viewpoint favored by a firm, reflected in the algorithms it has deployed.<sup>5</sup>

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<sup>1</sup> *Google and Censorship through Search Engines*, 116th Cong. (2019), S. Comm. on the Judiciary, Subcomm. on the Constitution, <https://www.judiciary.senate.gov/meetings/google-and-censorship-through-search-engines> (Jul. 16, 2019).

<sup>2</sup> EPIC, *About EPIC*, <https://epic.org/epic/about.html>.

<sup>3</sup> EPIC, *Algorithmic Transparency*, <https://epic.org/algorithmic-transparency/>.

<sup>4</sup> See Comments of EPIC, *Developing UNESCO’s Internet Universality Indicators: Help UNESCO Assess and Improve the Internet*, United Nations Educational, Scientific and Cultural Organization (“UNESCO”) (Mar. 15, 2018), 5-6, [https://epic.org/internet-universality/EPIC\\_UNESCO\\_Internet\\_Universality\\_Comment%20\(3\).pdf](https://epic.org/internet-universality/EPIC_UNESCO_Internet_Universality_Comment%20(3).pdf).

<sup>5</sup> *Id.*

## The Right to Access Information

Algorithms that rank and index search results must be scrutinized for distorting web users' access to information with limited transparency and accountability. Virtually every search engine, social media company, and web operator develops its own unique algorithm to curate content for individual users to control how information is fetched and displayed from search queries.<sup>6</sup>

There are many dangers with these information-mediating techniques:

- Filtering algorithms can prevent individuals from using the Internet to exchange information on topics that may be controversial or unpopular;
- Content may be labelled and categorized according to a rating system designed by governments to enable censorship and block access to political opposition or specific keywords;
- ISPs may block access to content on entire domains or selectively filter out web content available at any domain or page which contains a specific keyword or character string in the URL;
- Self-rating schemes by private entities will turn the Internet into a homogenized medium dominated by commercial speakers;
- Self-rating schemes will embolden and encourage government regulation on access to information on the Internet; and
- The majority of users are unaware of how algorithmic filtering restricts their access to information and do not have an option to disable filters.

Several years ago, EPIC encountered the problem of opaque algorithms deployed by a dominant platform. At the time, EPIC, an organization whose mission is to educate the public about emerging privacy issues, provided several videos that were among the top-ranked search results on YouTube for a search on “privacy. At the time, YouTube’s search results were organized by the objective criteria of “hits” and “viewer rankings.” Both of these are objective criteria and easy to verify.

But after Google acquired YouTube, EPIC’s search rankings fell. Google had substituted its own subjective, “relevance” ranking in place of objective search criteria. Google’s ranking algorithm was opaque and proprietary. And significantly, Google’s subjective algorithm preferred Google’s video content on YouTube concerning “privacy” over that of EPIC and others. Suddenly, the Google videos rose in the rankings.

At the time, we prepared a detailed report for the FTC when it undertook its investigation of anti-competitive behavior of Internet companies.<sup>7</sup> EPIC’s 2011 letter to the FTC is attached here.

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<sup>6</sup> See, Jaap-Henk Hoepman, *Summary of the CPDP Panel on Algorithmic Transparency* (Jan. 26, 2017) (summarizing remarks of Marc Rotenberg, EPIC President), <https://blog.xot.nl/2017/01/26/summary-of-the-cpdp-panel-on-algorithmic-transparency/>.

<sup>7</sup> Letter from EPIC to Commissioners of the Federal Trade Commission (Sept. 8, 2011), [https://epic.org/privacy/ftc/google/Google\\_FTC\\_Ltr\\_09\\_08\\_11.pdf](https://epic.org/privacy/ftc/google/Google_FTC_Ltr_09_08_11.pdf).

The FTC took no action on EPIC’s complaint. But last year, after a seven year investigation, the European Commission found that Google had abused its dominance as a search engine by rigging its search results to give preference to its own shopping service.<sup>8</sup> The Commission required Google to change its algorithm to rank its own shopping comparison the same way it ranks its competitors.

Facebook’s recent release of its community guidelines is a good example of what transparency can look like.<sup>9</sup> It is a step in the right direction, but more must be done. For example, Twitter could make public its search algorithm to make clear that it is not preferencing accounts affiliated with certain views.

Universal Guidelines for Artificial Intelligence

EPIC recommends legislative solutions based on the Universal Guidelines for Artificial Intelligence (UGAI).<sup>10</sup> The UGAI “are intended to maximize the benefits of AI, to minimize the risk, and to ensure the protection of human rights.”<sup>11</sup> These principles can provide the framework for any successful legislative efforts. Broadly, the guidelines address the rights and obligations of AI systems to ensure 1) fairness, accountability, and transparency; 2) autonomy and human determination; 3) data accuracy and quality; 4) safety and security; and 5) minimization of scope. Congress should enact legislation, based on the Universal Guidelines for AI, to address concerns about bias and establish accountability for companies who collect personal data.

We ask that this Statement be entered in the hearing record. EPIC looks forward to working with the Subcommittee on these issues of vital importance to the American public.

Sincerely,

/s/ Marc Rotenberg  
Marc Rotenberg  
EPIC President

/s/ Caitriona Fitzgerald  
Caitriona Fitzgerald  
EPIC Policy Director

Attachment

Letter from EPIC to the Federal Trade Commission regarding Google and Search Results on YouTube (Sept. 8, 2011)

The Public Voice, *Universal Guidelines for Artificial Intelligence*.

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<sup>8</sup> Press Release, European Commission, *Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service* (June 27, 2017), [http://europa.eu/rapid/press-release\\_IP-17-1784\\_en.htm](http://europa.eu/rapid/press-release_IP-17-1784_en.htm).

<sup>9</sup> Facebook, *Publishing Our Internal Enforcement Guidelines and Expanding Our Appeals Process* (Apr. 24, 2018), <https://newsroom.fb.com/news/2018/04/comprehensive-community-standards/>.

<sup>10</sup> The Public Voice, *Universal Guidelines for Artificial Intelligence*, <https://thepublicvoice.org/AI-universal-guidelines>.

<sup>11</sup> A full list of endorsers is available at The Public Voice, *Universal Guidelines for Artificial Intelligence: Endorsement*, <https://thepublicvoice.org/AI-universal-guidelines/endorsement>.



September 8, 2011

Honorable Jon Leibowitz, Chairman  
 Honorable William E. Kovacic, Commissioner  
 Honorable J. Thomas Rosch, Commissioner  
 Honorable Edith Ramirez, Commissioner  
 Honorable Julie Brill, Commissioner  
 The Federal Commission  
 600 Pennsylvania Ave., N.W.  
 Washington, D.C. 20580

1718 Connecticut Ave NW  
 Suite 200  
 Washington DC 20009  
 USA  
 +1 202 483 1140 [tel]  
 +1 202 483 1248 [fax]  
 www.epic.org

Dear Mr. Chairman and Members of the Commission:

We understand that the Federal Trade Commission (FTC) is currently investigating Google for possible antitrust violations.<sup>1</sup> We also understand that the investigation is focusing on Google's search practices, and whether it preferences its own content in its search results.<sup>2</sup> We would like to bring a relevant matter to your attention -- Google's use of its dominance in the search engine market to discriminate against non-Google content concerning "privacy."

Specifically, the subjective, secretive ranking criteria that Google uses on YouTube, the video sharing site the company acquired in 2006, unfairly preferences Google's own material on "privacy" over non-Google material that would be ranked higher with the use of objective, transparent criteria. Following the acquisition, Google revised the YouTube search criteria such that Google's subjective "relevance" rankings became the default for returning search results. As a consequence, Google's own online videos on "privacy" are more likely to be ranked highly, and therefore viewed by Internet users, than if the original search criteria had remained as the default. Over time, it has also become increasingly difficult to organize search results on YouTube using objective criteria.

This problem came to our attention as a result of EPIC's (the "Electronic Privacy Information Center") efforts to promote access to online videos on privacy-related topics. Beginning in 2006, EPIC created a web page to make available privacy-related videos of interest to the general public.<sup>3</sup> The videos for the EPIC archive were gathered from news

<sup>1</sup> "Supporting Choice, Ensuring Economic Opportunity," Official Google Blog, June 24, 2011, *available at* <http://googleblog.blogspot.com/2011/06/supporting-choice-ensuring-economic.html>.

<sup>2</sup> See Miguel Helft, "Google Confirms FTC Antitrust Inquiry," The New York Times, June 24, 2011, *available at* <http://bits.blogs.nytimes.com/2011/06/24/google-confirms-f-t-c-antitrust-inquiry/>; Nina Gregory, "Is Google Playing Fair With Its Search Results?" National Public Radio, June 27, 2011, *available at* <http://www.npr.org/2011/06/27/137448879/ftc-searches-google-in-antitrust-investigation>.

<sup>3</sup> "EPIC Video Archive," *available at* [http://epic.org/privacy\\_video/](http://epic.org/privacy_video/).

sources, documentaries, TV programs, interviews with political leaders, and privacy experts. Initially, many of these videos were highly ranked on YouTube, which was often where we looked to find useful content.

For example, the first post on the EPIC Video Archive, a very disturbing cell phone recording of a student being tased has, as of today, 1,711,845 hits and 4,378 likes. Yet this video, prominently featured at the EPIC site, will not be found on YouTube using the current Google default ranking system and the search term “privacy.” However, Google’s own video content occupies positions #4, #5, #9 and #10 for a search today on YouTube with the search term “privacy.”<sup>4</sup>

As part of the FTC's investigation into Google for potential antitrust violations, we recommend that the Commission investigate the extent to which Google's rankings preference its own content and disfavor the content of others. Our concern is not primarily about anti-competitive market practices; it is about public access to information made available on the Internet.

## **Factual Background**

Google’s video service business practices impact large numbers of consumers, as YouTube is the third most popular site on the Internet,<sup>5</sup> with over 2 billion hits per day.<sup>6</sup> More than 13 million hours of video were uploaded to YouTube in 2010 and 35 hours of video are uploaded.<sup>7</sup> Even YouTube's mobile site gets over 100 million views a day.<sup>8</sup>

The specific reason to address this concern now in the context of the current review is the fact that Google now controls the search rankings on YouTube and therefore exercises enormous influence over the availability and popularity of videos made available over the Internet. On October 9, 2006, Google announced it had bought

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<sup>4</sup> We note that similar practices, *i.e.* the preferencing of the search provider’s content, may occur with other search services and other search companies. For example, using Google search and the search string “privacy” produced a ranking for the “Google Privacy Center” at #3 while using “Bing” finds “Microsoft Online Privacy Notice Highlights” at #2, a listing that does not appear on the first screen of Google search. Both companies appear to be favoring their own content over the content in the search rankings they provide. We believe that the Commission could also look more broadly at search rankings across the industry. But the focus of this letter is specifically on the impact that Google’s acquisition of YouTube had on the ranking of privacy-related video content on the Internet, and therefore on the public’s ability to get access to this information.

<sup>5</sup> Brad McCarty, "Alexa: YouTube Surpasses Yahoo! As the Internet's Third Most Visited Site," August 23, 2010, *available at* <http://thenextweb.com/socialmedia/2010/08/23/alexa-shows-youtube-claiming-3-most-popular-site-over-yahoo-are-browsing-habits-changing/>.

<sup>6</sup> Jeremy Scott, "25 jaw-dropping YouTube facts, figures, and statistics," May 2011, ReelSeo, *available at* <http://www.reelseo.com/youtube-statistics/>

<sup>7</sup> YouTube Statistics, *available at* [http://www.youtube.com/t/press\\_statistics](http://www.youtube.com/t/press_statistics).

<sup>8</sup> *Id.*

YouTube for \$1.65 billion dollars in stock.<sup>9</sup> With regard to the acquisition, Eric Schmidt, Google CEO, stated: "The YouTube team has built an exciting and powerful media platform that complements Google's mission to organize the world's information and make it universally accessible and useful. . . ."<sup>10</sup> At the time Google bought YouTube, it had been in operation for less than a year but already had 50 million users around the world.<sup>11</sup>

At the time Google acquired YouTube, YouTube's search results were organized by the objective criteria of "hits" and "viewer rankings." Both of these are objective criteria and easy to verify. "Hits," for example, is simply the number of times a particular video was viewed, at least in part, and an ordering by "hits" would place those videos that had been viewed a lot above those videos that had been viewed fewer times. "Viewer rankings" reflect the five-to-one user star rating that users assign to the videos. Searches ordered by "viewer rankings," for example, would place a video that received four stars on average above a video that received three stars on average.

It is also significant that either rating system could be easily verified by the user, *i.e.* the users could independently verify, by observing the hits and viewer rankings associated with each video entry, the accuracy of Google's search ordering.

After Google acquired YouTube, Google transformed the search defaults for YouTube and adopted the subjective criteria of "relevance," which uses Google's proprietary search algorithm. While the original rankings were still available to users who went back to restore the defaults, this "nudge" in the settings caused a profound change in the search ordering and therefore the availability of video on the Internet.

For example, in 2007, after the acquisition, a search on YouTube for "privacy" (automatically sorted by "relevance") returned Google content (a PR video that described particular Google business practices) as the top result.<sup>12</sup> See Appendix 1. This Google video only has a 3.5 star rating by users. However, when the search results are sorted instead by "rating," non-Google material (including a documentary video of freedom of speech, the right to privacy, and innocence from torture) is at the top of the list of results for a search for "privacy,"<sup>13</sup> and the top result has a five star ranking by users. See Appendix 2.

Google continues to preference its own content on YouTube . As of today, a search on YouTube for "privacy" (automatically sorted by "relevance") returns five

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<sup>9</sup> "Google to Acquire YouTube for \$1.65 Billion in Stock," Google, October 9, 2006, *available at* [http://www.google.com/press/pressrel/google\\_youtube.html](http://www.google.com/press/pressrel/google_youtube.html).

<sup>10</sup> *Id.*

<sup>11</sup> Andrew Ross Sorkin and Jeremy Peters, "Google to Acquire YouTube for 1.65 Billion," *The New York Times*, October 9, 2006, *available at* <http://www.nytimes.com/2006/10/09/business/09cnd-deal.html>.

<sup>12</sup> Marc Rotenberg, "The Case Against the Google Doubleclick Merger," Center for Internet and Society, Stanford Law School, November 19, 2007, *available at* <http://cyberlaw.stanford.edu/node/5565>.

<sup>13</sup> *Id.*

Google videos in the top ten results.<sup>14</sup> See Appendix 3. All of the videos are promotional videos developed by the company, describing its own services and business practices. When the search is sorted instead by "user rating," there is no Google content in the top ten search results.<sup>15</sup> See Appendix 4. Instead, the videos include film documentaries, news reports, and music videos. And when the search is sorted by "view count," there is only one Google video in the top ten search results.<sup>16</sup> See Appendix 5.

By way of further illustration, the top result in the "user rankings" search has 3,106 likes, 9 dislikes, and 108,546 views.<sup>17</sup> See Appendix 6. The first result in the "view count" search has 12,430,424 views, 7,715 likes, and 6,196 dislikes.<sup>18</sup> See Appendix 7. In contrast, the Google video ranked fourth on the default "relevance" search has 1,775,613 views, 546 likes, and 227 dislikes.<sup>19</sup> See Appendix 8.

Therefore, Google's subjective "relevance" algorithm ranks the Google produced video higher than the other two videos, even though the Google video has 1/7 the number of views of the top viewed video, 1/4 the number of likes, and 25 times as many dislikes as the top ranked video. The default rank ordering established by Google for YouTube clearly preferences Google's own content.

In order to sort search results by anything other than "relevance," the user has to choose from a drop down list, and can no longer see the other options listed at the top of the screen as they could in 2007. Google has also eliminated with the straightforward star rating system, replaced it with the number of likes and dislikes, making it easier still to manipulate search outcomes.

### **Google's Practice of Preferencing its Own Content on YouTube Constitutes an Unfair and Anticompetitive Practice**

The FTC has the authority to review antitrust issues under Section 5 of the Federal Trade Commission Act (FTCA), which proscribes, "unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce."<sup>20</sup> According to FTC Commissioner Kovacic, "[c]ourts have

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<sup>14</sup> YouTube, "Search Results for Privacy," July 11, 2011, *available at* [http://www.youtube.com/results?search\\_query=privacy&aq=f](http://www.youtube.com/results?search_query=privacy&aq=f).

<sup>15</sup> YouTube, "Search Results for Privacy," sorted by "user rating," July 11, 2011, *available at* [http://www.youtube.com/results?search\\_query=privacy&aq=f](http://www.youtube.com/results?search_query=privacy&aq=f).

<sup>16</sup> YouTube, "Search Results for Privacy," sorted by "view count," July 11, 2011, *available at* [http://www.youtube.com/results?search\\_query=privacy&aq=f](http://www.youtube.com/results?search_query=privacy&aq=f).

<sup>17</sup> YouTube, "Spieling Peter Pan Disneyland," viewed July 11, 2011, *available at* <http://www.youtube.com/watch?v=Y4vu4HNJi3I>.

<sup>18</sup> YouTube, "Woman Shows Face After Chimp Attack," viewed July 11, 2011, *available at* <http://www.youtube.com/watch?v=a3DeJjHAz8I>.

<sup>19</sup> YouTube, "Google Search Privacy: Plain and Simple," viewed July 11, 2011, *available at* <http://www.youtube.com/watch?v=kLgJYBRzUXY>.

<sup>20</sup> 15 U.S.C.A. § 45 (2010).

interpreted Section 5 as enabling the FTC to prosecute conduct that violate the letter of the antitrust statutes . . . and to proscribe behavior that contradicts their spirit."<sup>21</sup>

YouTube search results are organized using the subjective secret Google "relevance" algorithm by default. These search results preference Google content over non-Google content, even when this content has fewer views and lower ratings by objective standards. Other objective methods of organizing YouTube search results yield more results with non-Google content. It is not obvious to the user how to change the default subjective "relevance" setting to use the more objective criteria of "user rating" or "view count".

Therefore, Google has used its dominance in the search algorithm marketplace to preference its own content in search results. This business practice leads to Google's domination in the marketplace of content and ideas, as it gives Google the limitless ability to not only preference its own content but to disfavor the content of others, including groups or individuals that have differing views from Google on such topics as privacy.

### **Request for Investigation**

EPIC respectfully requests that the Commission, as part of its investigation into Google for potential antitrust violations, investigate the extent to which Google's rankings preference its own content over information that is more newsworthy, more significant, and in fact of greater interest to Internet users. Google's dominance of the search marketplace should not influence the marketplace of information and ideas to Google's advantage.

Sincerely,

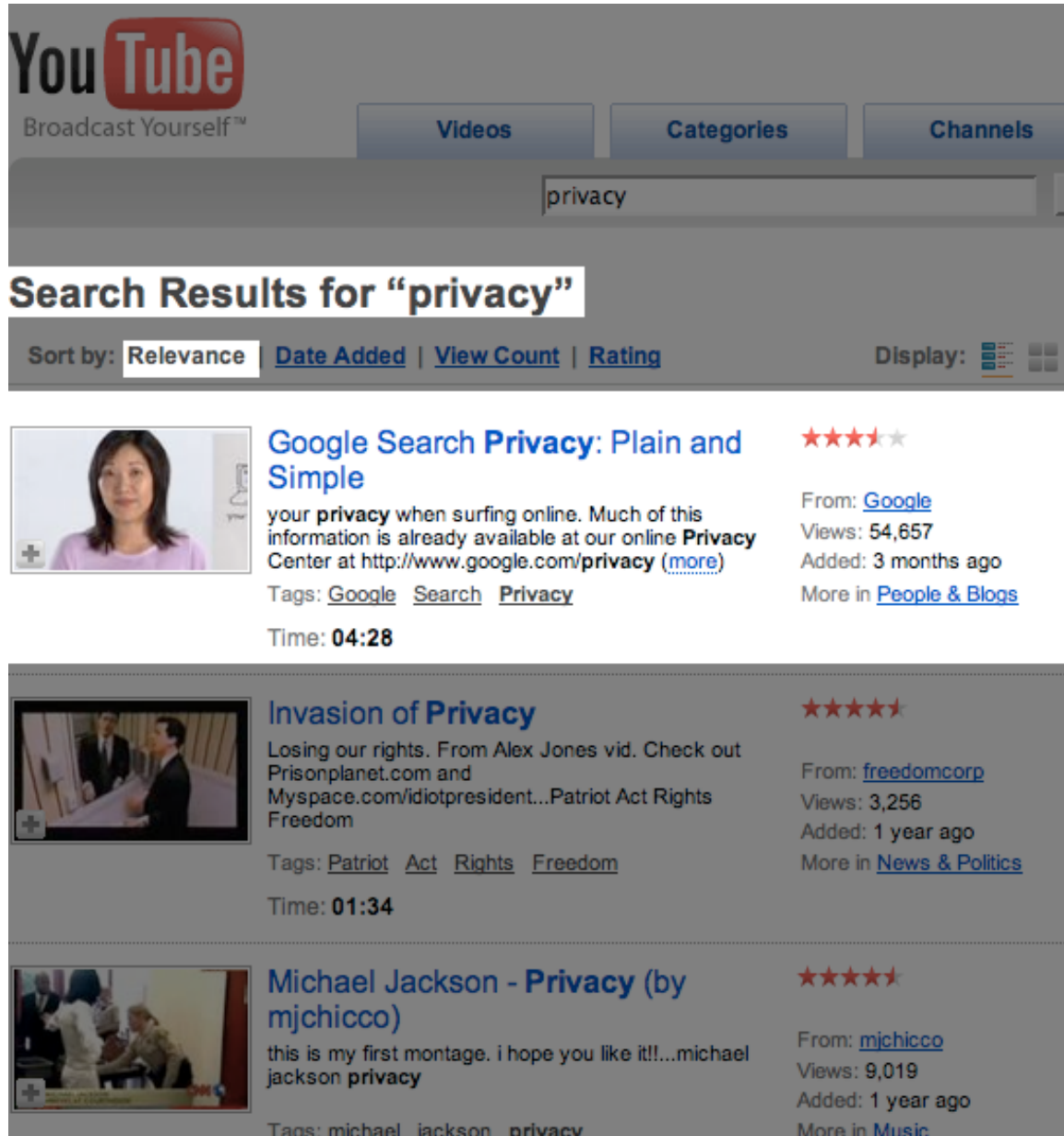
Marc Rotenberg, EPIC Executive Director  
Sharon Gott Nissim, EPIC Consumer Protection Counsel  
David Jacobs, EPIC Consumer Protection Fellow  
ELECTRONIC PRIVACY INFORMATION CENTER  
1718 Connecticut Ave. NW Suite 200  
Washington, DC 20009  
202-483-1140 (tel)  
202-483-1248 (fax)

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<sup>21</sup> KOVACIC ET AL., ANTITRUST LAW IN PERSPECTIVE: CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY 970 (Thomson West 2002).



## Appendix 1:

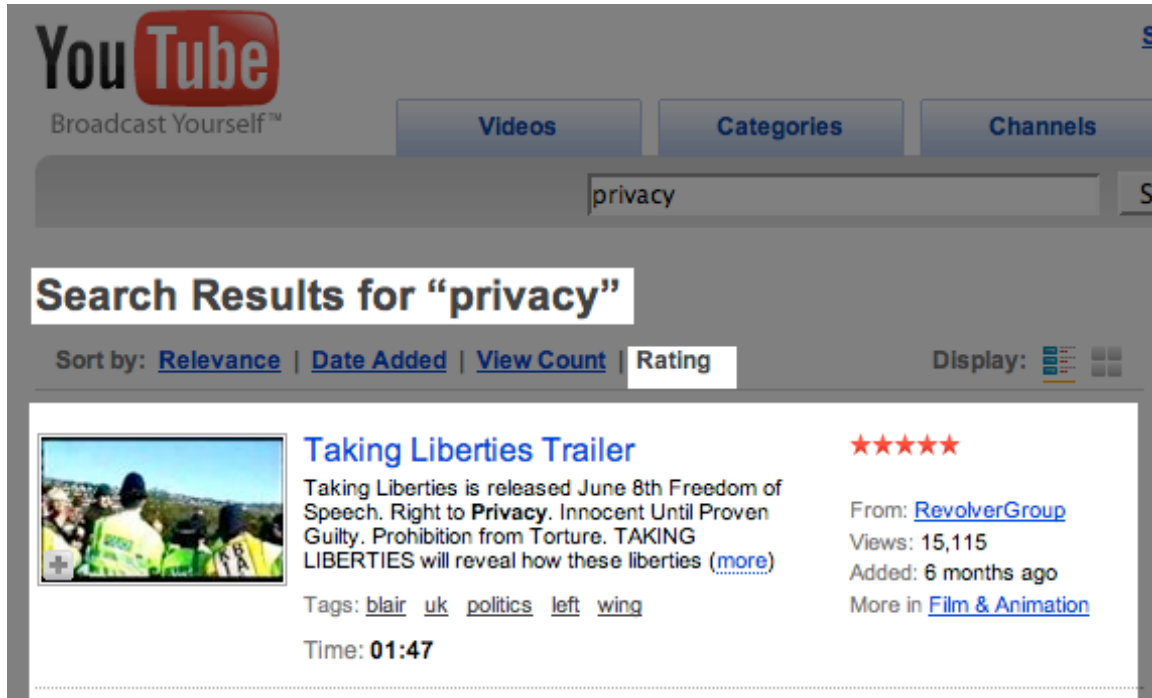


The screenshot shows the YouTube search interface. At the top left is the YouTube logo with the tagline "Broadcast Yourself™". Navigation buttons for "Videos", "Categories", and "Channels" are visible. A search bar contains the word "privacy". Below the search bar, the text "Search Results for 'privacy'" is displayed. Sorting options include "Relevance", "Date Added", "View Count", and "Rating". Display options are shown as icons. Three search results are listed:

- Google Search Privacy: Plain and Simple**
  - Thumbnail: A woman speaking.
  - Rating: 4.5 stars.
  - From: [Google](#)
  - Views: 54,657
  - Added: 3 months ago
  - More in [People & Blogs](#)
  - Tags: [Google](#) [Search](#) [Privacy](#)
  - Time: 04:28
- Invasion of Privacy**
  - Thumbnail: A man in a suit.
  - Rating: 4.5 stars.
  - From: [freedomcorp](#)
  - Views: 3,256
  - Added: 1 year ago
  - More in [News & Politics](#)
  - Tags: [Patriot](#) [Act](#) [Rights](#) [Freedom](#)
  - Time: 01:34
- Michael Jackson - Privacy (by mjchicco)**
  - Thumbnail: Michael Jackson in a white suit.
  - Rating: 4.5 stars.
  - From: [mjchicco](#)
  - Views: 9,019
  - Added: 1 year ago
  - More in [Music](#)
  - Tags: [michael](#) [jackson](#) [privacy](#)

**Source:** Marc Rotenberg, "The Case Against the Google Doubleclick Merger," Center for Internet and Society, Stanford Law School, November 19, 2007, *available at* <http://cyberlaw.stanford.edu/node/5565>.

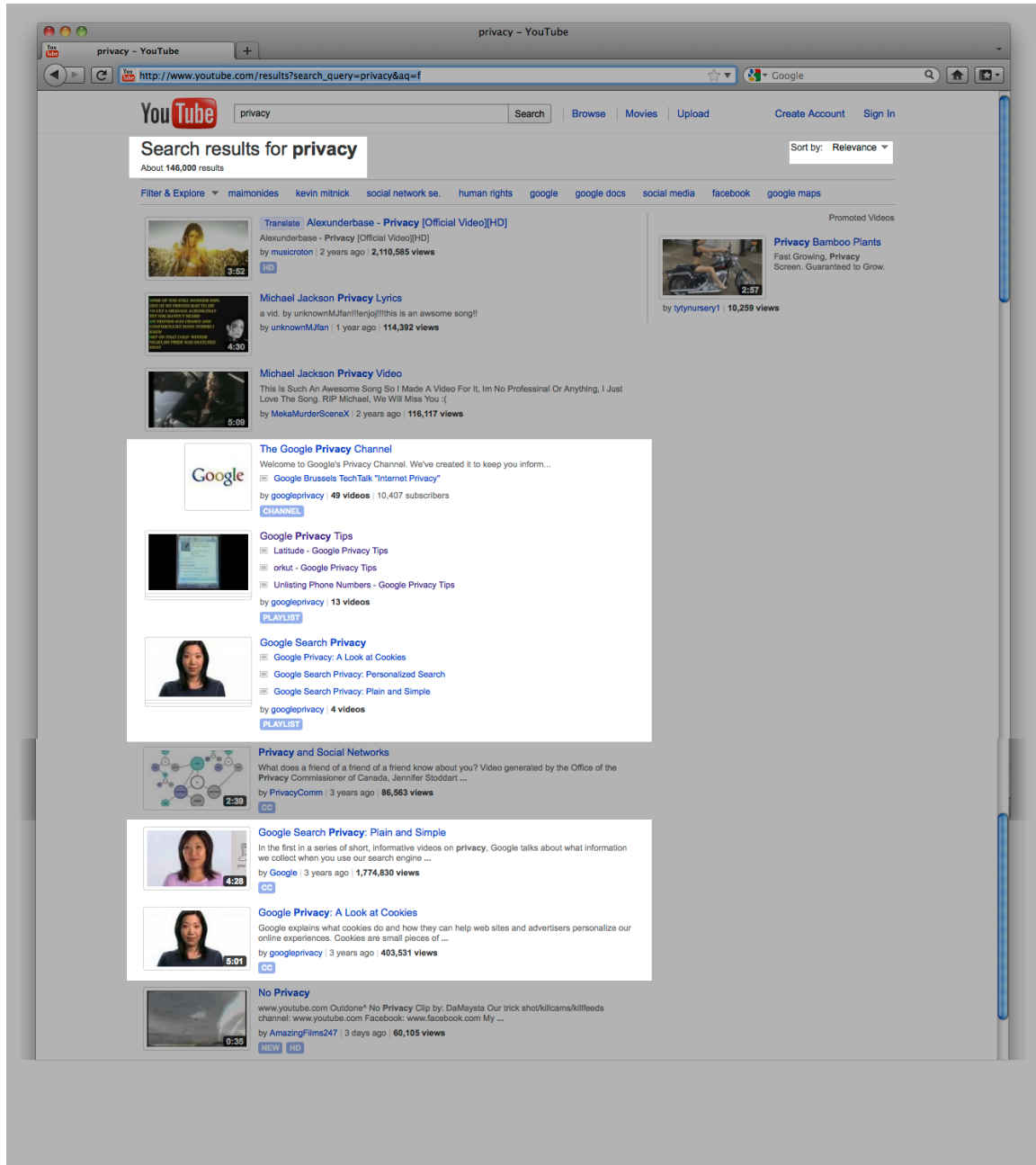
## Appendix 2



The image is a screenshot of a YouTube search results page. At the top left is the YouTube logo with the tagline "Broadcast Yourself™". To the right are navigation buttons for "Videos", "Categories", and "Channels". A search bar contains the word "privacy". Below the search bar, the text "Search Results for 'privacy'" is displayed. Underneath, there are sorting options: "Sort by: Relevance | Date Added | View Count | Rating", with "Rating" selected. To the right, there are display options. The first search result is for a video titled "Taking Liberties Trailer". It features a thumbnail image of people in a crowd. The video has a five-star rating. The description reads: "Taking Liberties is released June 8th Freedom of Speech. Right to Privacy. Innocent Until Proven Guilty. Prohibition from Torture. TAKING LIBERTIES will reveal how these liberties (more)". The video is from the channel "RevolverGroup", has 15,115 views, and was added 6 months ago. It is categorized as "Film & Animation". The video duration is 01:47. Tags include "blair", "uk", "politics", "left", and "wing".

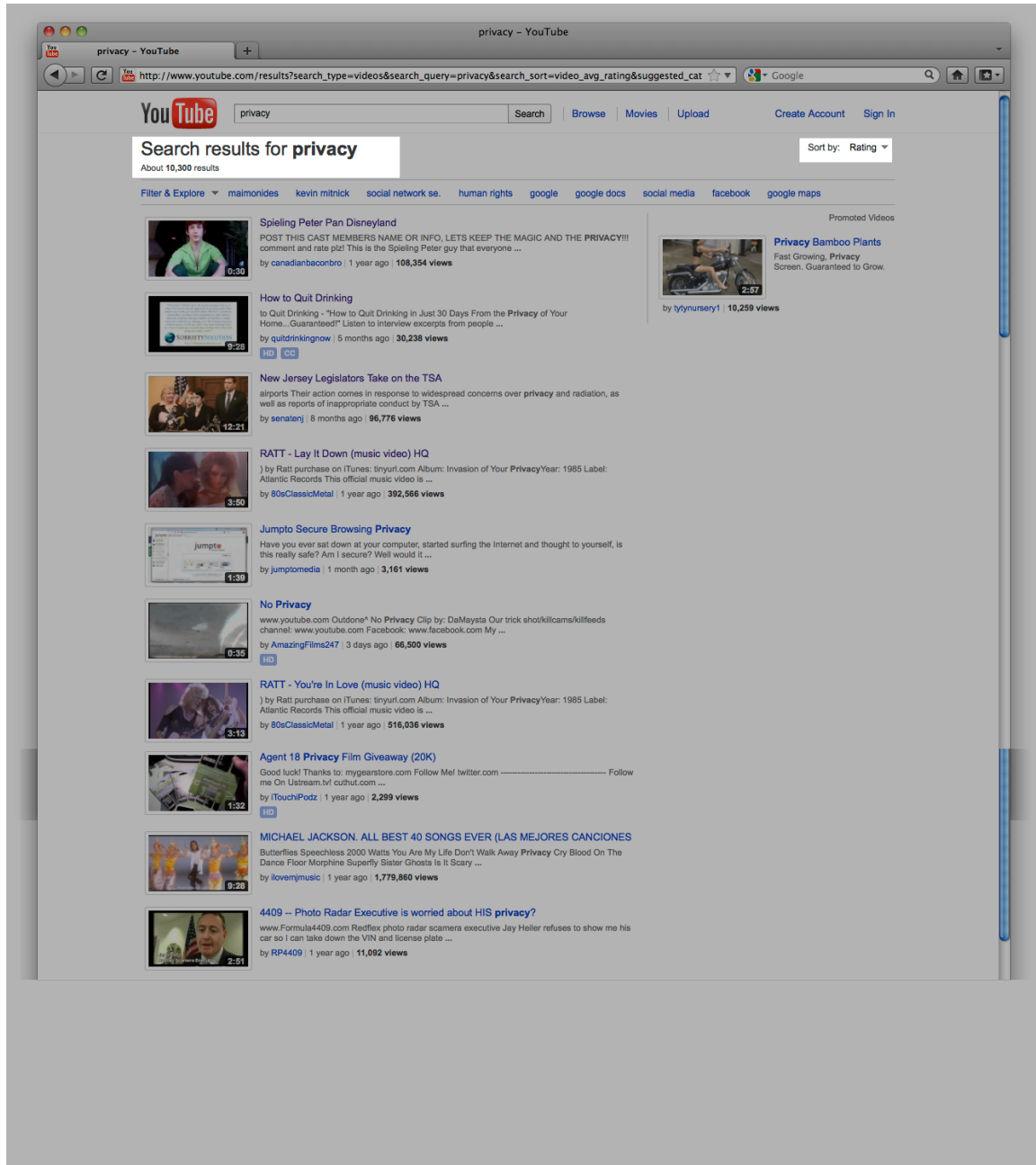
**Source:** Marc Rotenberg, "The Case Against the Google Doubleclick Merger," Center for Internet and Society, Stanford Law School, November 19, 2007, *available at* <http://cyberlaw.stanford.edu/node/5565>.

## Appendix 3



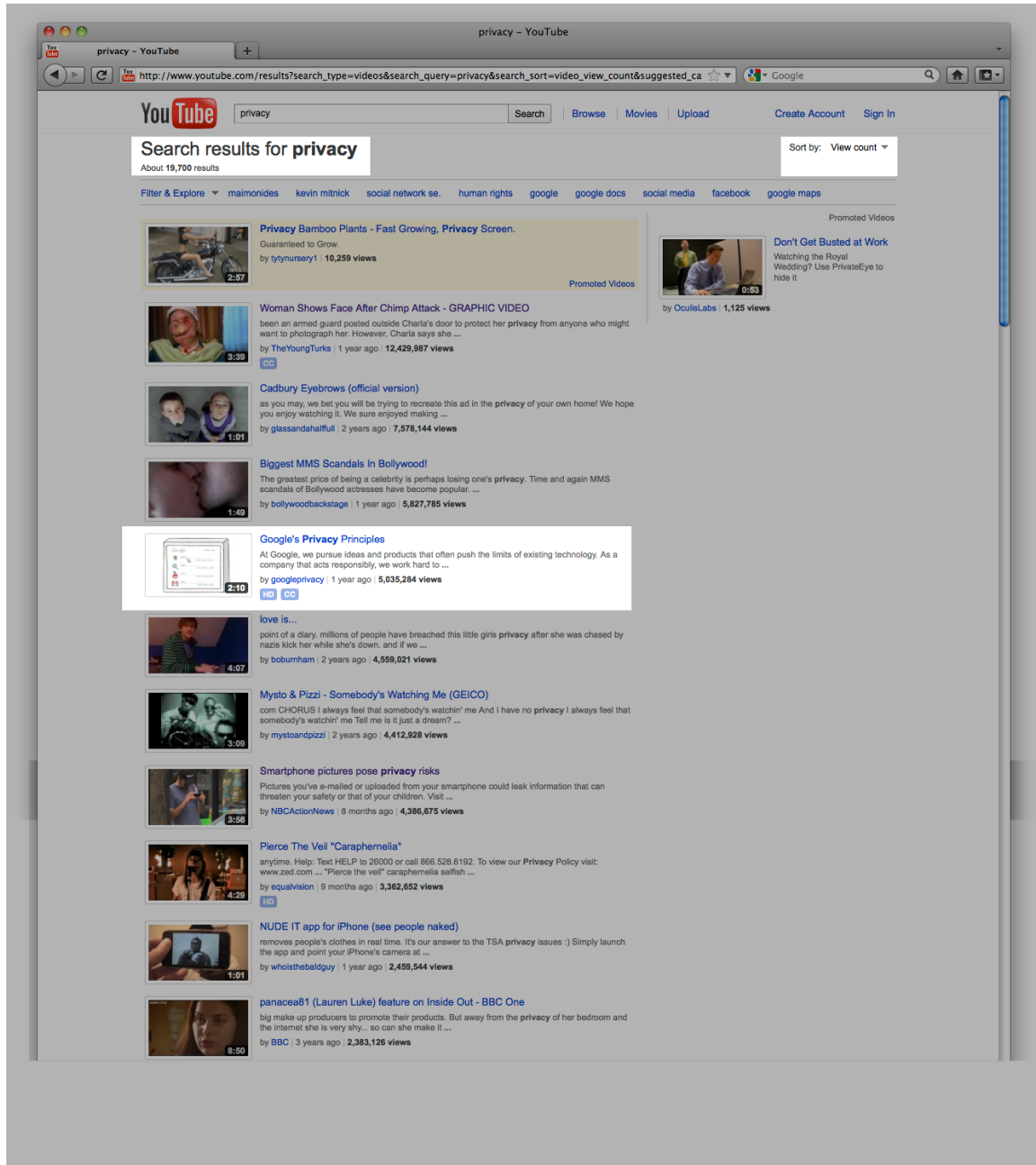
Source: YouTube, "Search Results for Privacy," July 11, 2011, available at [http://www.youtube.com/results?search\\_query=privacy&aq=f](http://www.youtube.com/results?search_query=privacy&aq=f).

## Appendix 4



Source: YouTube, "Search Results for Privacy," sorted by "user rating," July 11, 2011, available at [http://www.youtube.com/results?search\\_query=privacy&aq=f](http://www.youtube.com/results?search_query=privacy&aq=f).

## Appendix 5



Source: YouTube, "Search Results for Privacy," sorted by "view count," July 11, 2011, available at [http://www.youtube.com/results?search\\_query=privacy&aq=f](http://www.youtube.com/results?search_query=privacy&aq=f).

## Appendix 6

### Spieling Peter Pan Disneyland

canadianbaconbro 145 videos



108,546

Uploaded by canadianbaconbro on May 3, 2010

DONT POST THIS CAST MEMBERS NAME OR INFO, LETS KEEP THE MAGIC AND THE PRIVACY!!! comment and rate plz! This is the Spieling Peter guy that everyone likes, at the Disneyland Resort in Anaheim

3,106 likes, 9 dislikes

YAAAH REDHEAD!!!

**Source:** YouTube, "Spieling Peter Pan Disneyland," viewed July 11, 2011, *available at* <http://www.youtube.com/watch?v=Y4vu4HNJi3I>.

## Appendix 7

### Woman Shows Face After Chimp Attack - GRAPHIC VIDEO

TYT NETWORK 9,457 videos

Subscribe [facebook.com/tytnation](https://www.facebook.com/tytnation)

0:06 / 3:39 360p

Like Add to Share

12,430,424

7,715 likes, 6,196 dislikes

**!** This video has been age-restricted based on our [Community Guidelines](#)

Uploaded by [TheYoungTurks](#) on Nov 11, 2009

Facebook: <http://www.facebook.com/tytnation>

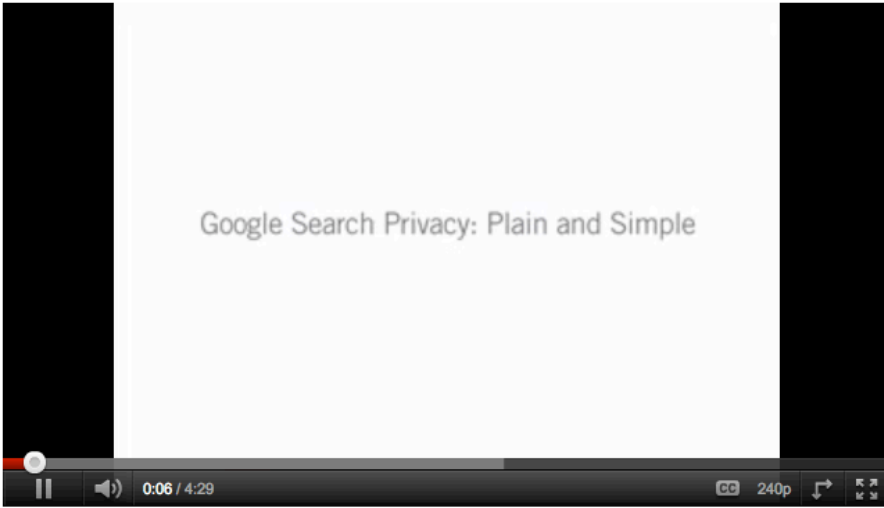
CLICK TO TWEET: <http://clicktotweet.com/2v6GC>

**Source:** YouTube, "Woman Shows Face After Chimp Attack," viewed July 11, 2011, *available at* <http://www.youtube.com/watch?v=a3DeJjHAz8I>.

## Appendix 8

### Google Search Privacy: Plain and Simple

Google 1,363 videos



0:06 / 4:29 240p

Like Add to Share

1,775,613

546 likes, 227 dislikes

As Seen On:  
The Silver Bullet Sec...

Uploaded by Google on Aug 8, 2007

In the first in a series of short, informative videos on privacy, Google talks about what information we collect when you use our search engine and the steps we've taken to protect it. In future videos, we'll talk about why Google

**Source:** YouTube, "Google Search Privacy: Plain and Simple," viewed July 11, 2011, *available at* <http://www.youtube.com/watch?v=kLgJYBRzUXY>.



## Universal Guidelines for Artificial Intelligence

### 23 October 2018

### Brussels, Belgium

New developments in Artificial Intelligence are transforming the world, from science and industry to government administration and finance. The rise of AI decision-making also implicates fundamental rights of fairness, accountability, and transparency. Modern data analysis produces significant outcomes that have real life consequences for people in employment, housing, credit, commerce, and criminal sentencing. Many of these techniques are entirely opaque, leaving individuals unaware whether the decisions were accurate, fair, or even about them.

We propose these Universal Guidelines to inform and improve the design and use of AI. The Guidelines are intended to maximize the benefits of AI, to minimize the risk, and to ensure the protection of human rights. These Guidelines should be incorporated into ethical standards, adopted in national law and international agreements, and built into the design of systems. We state clearly that the primary responsibility for AI systems must reside with those institutions that fund, develop, and deploy these systems.

1. **Right to Transparency.** All individuals have the right to know the basis of an AI decision that concerns them. This includes access to the factors, the logic, and techniques that produced the outcome.
2. **Right to Human Determination.** All individuals have the right to a final determination made by a person.
3. **Identification Obligation.** The institution responsible for an AI system must be made known to the public.
4. **Fairness Obligation.** Institutions must ensure that AI systems do not reflect unfair bias or make impermissible discriminatory decisions.
5. **Assessment and Accountability Obligation.** An AI system should be deployed only after an adequate evaluation of its purpose and objectives, its benefits, as well as its risks. Institutions must be responsible for decisions made by an AI system.
6. **Accuracy, Reliability, and Validity Obligations.** Institutions must ensure the accuracy, reliability, and validity of decisions.
7. **Data Quality Obligation.** Institutions must establish data provenance, and assure quality and relevance for the data input into algorithms.
8. **Public Safety Obligation.** Institutions must assess the public safety risks that arise from the deployment of AI systems that direct or control physical devices, and implement safety controls.
9. **Cybersecurity Obligation.** Institutions must secure AI systems against cybersecurity threats.
10. **Prohibition on Secret Profiling.** No institution shall establish or maintain a secret profiling system.
11. **Prohibition on Unitary Scoring.** No national government shall establish or maintain a general-purpose score on its citizens or residents.
12. **Termination Obligation.** An institution that has established an AI system has an affirmative obligation to terminate the system if human control of the system is no longer possible.