

EXHIBIT 24

(Filed Under Seal)

Expert Witness Report of

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Professor

College of Information Sciences and Technology

The Pennsylvania State University

Regarding the case of:

Virginia Giuffre

v.

Ghislaine Maxwell

(U.S. District Court for the Southern District of New York)

9 September 2016

I. INTRODUCTION

1. I have been retained by the law firm of Farmer, Jaffe, Weissing, Edwards, Fistos & Lehrman, P.L. to provide expert analysis and opinion on behalf of Ms. Virginia Giuffre in VIRGINIA L. GIUFFRE, Plaintiff, v. GHISLAINE MAXWELL, Defendant. CASE NO. 1:15-cv-07433, which is pending in the United States District Court Southern District of New York.

II. QUALIFICATIONS

2. I am a tenured, full professor at the College of Information Sciences and Technology at The Pennsylvania State University, University Park, Pennsylvania, where I have been employed since 2001. I am the Director of the Information Searching and Learning Laboratory at the College of Information Sciences and Technology at The Pennsylvania State University. I am also a principal scientist at the Qatar Computing Research Institute. I was a Senior Fellow at the Pew Internet & American Life Project, which is part of the Pew Research Center, from 2010 through 2012. I was also a University Expert at the National Ground Intelligence Center from 2011 through 2014. Prior to my employment at The Pennsylvania State University, I was a Lecturer in the Computer Science Program at the University of Maryland (Asian Division) for 1 year. Before that I was an Assistant Professor and Lecturer in the Department of Electrical Engineering and Computer Science at the United States Military Academy, a.k.a. West Point, for 3 years.

3. In addition to my academic credentials, my professional experience includes 20 years of practice in the U.S. military, working primarily in a variety of technology-related and leadership positions.

4. I have authored approximately 250 academic publications, focusing on the areas of Web data, digital analytics, Web analytics, Web searching, Web search engines, social media analytics, and related areas. Approximately 200 of my publications address aspects of search

analytics, Web analytics, online advertising, search engines, or Web searching. My recent research work focuses on online news analytics, which is the investigation of the online qualitative and quantitative attributes of news stories, along with other digital content. I am also the editor-in-chief of the academic journal Information Processing and Management, and I was previously the editor-in-chief for 5 years of the academic journal, Internet Research. I have authored, co-authored, or co-edited four books, including Web Search: Public Searching of the Web (2007), Understanding User – Web Interactions via Web Analytics (2009) and Understanding Sponsored Search (2011). A copy of my complete curriculum vitae, which includes a list of all publications I have authored in the past 10 years, is attached as **Appendix A**.

5. My fields of professional expertise include web analytics, search engines, web searching, social media, online advertising, and related areas. In the course of my academic career, I have worked with a variety of search engines and information searching applications in order to understand user searching behavior on the Web and other environments. For example, as part of my Master's program in computer science, I designed and coded a text-based search engine. For my Doctorate program in computer science, I developed a program interface for Web search engines and implemented it on the Gigabyte search engine. In subsequent research, I have worked with the Microsoft Internet Information Services (IIS) and Verity commercial searching systems.

6. Concerning user searching behaviors on the Web using web analytics, I have worked directly with real-user searching data from several search engines, including AOL, Alta Vista, Dogpile, Excite, and MSN Live. I've also analyzed web data of visitor traffic and other attributes from a variety of websites and social media platforms. I've analyzed real-user data from online search marketing campaigns and user referral traffic to websites. I have conduct research and teaching concerning aspects of websites and social media platforms, including keyword

advertising. I've developed web analytics models and processes for analysis of business goals, and I have used web analytics data and commercial tools in both my research and teaching. I've also conducted other research on user searching and related online behaviors. I have advised governmental agencies and companies in consulting and expert witnessing matters. A list of cases in which I have testified as an expert in deposition or trial in the past four years is attached as **Appendix B**. I am being compensated for my work on this case at the rate of \$300 per hour.

III. ASSIGNMENT AND MATERIALS CONSIDERED

7. In providing my expert opinion, I have been asked to respond to the following question:

8. **What is the dissemination of the statements from Ms. Maxwell referring to Ms. Giuffre's declarations as "untrue" and "lies" from when the statements were made on 2 January 2015 to the date that I filed this report?**

9. For brevity, I refer to references to the statements denoting Ms. Giuffre's declarations as "untrue" and "lies", any related accounts referring to those original statements, or similar statements from Ms. Maxwell or her representatives referring to Ms. Giuffre as *the statements made against Ms. Giuffre, the statements from Ms. Maxwell's message, or the message from Mr. Gow*¹.

10. My analysis is based on my experience, training, knowledge, and education and is formed through the application of that experience, training, knowledge, and education in the principles of web data collection, web analytics, web search, search engines, web sites, web traffic analysis, and related market analysis.

11. The materials that I considered in preparing this report are listed in **Appendix C**.

¹ See, para. 30 and 32, Complaint, VIRGINIA L. GIUFFRE, Plaintiff, v. GHISLAINE MAXWELL, Defendant. CASE NO. 1:15-cv-07433.

IV. SUMMARY OF OPINIONS

12. Based on my research and analysis in connection with this assignment, which is described in more detail in the body of this report, along with my own experience, training, knowledge, and education as stated below, I have reached the following opinion:

13. **The statements made against Ms. Giuffre have been disseminated to at least 115 online media or other sites in 178 separate stories or articles with a combined 66,909,965 potential unique visitors since 2 January 2015 to the date that I filed this report, inclusive.**

14. This is a conservative estimate, and it is more likely than not, the statements made by Ms. Maxwell against Ms. Giuffre have received wider dissemination due to factors such as:

a. I used a set of online websites to measure dissemination, and it is reasonable that I have not located all references to the statements made against Ms. Giuffre on every website by the time of the submission of this report.

b. I examined only online sources referencing the statements made against Ms. Giuffre and not print or broadcast media dissemination of the statements made against Ms. Giuffre.

c. I have not attempted to measure face-to-face dissemination of articles containing the statements against Ms. Giuffre.

d. I do not have access to certain online sources where articles containing the statements against Ms. Giuffre may have been disseminated (e.g., email messages, personal social media messages, articles behind firewalls, etc.).

e. There are possibly sites that have hosted the statements made against Ms. Giuffre that I could not locate or where the statements have been removed.

f. There are sites that hosted the articles containing the statements made against Ms. Giuffre where the visitor data is not accessible or where I could not confirm the number of visitors.

g. I did not consider the dissemination via social media platforms of articles containing the statements made against Ms. Giuffre.

h. Many sites published multiple articles on multiple days that contained or referenced the statements made against Ms. Giuffre; however, I did not include these multiple publication dates in calculating unique daily visitors.

i. I did not include unique daily visitors to articles that link from that article to one or more of the articles containing the statements made against Ms. Giuffre.

j. Finally, I did not include the counts of those who may have been searching and seen the statements made against Ms. Giuffre in the search results listing.

V. **BACKGROUND WEB ANALYTICS FOR TRAFFIC ANALYSIS**

15. In the course of forming this opinion, I implemented numerous web analytics and related techniques commonly used in the industry. In order to more clearly discuss these techniques, I define the following terms:

- **Direct Traffic**: visitors to a website that come from entering a website link into a browser location bar (e.g., not coming via a link on another website).
- **Dissemination**: the act of spreading or the circulation of information or articles.
- **Domain**: a specific Internet website that are administered as a unit and defined by an Internet Protocol (IP) address.

- **Reach**: the percentage or number of people who visit a website out of the total targeted population.
- **Referral Traffic**: visitors to a site that come from websites other than search engines.
- **Repeat Visits**: visitor traffic to a website in a given period that **just** includes multiple visits from the same set of IP addresses (i.e., IP addresses with more than one visit); provides a count of the people who have visited a site more than once in a given period. An individual is usually defined by a combination of IP address and browser within a given period but can also be defined by more sophisticated methods.
- **Search Engine**: a program and associated hardware and processes that allows people to find information on the Web, typically via the submission of queries consisting of terms.
- **Search Traffic**: visitors to a site that come from search engines rather than from other websites or via direct navigation.
- **Search**: a submission of a query to a search engine, usually in the form of terms forming a query.
- **Share**: sharing of an article or webpage typically via some social media platform.
- **Social Media**: content that is shared via a social networking website.
- **Unique Visits**: visitor traffic to a website within a given period that includes only the first visit (i.e., subsequent visits are ignored), which excludes repeat visits; provides a count of the individuals who have visited a site in a given period.

- **Unique Daily Visitors**: visitor traffic to a website who visits a site at least once in a given 24-hour period. Each visitor, to the site, is counted once during the reporting period, which means it excludes repeat visits; provides a count of the individuals who have visited a site on a given day.

- **Visits**: a count of all the traffic to a website in a given period, including both unique and repeat visits.

- **Web Analytics**: the measurement, collection, analysis and reporting of web data.

VI. **METHODOLOGY**

16. I was asked to determine the dissemination of articles containing the statements made against Ms. Giuffre.

17. In forming my opinion, I utilized accepted web analytics and related methodologies in developing my assessment.

18. To that end, I employed various publicly available online analytic services, as well as some subscription-based services in conducting my research, including:

- **Alexa**: an online service that provides web traffic data and analysis.
- **Compete**: an online service that provides web traffic data and analysis.
- **Google Keyword Tool**: an online service that provides the number of searches for a given set of keywords in a given month on the Google search engine.
- **Google Trends**: an online service that shows how often a particular term is relatively searched on the Google search engine in a given period.
- **SimiliarWeb**: an online service that provides web traffic data and analysis.
- **SpyFu**: an online service providing search data and analytics, including for both paid (i.e., advertisements) and organic (i.e., natural or algorithmic) channels.
- **W3Snoop**: an online service that provides web traffic data and analysis.

19. These tools offer a variety of data and analysis services, and they are frequently utilized by industry professionals in the search engine optimization, web analytics, and search engine marketing fields for market, customer, and competitive analysis. Furthermore, where possible, I did my own assessments, as outlined below, in order to validate the data and analysis results.

20. I also utilized search engines, primarily Google and Bing, to assess the dissemination of articles containing the statements made against Ms. Giuffre.

21. Whenever possible, I used multiple data sources, which is a data verification technique known as triangulation², where one uses multiple and disparate sources for analysis and then compare the results from the separate analysis. If the results are similar, it reinforces the conclusion that the overall data analysis is valid.

22. In all of my assessments, I have used the most conservative numbers, meaning that I use the smallest value in arriving at the dissemination of articles containing the statements made against Ms. Giuffre. If I had not employed this conservative estimate, the number of potential dissemination of the articles containing the statements made against Ms. Giuffre would be 102,740,816 (i.e., more than 102 million) daily unique visitors.

23. In situations where I believed that I could not adequately verify the number of individuals or did not have confidence in the numbers in those situations, I did **not** include those numbers in the calculation of daily unique visitors.

24. My analysis is based on my experience, training, knowledge, and education and is formed through the application of that experience, training, knowledge, and education in the

² Triangulation (social science) http://en.wikipedia.org/wiki/Triangulation_%28social_science%29

principles of web data collection, web analytics, web search, search engines, web sites, and related areas.

VII. DISSEMINATION OF THE STATEMENTS MADE AGAINST MS. GIUFFRE

25. My opinion is that articles containing the statements made against Ms. Giuffre have been disseminated to at least 115 online media and others sites in 178 separate stories or articles with a combine 66,909,965 unique daily visitors.

26. This is a conservative estimate, and it is more likely than not, the statements have received wider dissemination due to factors such as:

a. I used a set of online websites (115) to calculate the dissemination of articles, and it is reasonable that I have not located all references to the statements made against Ms. Giuffre by the time of the submission of this report. So, there may be more sites with articles containing the statements made against Ms. Giuffre that are **not** included in my calculations.

b. My focus of analysis was the online dissemination of the statements made against Ms. Giuffre. Therefore, I examined only online sources and **not** dissemination of the statements made against Ms. Giuffre via print or broadcast media. It is reasonable to assume that the statements made against Ms. Giuffre were disseminated via these other channels.

c. I have not attempted to measure face-to-face dissemination of the statements made against Ms. Giuffre. Therefore, these sources of dissemination are **not** included in the count of daily unique visitors.

d. I did not have access to certain online sources where the statements against Ms. Giuffre may have been disseminated (e.g., email messages, social media messages,

articles behind firewalls, etc.). Therefore, these sources are **not** included in the count of daily unique visitors.

e. There may be sites that have hosted articles containing the statements made against Ms. Giuffre where the articles have been removed. Therefore, I did **not** include these sites in my calculation of the unique daily visitors.

f. There are sites where the visitor data is not accessible or where I could not reasonably check the number of visitors. In these cases, even though I had confirmed the site had posted one or more articles containing the statements made against Ms. Giuffre, I did **not** include these sites in my calculation of the unique daily visitors.

g. I did **not** consider the dissemination via social media platforms of articles containing the statements made against Ms. Giuffre.

h. Many sites published multiple articles on multiple days that contain or reference the statements made against Ms. Giuffre; however, I did **not** use these multiple articles from the same site with different publication dates in my calculations in determining the number of daily unique visitors who have been exposed to the articles containing the statements made against Ms. Giuffre.

i. I did **not** include articles that link to one or more of the articles containing the statements made against Ms. Giuffre. Unless the article directly referenced the statements made against Ms. Giuffre, I did **not** include it in my analysis.

j. Finally, I did **not** include people who may have been searching and may have seen the statements made against Ms. Giuffre in the search results, without needing to visit the actual articles posted on the websites.

VIII. METHODOLOGY TO DETERMINE THE DISSEMINATION OF THE STATEMENTS MADE AGAINST MS. GIUFFRE

27. I have been informed that the statements made against Ms. Giuffre were originally contained in an email message from Mr. Ross Gow³, of Acuity Reputation, acting on behalf of Ms. Maxwell, that was sent on 2 January 2015 at 8:38 pm⁴ to, based on the email addresses⁵, people at The Mail Online⁶, The Independent⁷, The Mirror⁸, The Times⁹, and the BBC¹⁰. The email message from Mr. Gow contained the statements made against Ms. Giuffre. A screen shot of the email message is shown in Figure 1.

28. **Figure 1: Email message from Mr. Ross Gow containing the statements made against Ms. Giuffre.**

³ GM_00068 (Gow E-Mail)

⁴ I am assuming, based on the location of Mr. Gow's company, Acuity Reputation, that this is date-time stamp for the United Kingdom.

⁵ Note: For some reason, the contact at the Mail Online is on the cc: line, while the other recipients are in the to: line. Also, the email message is sent to two recipients at the BBC.

⁶ https://en.wikipedia.org/wiki/Mail_Online

⁷ https://en.wikipedia.org/wiki/The_Independent

⁸ https://en.wikipedia.org/wiki/Daily_Mirror

⁹ https://en.wikipedia.org/wiki/The_Times

¹⁰ https://en.wikipedia.org/wiki/BBC_News

From: <ross@acuityreputation.com>
Date: 2 January 2015 at 20:38
Subject: Ghislaine Maxwell
To: Rossacuity Gow <ross@acuityreputation.com>
bcc: martin.robinson@mailonline.co.uk,
P.Peachey@independent.co.uk,
nick.sommerlad@mirror.co.uk,
david.brown@thetimes.co.uk,
nick.alway@bbc.co.uk,
jo-anne.pugh@bbc.co.uk

To Whom It May Concern,
Please find attached a quotable statement on behalf of Ms Maxwell.

No further communication will be provided by her on this matter.
Thanks for your understanding.
Best
Ross

Ross Gow
ACUITY Reputation

Jane Doe 3 is Virginia Roberts - so not a new individual. The allegations made by Victoria Roberts against Ghislaine Maxwell are untrue. The original allegations are not new and have been fully responded to and shown to be untrue.

Each time the story is re told it changes with new salacious details about public figures and world leaders and now it is alleged by Ms Roberts that Alan Dershowitz is involved in having sexual relations with her, which he denies.

Ms Roberts claims are obvious lies and should be treated as such and not publicised as news, as they are defamatory.

Ghislaine Maxwell's original response to the lies and defamatory claims remains the same. Maxwell strongly denies allegations of an unsavoury nature, which have appeared in the British press and elsewhere and reserves her right to seek redress at the repetition of such old defamatory claims.

Sent from my BlackBerry® wireless device

29. I have been informed that the statements made against Ms. Giuffre were confirmed by Ms. Maxwell in a news article and video¹¹ aired on 5 January 2015, which I have established by reviewing the video referenced in the news article¹².

¹¹ GIUFFRE001120

¹² <http://www.nydailynews.com/news/world/alleged-madame-accused-supplying-prince-andrew-article-1.2065505>

30. Additionally, on 8 January 2015, agents reportedly acting on behalf of Ms. Maxwell made statements that the allegations against her were a “web of lies and deceit”¹³, which are similar to the statements made against Ms. Giuffre in the message from Mr. Gow.

31. Similarly, on 1 February 2015, like statements were quoted as “These allegations are untrue and defamatory”¹⁴, which are similar to the statements made against Ms. Giuffre in the message from Mr. Gow.

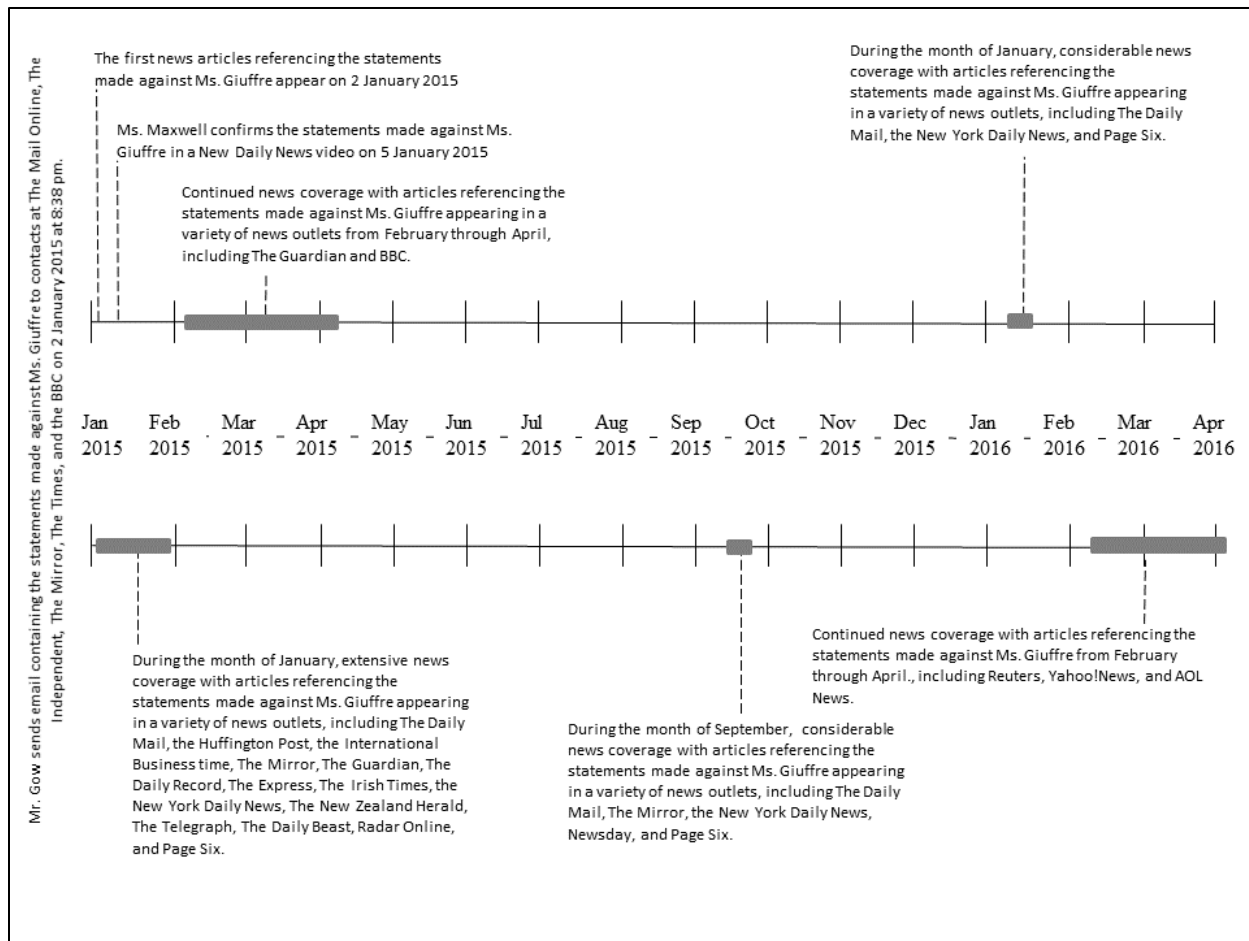
32. Based on my investigation and research, news stories, articles, and postings containing direct reference to or quotes from the statements made against Ms. Giuffre appeared the same day (i.e., 2 January 2015) as the email from Mr. Gow, with several news organizations and other sites publishing other articles containing direct reference to or quotes from the statements made against Ms. Giuffre in the immediately following days. News articles containing direct reference to or quotes of the statements made against Ms. Giuffre have continued to appear in news articles and other postings nearly up to the date that I submitted this report.

33. A timeline of events relating to the dissemination of the statements made against Ms. Giuffre is shown in Figure 2.

34. **Figure 2: Timeline of events relating to the dissemination of the statements made against Ms. Giuffre from 2 January 2015 onwards.**

¹³ <https://www.thesun.co.uk/archives/news/6754/prince-andrews-pal-ghislaine-groped-teen-girls/>

¹⁴ <http://www.mirror.co.uk/news/uk-news/prince-andrews-pal-ghislaine-maxwell-5081971>



35. Concerning the procedure employed in determining the dissemination of the statements made against Ms. Giuffre, nearly every major news site¹⁵ that I investigated, along with other specific news sites in the United States, the United Kingdom, Canada, and Australia, as well as other countries, have carried some aspects of the overall story related to Ms. Giuffre and/or Ms. Maxwell, or other parties involved.

36. In fact, there are tens of thousands of news articles and postings concerning the general story from news outlets worldwide, with combined potential viewership in the multi-millions, as searches on the major search engines, such as Google and Bing, show.

¹⁵ Including the largest online news sites, such as Yahoo! News, Google News, Huffington Post, CNN, NY Times, Fox News, NBC News, Daily Mail, Washington Post, The Guardian, Wall Street Journal, ABC News, BBC News, USA Today, LA Times (see <http://www.ebizmba.com/articles/news-websites>)

37. However, I was not interested in news articles that **just** discussed the story in general or other aspects of the story. Also, I was **not** interested in those articles where Ms. Maxwell or those acting on her behalf, such as Mr. Gow, would just generally deny the allegations in the complaint¹⁶. I was specifically interested in only those articles that referenced directly or quoted the statements made against Ms. Giuffre in the 2 January 2015 email message from Mr. Gow, Ms. Maxwell's subsequent confirmation of the statements, or similar statements as those in the message from Mr. Gow. Naturally, this narrow focus is a smaller subset of news articles than are the articles addressing the overall story.

38. To isolate these articles of interest, I generated a series of 10 queries¹⁷ that specifically targeted news articles from the case that addressed the statements made against Ms. Maxwell (e.g., *Ghislaine Maxwell obvious lies*) to retrieve a set of articles that directly related to the statements made against Ms. Giuffre¹⁸. I employed a modified snowball technique¹⁹, starting with one seed query, adding and modifying terms, until I was not retrieving new results. I also located some articles via navigating from the set of retrieved articles.

39. I set the search range date from 2 January 2015 onward, so articles prior to that date were not included in the search results. For each article used in my analysis, I also verified the date that the article was published to ensure it was published on or after 2 January 2015 and that the articles directly referenced in some way the statements made against Ms. Giuffre.

40. An example of a search engine results page in response to one of these queries is shown in Figure 3.

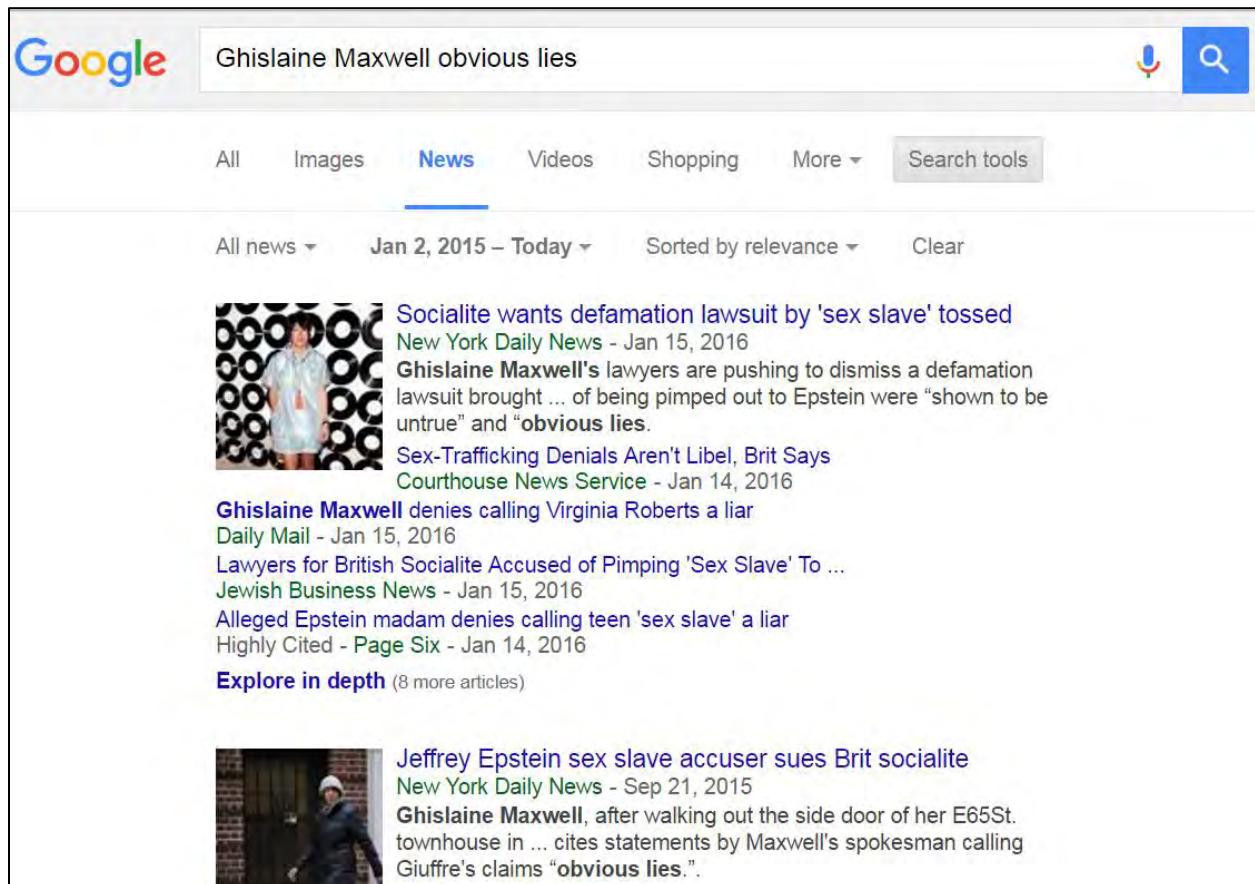
¹⁶ Complaint, VIRGINIA L. GIUFFRE, Plaintiff, v. GHISLAINE MAXWELL, Defendant. CASE NO. 1:15-cv-07433.

¹⁷ *Ghislaine Maxwell obvious lies, Ghislaine Maxwell Roberts obvious lies cnn, Ghislaine Maxwell Virginia Roberts, Giuffre Maxwell obvious lies, new york daily news alleged madam andrews, Prince Andrew Maxwell Roberts, Prince Andrew obvious lies, prince andrew's sex slave scandal who is maxwell, Ross Gow obvious lies, sex slave obvious lies.*

¹⁸ In addition to the queries, I located some articles via direction navigation.

¹⁹ https://en.wikipedia.org/wiki/Snowball_sampling

41. **Figure 3: Google News search results for the search *Ghislaine Maxwell obvious lies* with a date delimiter beginning on 2 January 2015.**



42. I then personally verified that each article, by reviewing each article, used in my analysis directly referenced in some way the statements made against Ms. Giuffre.

43. So, articles relating to the overall story that did **not** mention Ms. Maxwell's statements made against Ms. Giuffre were **not** included in the analysis. Articles relating to the overall story that referred to Ms. Maxwell simply denying the charges were **not** included.

44. I also personally performed a site search²⁰ of the top 15 online media sites worldwide²¹ of articles related to the case, and I reviewed the results to identify if any of these

²⁰ https://www.google.com/advanced_search

²¹ Yahoo! News, Google News, Huffington Post, CNN, NY Times, Fox News, NBC News, Daily Mail, Washington Post, The Guardian, Wall Street Journal, ABC News, BBC News, USA Today, LA Times (see <http://www.ebizmba.com/articles/news-websites>)

articles referred to the statements against Ms. Giuffre. I also did the same for many country-specific news sites in the United States, the United Kingdom, Canada, and Australia.

45. In the end, I had a set of 178 online news and other articles from 2 January 2105 to the date that I filed this report that specifically referenced the statements made against Ms. Giuffre to conduct my analysis, as outlined below.

46. Each of these 178 online articles was posted online. The 178 online articles were distributed among 115 unique domain websites (i.e., some websites posted multiple articles that contain the statements made against Ms. Giuffre). These 115 domains are:

- <http://beforeitsnews.com>
- <http://boltonbnp.blogspot.com>
- <http://businessnewsusa.org>
- <http://dukefmduluth.com>
- <http://dukefmfargo.com>
- <http://home.bt.com>
- <http://jewishbusinessnews.com>
- <http://jewishnews.timesofisrael.com>
- <http://kdal610.com>
- <http://kfgo.com>
- <http://motivatornews.com>
- <http://mrharrywales.tumblr.com>
- <http://muhammad-ali-ben-marcus.blogspot.com>
- <http://news.sky.com>
- <http://news.trust.org>
- <http://newsbite.it>
- <http://newstoday.club>
- <http://normanfinkelstein.com>
- <http://onewayempire.com>
- <http://pagesix.com>
- <http://planetinvestigations.com>
- <http://softwaresuites.ne>
- <http://thisviral.com>
- <http://townhall.com>
- <http://ugandansatheart.blogspot.com>
- <http://uk.reuters.com>
- <http://whatiswrongwiththispicture2012.blogspot.com>
- <http://whbl.com>
- <http://whtc.com>

- <http://wibqam.com>
- <http://wifc.com>
- <http://wincountry.com>
- <http://wkzo.com>
- <http://worlddailynews.info>
- <http://wsau.com>
- <http://wtaq.com>
- <http://wtvbam.com>
- <http://www.anorak.co.uk>
- <http://www.aol.co.uk>
- <http://www.asianimage.co.uk>
- <http://www.bailiwickexpress.com>
- <http://www.bannednews.net>
- <http://www.bbc.com>
- <http://www.belfasttelegraph.co.uk>
- <http://www.bournemouthecho.co.uk>
- <http://www.businessinsider.com>
- <http://www.business-standard.com>
- <http://www.capitalbay.news>
- <http://www.clactonandfrintongazette.co.uk>
- <http://www.courthousenews.com>
- <http://www.dailylife.com.au>
- <http://www.dailymail.co.uk>
- <http://www.dailyrecord.co.uk>
- <http://www.darkpolitricks.com>
- <http://www.dudleynews.co.uk>
- <http://www.eveningtimes.co.uk>
- <http://www.express.co.uk>
- <http://www.faceiraq.com>
- <http://www.ghanagrio.com>
- <http://www.ghanareview.com>
- <http://www.govtislaves.info>
- <http://www.headlines-news.com>
- <http://www.huffingtonpost.co.uk>
- <http://www.ibtimes.co.uk>
- <http://www.independent.ie>
- <http://www.infiniteunknown.net>
- <http://www.iol.co.za>
- <http://www.irishtimes.com>
- <http://www.irishtimes.com>
- <http://www.itv.com>
- <http://www.lancashiretelegraph.co.uk>
- <http://www.lse.co.uk>

- <http://www.mgtowhq.com>
- <http://www.mirror.co.uk>
- <http://www.msn.com>
- <http://www.nationalenquirer.com>
- <http://www.newindianexpress.com>
- <http://www.newscopia.com>
- <http://www.newsday.com>
- <http://www.newsgrio.com>
- <http://www.nigeriadailynews.news>
- <http://www.nydailynews.com>
- <http://www.nzherald.co.nz>
- <http://www.oneworldofnations.com>
- <http://www.oxfordmail.co.uk>
- <http://www.pressreader.com>
- <http://www.reuters.com>
- <http://www.scmp.com>
- <http://www.scotsman.com>
- <http://www.somersetlive.co.uk>
- <http://www.srnnews.com>
- <http://www.swindonadvertiser.co.uk>
- <http://www.telegraph.co.uk>
- <http://www.theargus.co.uk>
- <http://www.theboltonnews.co.uk>
- <http://www.thedailybeast.com>
- <http://www.thetelegraphandargus.co.uk>
- <http://www.thetruthseeker.co.uk>
- <http://www.twimovies.news>
- <http://www.westernmorningnews.co.uk>
- <http://www.wirralglobe.co.uk>
- <http://www.yorkpress.co.uk>
- <http://www.yorkshirepost.co.uk>
- <https://blairzhit.wordpress.com>
- <https://bol.bna.com>
- <https://ca.news.yahoo.com>
- <https://circusbuoy.wordpress.com>
- <https://quartetbooks.wordpress.com>
- <https://thetruth24.info>
- <https://www.eveningtelegraph.co.uk>
- <https://www.theguardian.com>
- <https://www.thesun.co.uk>
- <https://www.yahoo.com>
- <http://ferddyjay.blogspot.com>

47. As seen from the list of domains that have published articles or stories containing references to the statement made against Ms. Giuffre, many of these domains are those of major news organizations or sources, including AOL News, BBC, Huffington Post, International Business Times, Irish Times, MSN News, National Enquirer, New York Daily News, New Zealand Herald, Page Six, Radar Online, Reuters, The Daily Beast, The Daily Mail, The Express, The Guardian, The Mirror, The Sun, The Telegraph, Yahoo! News, etc.

48. I then used a variety of web analytics traffic services and other sources to get the unique daily visitor traffic for each of these domains. I used multiple services when available to verify the unique daily visitor traffic for each of these domains, as these traffic services may use different techniques to arrive at their traffic numbers.

49. In cases of conflicting unique daily visitor traffic numbers, I utilized the most conservative (i.e., smallest) number.

50. In cases where I determined I could not get unique daily visitor traffic numbers or the unique daily visitor traffic were not reliable, in my opinion, I did not include the unique daily visitor traffic numbers for that domain in the numbers. This usually occurred for the sites with a smaller number of daily visitors or sites with an extremely large number of daily visitors.

51. *Unique daily visitors* measure is an industry standard web analytics metric for measuring people that visit a website in a given day, also known as unique audience²². It is generally averaged out over multiple days with a given period, such as week or month, as there are normal daily fluctuations.

52. Table 1 shows the unique daily visitor traffic for the listed domains that posted articles or stories referencing the statements made against Ms. Giuffre and the associated unique

²² <http://digitalmeasurement.nielsen.com/files/metrics-guidelines.pdf>

daily visitor traffic for each of those domains, along with number of articles containing the statements made against Ms. Giuffre posted on that site.

53. **Table 1: Domains that published articles or stories containing the statements made against Ms. Giuffre with the domain's number of unique daily visitors and the number of articles containing the statements made against Ms. Giuffre published on that domain from 2 January 2015 to the date that I filed this report²³.**

No.	Domain	Domain Unique Visitor Traffic (Daily)	Number of Articles Published
1	http://beforeitsnews.com	193,333	1
2	http://boltonbnp.blogspot.com ^a	-	1
3	http://businessnewsusa.org ^a	-	1
4	http://dukefmduluth.com ^a	-	1
5	http://dukefinfargo.com ^a	-	1
6	http://home.bt.com	800,000	1
7	http://jewishbusinessnews.com	5,000	2
8	http://jewishnews.timesofisrael.com ^a	-	1
9	http://kdal610.com	257	1
10	http://kfgo.com	1,600	1
11	http://motivatornews.com ^a	-	1
12	http://mrharrywales.tumblr.com ^a	-	1
13	http://muhammad-ali-ben-marcus.blogspot.com ^a	-	1
14	http://news.sky.com	523,333	2
15	http://news.trust.org ^a	-	1
16	http://newsbite.it ^a	-	1
17	http://newstoday.club ^a	-	1
18	http://normanfinkelstein.com	1,987	1
19	http://onewayempire.com ^a	-	1
20	http://pagesix.com	320,000	5
21	http://planetinvestigations.com ^a	-	1
22	http://softwaresuites.ne ^a	-	1
23	http://thisviral.com ^a	-	1
24	http://townhall.com	236,667	1
25	http://ugandansatheart.blogspot.com ^a	-	1
26	http://uk.reuters.com	153,333	1
27	http://whatiswrongwiththispicture2012.blogspot.com ^a	-	1

²³ Note: Some outlets, I was able to get self-reported visitor numbers, such as the <https://www.theguardian.com>.

No.	Domain	Domain Unique Visitor Traffic (Daily)	Number of Articles Published
28	http://whbl.com	12,252	1
29	http://whtc.com	1,207	1
30	http://wibqam.com ^a	-	1
31	http://wifc.com	990	1
32	http://wincountry.com	503	1
33	http://wkzo.com	573	1
34	http://worlddailynews.info ^a	-	1
35	http://wsau.com	2,653	1
36	http://wtaq.com ^a	-	1
37	http://wtvbam.com ^a	-	1
38	http://www.anorak.co.uk	7,150	1
39	http://www.aol.co.uk	423,333	2
40	http://www.asianimage.co.uk	1,293	1
41	http://www.bailiwickexpress.com	29,633	1
42	http://www.bannednews.net ^a	-	1
43	http://www.bbc.com	12,950,000	1
44	http://www.belfasttelegraph.co.uk ^a	-	1
45	http://www.bournemouthecho.co.uk ^a	-	1
46	http://www.businessinsider.com	3,866,667	1
47	http://www.business-standard.com ^a	-	1
48	http://www.capitalbay.news ^a	-	1
49	http://www.clactonandfrintongazette.co.uk	-	1
50	http://www.courthousenews.com	11,333	3
51	http://www.dailylife.com.au	80,000	1
52	http://www.dailymail.co.uk	14,276,667	6
53	http://www.dailyrecord.co.uk	145,048	3
54	http://www.darkpolitricks.com ^a	-	1
55	http://www.dudleynews.co.uk ^a	-	1
56	http://www.eveningtimes.co.uk	3,667	1
57	http://www.express.co.uk	1,686,667	1
58	http://www.faceiraq.com ^a	-	1
59	http://www.ghanagrio.com ^a	-	4
60	http://www.ghanareview.com ^a	-	1
61	http://www.govtislaves.info ^a	-	1
62	http://www.headlines-news.com ^a	-	1
63	http://www.huffingtonpost.co.uk	750,000	3
64	http://www.ibtimes.co.uk	1,380,000	3
65	http://www.independent.ie ^a	-	1
66	http://www.infiniteunknown.net	3,183	1
67	http://www.iol.co.za	233,333	1

No.	Domain	Domain Unique Visitor Traffic (Daily)	Number of Articles Published
68	http://www.irishe Examiner.com ^a	-	1
69	http://www.irishmirror.ie	100,000	3
70	http://www.irishtimes.com	323,333	1
71	http://www.itv.com	1,026,667	2
72	http://www.lancashiretelegraph.co.uk ^a	-	1
73	http://www.lse.co.uk	70,000	1
74	http://www.mgtowh.com ^a	-	1
75	http://www.mirror.co.uk	3,860,000	10
76	http://www.msn.com ^b	-	2
77	http://www.nationalenquirer.com	60,000	1
78	http://www.newindianexpress.com ^a	-	1
79	http://www.newscopia.com ^a	-	1
80	http://www.newsday.com	132,250	1
81	http://www.newsgrio.com	132,250	2
82	http://www.nigeriadailynews.news	16,236	4
83	http://www.nydailynews.com	2,100,000	6
84	http://www.nzherald.co.nz	686,667	1
85	http://www.oneworldofnations.com ^a	-	1
86	http://www.oxfordmail.co.uk ^a	-	1
87	http://www.pressreader.com	110,000	4
88	http://www.reuters.com	2,363,333	1
89	http://www.scmp.com ^a	-	1
90	http://www.scotsman.com	125,393	1
91	http://www.somersetlive.co.uk ^a	-	1
92	http://www.snnnews.com ^a	-	1
93	http://www.swindonadvertiser.co.uk	22,077	2
94	http://www.telegraph.co.uk	5,506,667	1
95	http://www.theargus.co.uk	59,281	3
96	http://www.theboltonnews.co.uk	40,000	2
97	http://www.thedailybeast.com	1,636,667	3
98	http://www.thetelegraphandargus.co.uk	46,667	1
99	http://www.thetruthseeker.co.uk	21,757	1
100	http://www.twimovies.news ^a	-	1
101	http://www.westernmorningnews.co.uk ^a	-	1
102	http://www.wirralglobe.co.uk ^a	-	3
103	http://www.yorkpress.co.uk ^a	-	1
104	http://www.yorkshirepost.co.uk ^a	-	1
105	https://blairzhit.wordpress.com ^a	-	1
106	https://bol.bna.com ^a	-	2
107	https://ca.news.yahoo.com ^b	-	1

No.	Domain	Domain Unique Visitor Traffic (Daily)	Number of Articles Published
108	https://circusbuoy.wordpress.com ^a	-	1
109	https://quartetbooks.wordpress.com ^a	-	1
110	https://thetruth24.info ^a	-	1
111	https://www.eveningtelegraph.co.uk ^a	-	2
112	https://www.theguardian.com	8,872,392	6
113	https://www.thesun.co.uk	1,496,667	1
114	https://www.yahoo.com ^b	-	1
115	http://ferddyjay.blogspot.com ^a	-	1
		66,909,965	178

^a - Unique daily visitor traffic not available

^b - Unique daily visitor traffic not verifiable

54. I used each domain's unique daily visitor count to calculate the dissemination of the articles containing the statements against Ms. Giuffre to various websites and potentially to visitors to that site (i.e., as visitors to the news sites, these individuals could have been exposed to the articles containing the statements made against Ms. Giuffre), using the unique daily visitor number only once for each domain, regardless whether that domain published more than one article referring to the statements made against Ms. Giuffre.

IX. RESULTS FOR ANALYSIS OF THE DISSEMINATION OF THE STATEMENTS MADE AGAINST MS. GIUFFRE

55. Based on my analysis as outlined above, my opinion is that the statements against Ms. Giuffre have been disseminated to at least 115 online media and other sites with 178 stories or articles with a combined 66,909,965 (more than 66 million) unique daily visitors traffic.

56. I note that for many of the 178 articles containing the statements made against Ms. Giuffre, one could get gist of the story of the article directly from the article headline. I point this out as it is well known that people skim online news sites²⁴, so titles such as these

²⁴ See for example: Aikat, D. News on the web: usage trends of an on-line newspaper. *Convergence: The International Journal of Research into New Media Technologies* 4, 4 (Dec. 1998), 94-110.

would have substantial impact on visitors to that site. Examples of such articles headlines (examples of actual headlines from the 178 articles) are:

- *British socialite to face Epstein accuser's defamation lawsuit*
- *Alleged Epstein madam denies calling teen 'sex slave' a liar*
- *Sex-Trafficking Denials Aren't Libel, Brit Says*
- *U.S. woman who claimed she was forced to have sex with Prince Andrew sues British socialite for denying that she recruited her to be a sex slave*
- *British 'madam' accused of recruiting teenage 'sex slave' Virginia Roberts for Prince Andrew's friend Jeffrey Epstein denies calling her a liar*
- *Ghislaine Maxwell denies calling Virginia Roberts a liar*
- *Bill Clinton Pedophile Sex Scandal: Socialite Denies Calling ENQUIRER Source A Liar, Woman files defamation suit against British publishing magnate*
- *Jeffrey Epstein sex slave accuser sues Brit socialite for defamation*
- *Lawyers for British socialite accused of pimping 'sex slave' to Jeffrey Epstein push to dismiss defamation lawsuit.*

57. This is a conservative estimate, and more likely than not, articles containing the statements made against Ms. Giuffre have been disseminated to more individuals.

X. WHY THE ESTIMATE IS LOW

58. This (66,909,965 individual unique daily traffic) is a conservative estimate, and it is more likely than not, the statements have received wider dissemination due to factors such as:

- a. Although I spend considerable effort to locate published articles that contained the statements made against Ms. Giuffre, it is reasonable to assume that I have not located all such articles by the time of the submission of this report. So, there are possibly more

sites with articles containing the statements made against Ms. Giuffre that are not included in my calculations, which would increase the dissemination of the articles.

b. The focus of my analysis was the dissemination of online articles containing the statements made against Ms. Giuffre, and I examined only online sources and not print or broadcast media. Many of the media outlets that I did identify have consider print distribution²⁵, which are not included in my calculations, for example, such as:

- The Sun (print circulation) 1,741,838
- Daily Mail (print circulation) 1,562,361
- The Daily Telegraph (print circulation) 472,936
- The Times (print circulation) 402,752
- The Guardian (print circulation) 161,152

c. In my analysis, I did not attempt to measure face-to-face dissemination that may have occurred after individuals may have read articles containing the statements made against Ms. Giuffre, which would increase the count.

d. Naturally, I could not access certain online sources where the statements made against Ms. Giuffre may have been disseminated (e.g., email messages, social media messages, articles behind firewalls, etc.). Therefore, these numbers are not included in my calculations.

e. Also, there are possibly sites that have hosted articles containing the statements made against Ms. Giuffre where the articles have been removed. Therefore, they are not included in my calculations.

²⁵ www.theguardian.com/media/2016/mar/17/independent-mirror-express-and-star-suffer-sharp-fall-in-traffic

f. For sites where one or more of the articles containing the statements made against Ms. Giuffre are posted but where I could not locate or not determine reliable daily unique visitor traffic, I have not included these sites in my calculations. There are 59 (of the 115 sites, 51.3%) where I could not get or not get verifiable traffic data. For example, the traffic numbers for the MSN News (Microsoft) and Yahoo! News are not separated by news and other services, such as search, so I did not include these in the number of people to which the articles containing the statements made against were disseminated.

g. I did not include the dissemination of the articles containing the statements made against Ms. Giuffre directly to social media platforms. However, many of the articles containing the statements made against Ms. Giuffre do include counts of the number of times that individuals shared the article to a social media networks, as shown in Table 2.

i. **Table 2: Number of social media shares by published article containing the statements made against Ms. Giuffre.**

Shares	Date	Domain
12576	2-Jan-15	https://www.theguardian.com
201	3-Jan-15	http://muhammad-ali-ben-marcus.blogspot.qa
1600	3-Jan-15	http://www.dailymail.co.uk
4000	3-Jan-15	http://www.dailymail.co.uk
130	3-Jan-15	http://www.huffingtonpost.co.uk
45	3-Jan-15	http://www.ibtimes.co.uk
6436	3-Jan-15	http://www.mirror.co.uk
55	4-Jan-15	http://newsbite.it
56	4-Jan-15	http://ugandansatheart.blogspot.com
1813	4-Jan-15	http://www.dailyrecord.co.uk
9	4-Jan-15	http://www.express.co.uk
560	4-Jan-15	http://www.huffingtonpost.co.uk
24	4-Jan-15	http://www.ibtimes.co.uk
54	4-Jan-15	http://www.ibtimes.co.uk
198	4-Jan-15	http://www.irishmirror.ie
198	4-Jan-15	http://www.mirror.co.uk
174	4-Jan-15	http://www.nigeriadailynews.news
51	4-Jan-15	http://www.nzherald.co.nz

Shares	Date	Domain
216	4-Jan-15	http://www.telegraph.co.uk
177	4-Jan-15	https://www.theguardian.com
193	4-Jan-15	https://www.theguardian.com
105	5-Jan-15	http://www.dailylife.com.au
192	5-Jan-15	http://www.dailyrecord.co.uk
7	5-Jan-15	http://www.mirror.co.uk
1052	5-Jan-15	http://www.mirror.co.uk
96	5-Jan-15	http://www.nydailynews.com
115	5-Jan-15	https://www.theguardian.com
45	6-Jan-15	http://www.dailymail.co.uk
17	8-Jan-15	http://www.nydailynews.com
114	10-Jan-15	http://www.dailymail.co.uk
1	10-Jan-15	http://www.infiniteunknown.net
1466	10-Jan-15	https://www.theguardian.com
1	13-Jan-15	http://whatiswrongwiththispicture2012.blogspot.qa
256	22-Jan-15	http://www.dailyrecord.co.uk
120	22-Jan-15	http://www.huffingtonpost.co.uk
319	22-Jan-15	http://www.irishmirror.ie
338	22-Jan-15	http://www.mirror.co.uk
21	1-Feb-15	http://www.mirror.co.uk
342	7-Feb-15	https://www.theguardian.com
107	21-Sep-15	http://www.nydailynews.com
33	22-Sep-15	http://www.dailymail.co.uk
205	22-Sep-15	http://www.mirror.co.uk
1	15-Jan-16	http://jewishbusinessnews.com
13	15-Jan-16	http://www.dailymail.co.uk
17	15-Jan-16	http://www.nationalenquirer.com
2	15-Jan-16	http://www.nydailynews.com
7	n.d.	http://www.govtslaves.info
33,758		

ii. As shown in Table 2, the articles containing the statements made against Ms. Giuffre have been shared 33,758 times, mostly on Facebook.

iii. Given that the median number of Facebook ‘friends’ is 200²⁶, this equates to a possible 6,751,600 individuals, in addition to the 33,758 individuals who originally shared

²⁶ <http://www.pewresearch.org/fact-tank/2014/02/03/6-new-facts-about-facebook/>

the articles, to which the articles containing the statements made against Ms. Giuffre could have been disseminated, assuming these individuals are all unique and have not already read one of the articles.

iv. However, I did not include these social media shares in my calculations.

v. Since news article viewing follows a power law²⁷ distribution²⁸, there is no direct linear ratio of number of social media shares to readership. There is published research that does report average of views of an article on a news website and also average social media shares²⁹. In a direct calculation with numbers from this article³⁰, 23 articles views per social media share, using 33,758 social media shares, this would be 776,434 article views. However, this ratio would vary by website, number of daily unique visitors, type of news article, time for accumulating shares, and possibly other factors. Plus, this number would not account for the people receiving the social media share that viewed the title, post, and snippet but did not click on the share to view the article on the website, thereby undercounting views of the articles.

vi. Also, given the topical nature of the underlying news story, one could expect **lower** social media sharing but **higher** article viewing, as people will tend to read articles on such topics privately but not share on social media³¹. So, I would expect the social media number itself to be an undercount.

h. I did not include articles that link to one of the articles containing the statements made against Ms. Giuffre in my calculations of dissemination. Unless the article

²⁷ https://en.wikipedia.org/wiki/Power_law

²⁸ See for example, Tatar, A., de Amorim, M. D., Fdida, S., & Antoniadis, P. (2014). A survey on predicting the popularity of web content. *Journal of Internet Services and Applications*, 5(1), 1.

²⁹ See for example, Castillo, C., El-Haddad, M., Pfeffer, J., & Stempeck, M. (2014, February). Characterizing the life cycle of online news stories using social media reactions. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 211-223). ACM.

³⁰ Castillo, C., El-Haddad, M., Pfeffer, J., & Stempeck, M. (2014, February). Characterizing the life cycle of online news stories using social media reactions. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 211-223). ACM.

³¹ See for example, Agarwal, D., Chen, B. C., and Wang, X. Multi-faceted ranking of news articles using post-read actions. In *Proc. of CIKM*, ACM (2012), 694-703.

directly mentioned the statements made against Ms. Giuffre, I did not include that article in my calculations. So, unless the linking article actually mentioned, referenced, or quoted the statements made against Ms. Giuffre, I did not include it in the calculations.

i. Many sites published multiple articles on multiple days that quoted or referenced the statements made against Ms. Giuffre; however, I did not use these multiple publication dates from the same site in my calculations of unique visitor traffic. If a domain published only one article containing the statements against Ms. Giuffre, then I directly used the unique daily visitors number. If a domain published multiple articles concerning the statements against Ms. Giuffre, I did not count the traffic for the subsequent articles containing the statements made against Ms. Giuffre, even though research shows that repeat traffic to websites is generally only about 30%³², meaning that 70% of the traffic would be unique. However, I was not comfortable using this figure given the nature of these sites, which might have higher repeat visitors day-to-day. Therefore, I did not include the unique visitors to multiple articles in my calculations.

j. Finally, I did not include the count of people who may have been searching and may have seen the statements made against Ms. Giuffre in the search results, without needing to visit the actual articles, as shown in Figure 4.

k. **Figure 4: Example of search results with the statements made against Ms. Giuffre appearing in the result snippets, requiring no need to visit the articles themselves.**

³² Teevan, J., Adar, E., Jones, R. and Potts, M. (2006). History repeats itself: repeat queries in Yahoo's logs. In *Proceedings of the 29th annual international ACM SIGIR conference on Research and development in information retrieval* (SIGIR '06). ACM, New York, NY, USA, 703-704.


← → ↻ <https://www.google.com/#q=Ghislaine+Maxwell+obvious+lies>

Google Ghislaine Maxwell obvious lies

All Images News Videos Shopping More ▾ Search tools

About 17,000 results (0.51 seconds)

Images for Ghislaine Maxwell obvious lies [Report images](#)



[More images for Ghislaine Maxwell obvious lies](#)

Ghislaine Maxwell denies calling Virginia Roberts a liar | Daily Mail ...
www.dailymail.co.uk/.../British-madam-accused-recruiting-teenage-sex-sla... ▾ Daily Mail ▾
 Jan 15, 2016 - Ghislaine Maxwell (pictured), who is accused of recruiting Virginia Roberts as ... of saying Roberts' allegations were 'untrue' and 'obvious lies'.

Ghislaine Maxwell still has connections despite link to Prince Andrew ...
www.dailymail.co.uk/.../Ghislaine-Maxwell-s-link-sex-scandal-court-papers... ▾ Daily Mail ▾
 Jan 9, 2016 - Ghislaine Maxwell stands accused of 'procuring' girls, including ... Ms Maxwell has called her claims 'obvious lies', while the Prince has put out ...

British socialite to face Epstein accuser's defamation lawsuit | Reuters
www.reuters.com/article/us-maxwell-defamation-lawsuit-idUSKCN0W34ZN ▾ Reuters ▾
 Mar 1, 2016 - ... socialite Ghislaine Maxwell of defamation for calling her allegations lies, ... been "shown to be untrue," and that her "claims are obvious lies."

Ghislaine Maxwell denies being a madam for paedophile Jeffrey ...
www.express.co.uk/News/World ▾ Daily Express ▾
 Jan 4, 2016 - Ghislaine Maxwell's original response to the lies and defamatory ... "(The woman's) claims are obvious lies and ... should be treated as such and ...

Jeffrey Epstein sex slave accuser sues Brit socialite - NY Daily News
www.nydailynews.com/.../jeffrey-epstein-sex-slave-accuser-sue... ▾ New York Daily News ▾
 Sep 21, 2015 - She says Ghislaine Maxwell set up the sex encounters with the New York ... by Maxwell's spokesman calling Guffre's claims "obvious lies."

Socialite wants defamation lawsuit by 'sex slave' tossed - NY Daily News

XI. ACCURACY OF THE TRAFFIC NUMBERS AND ADDITIONAL VERIFICATION

59. Concerning the accuracy of the analysis, the number of domains where the statements made against Ms. Giuffre have been disseminated is reliable, as this is straightforward to verify (i.e., the article is either posted on a site or it is not). If anything, this is an undercount, as some domains, for example, may have removed such articles, making them no longer available. There are possibly articles containing the statements that I have not been able to locate by the time that I submitted this report.

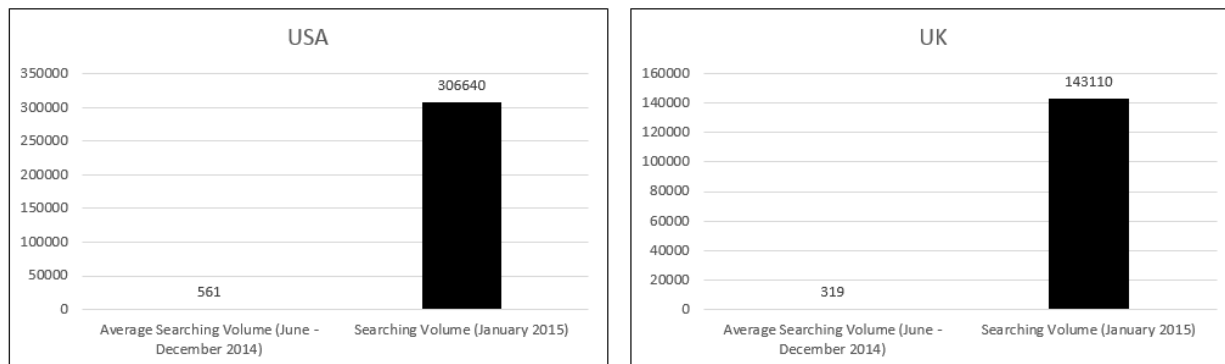
60. Concerning traffic numbers for domains, a unique visitor is typically identified by an identifier stored in a text file, which is based on an individual computer's browser, although more sophisticated methods are also being used. In locating traffic numbers for the domains, I used multiple services when available and attempted to verify via other sources. In case with varying traffic data, I utilized the most conservative (i.e., smallest) number available.

61. I also verified findings from my analysis via other methods and my own experience and training. For example, there are periods of increased publishing of articles containing the statements made against Ms. Giuffre and related stories. One would expect, increases in associated searching during these periods. Using the Google Keyword Tool, which provides search volume for search queries by month, I examined search volume from January 2015 to the date that I filed this report. There was an 54,518% increase in search volume for the keywords *Virginia Giuffre Virginia Roberts Ghislaine Maxwell* in January 2015, relative to the prior 7 months, in the US, and a 44,822% increase for the United Kingdom (UK) in January 2015, relative to the prior 7 months. This is in line with the increase in posting of articles during the same month³³. So, one sees the expected increase in searching for key terms based on the increase posting of articles.

³³ Note: I use the US and the UK as sample countries since there are aspect of the story that relate to each country.

62. Figure 5 shows increase in searching volume in January 2015 for the US and UK relative to the previous 7 months.

63. **Figure 5: Increase in search volume in January 2015 for the US and UK relative to the previous 7 months for the keyphrase *Virginia Giuffre Virginia Roberts Ghislaine Maxwell*.**



XII SUMMARY

64. **The statements made against Ms. Giuffre have been disseminated to at least 115 online media or other sites in 178 separate stories or articles with a combined 66,909,965 individual unique visitors from 2 January 2015 to the date that I filed this report, inclusive. More likely than not, this is a conservative estimate.**

65. Right to Amend: Although I have had access to materials publicly available pertaining to claims in this dispute, I have not been able to review all the material by the deadline for completion of this report. I reserve the right to review and rely on any such material, including at the time of trial. I also reserve the right to issue a supplemental or an amended report if my review of such material results in any significant change or addition to my opinion.

DATED: 09 September 2016

Respectfully submitted,

By _____

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Appendix A Curriculum Vitae



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Affiliate Appointment, Department of Computer Science and Engineering, The Pennsylvania
State University

Affiliate Appointment, Department of Industrial and Manufacturing Engineering, The
Pennsylvania State University

Director, Information Searching and Learning Laboratory, College of Information Sciences and
Technology (ISL²), The Pennsylvania State University

Current Advisory Boards

- The Pennsylvania Technical Assistance Program (PennTAP) (<http://penntap.psu.edu/>)
- CLAK Impressions (<http://www.linkedin.com/company/clak-impressions>)
- Innoblue (<http://www.linkedin.com/company/innoblue>)

Research

Research Goal: Increase the effectiveness and efficiency for accomplishing information tasks
by improving the interaction among people, information, and technology

Research Interests:

I study the uses and affordances of the Web for information searching and ecommerce, with a
focus on interactions among the person, information, and technology. Current active research
areas are **Web searching**, **information retrieval**, **keyword advertising**, **online marketing**,
and **online social networking** within the ecommerce domain.

- **Sponsored search** and **keyword advertising**
- **Social media** as an information source
- **Information searching** and **Web information retrieval**

Short Bio:

Jim has authored or co-authored **250 or so research publications**, with articles appearing in
a multi-disciplinary and extremely wide range of journals and conferences. He is author of the
book, Understanding Sponsored Search: A Coverage of the Core Elements of Keyword

Research

Advertising (Cambridge University Press), author of the book Understanding User - Web Interactions Via Web Analytics, co-author of the book, Web Search: Public Searching of the Web, and co-editor of the book Handbook of Research on Weblog Analysis.

Jim is a full professor with the College of Information Sciences and Technology at **The Pennsylvania State University** and a Principal Scientist in the social computing group of the **Qatar Computing Research Institute, Hamad bin Khalifa University**. He is a graduate of **West Point** and has a PhD in computer science from **Texas A&M University**, along with master degrees from **Texas A&M** (computer science) and **Troy State** (international relations).

Jim is **editor-in-chief** of the journal, Information Processing & Management (Elsevier), a member of the editorial boards of seven international journals, former editor-in-chief of the journal, Internet Research (Emerald), and he has served on the research committee for the Search Engine Marketing Professional Organization (SEMPO). He has received **several awards and honors**, including an ACM Research Award and six application development awards, along with other writing, publishing, research, teaching, and leadership honors.

He has served as a Senior Fellow at the **Pew Research Center** with the Pew Internet and American Life Project and a university expert with the **National Ground Intelligence Center**. He is a Principle Scientist at the Qatar Computing Research Institute.

He has done several **consulting projects** (log analysis, statistical analysis) and **expert witnesses** cases (patent litigation, civil litigation, and class action suits) in the areas of keyword advertising, web analytics, co-registration, domain parking, webpage access, webpage history, and online advertising click fraud.

Education

Ph.D. Computer Science, August 1999 - May 1996

Texas A&M University, College Station, Texas 77843

Dissertation: A Software Agent for Performance Improvement of an Existing Information Retrieval System

Advisor: Dr. Udo Pooch

M.CS. Computer Science, May 1996 - June 1994

Texas A&M University, College Station, Texas 77843

Research Area: Network Performance and Monitoring

M.S. International Relations, August 1994 - June 1992

Troy State University, European Division

Research Thesis: National Competitive Advantage

B.S. Computer Science, May 1985 - June 1981

United States Military Academy, West Point, New York 10996

Engineering Sequence: Electrical Engineering

Academic Appointments

- Current - 2014 **Full Professor**, College of Information Sciences and Technology, The Pennsylvania State University, University Park, PA, 16802, USA.
- Current - 2015 **Principal Scientist**, Qatar Computing Research Institute (QCRI), Hamad Bin Khalifa University, Doha, Qatar
- 2014 - 2011 **University Researcher**, National Ground Intelligence Center, 2055 Boulders Road, Charlottesville, VA 22911
- 2014 - 2009 **Associate Professor**, College of Information Sciences and Technology, The Pennsylvania State University, University Park, PA, 16802, USA.
- 2012 - 2010 **Senior Fellow, Pew Internet and American Life Project, Pew Research Center, 1615 L Street, NW Suite 700 Washington, DC 20036**
- 2009 - 2003 **Assistant Professor**, College of Information Sciences and Technology, The Pennsylvania State University, University Park, PA, 16802, USA. (Previously, School of Information Sciences and Technology)
- 2003 - 2001 **Instructor**, School of Information Sciences and Technology, The Pennsylvania State University, University Park, PA, 16802, USA
- 2000 - 1999 **Lecturer**, Computer Science Program, University of Maryland (Asian Division), Seoul, 104-022, Republic of Korea
- 1999 - 1998 **Assistant Professor**, Department of Electrical Engineering and Computer Science, United States Military Academy, West Point, New York, 10996
- 1998 - 1996 **Lecturer**, Department of Electrical Engineering and Computer Science, United States Military Academy, West Point, New York, 10996, USA.

Honors and Awards

- 2016 **2016 President's Award for Engagement with Students**, The Pennsylvania State University, University Park, Pennsylvania.
- 2015 **Best Paper**: Liu, Z. and Jansen, B. J. (2015) *Subjective versus Objective Questions: Perception of Question Subjectivity in Social Q&A*. 2015 International Conference on Social Computing, Behavioral-Cultural Modeling, and Prediction (SBP15). Washington DC, p. 131-140. 31 Mar.-3 Apr.
- 2011 **Teaching and Learning with Technology Fellow** at Penn State (May 2011 – May 2012). Teaching research fellowship to develop subject-based learning apps that leverage cellular technology, the contextual (location-aware) attributes of mobile technology, and social media. See tit.its.psu.edu/2011/07/24/jim-jansen/

Honors and Awards

- 2011 **Paper Award:** The article, *The Seventeen Theoretical Constructs of Information Searching and Information Retrieval*, published in Journal of the American Society for Information Science and Technology selected as **John Wiley Best JASIST Paper Award 2011** (see http://www.asis.org/awards/jasis_paper.html).
- 2010 Emerald Literati Network **2010 Award for Excellence for Outstanding Reviewer** for the journal Internet Research (<http://info.emeraldinsight.com/authors/literati/index.htm>)
- 2008 **Best Paper**, Jansen, B. J., Zhang, M., and Schultz, C. (2008) *The Effect of Brand on the Evaluation of IT System Performance*. Proceedings of the Southern Association for Information Systems Conference, Richmond, VA, USA 13-15 March 2008
- 2008 Presented with a **Google Faculty Research Award** (\$50,000)
- 2007 Article selected as **Highly Commended Winner** at the Emerald Literati Network Awards for Excellence 2007. Spink, A. and Jansen, B. J. (2006) *Searching multiple federate content Web collections*, Online Information Review. 30(5), 485-495.
- 2004 Worldwide press coverage for book Web Search: Public Searching of the Web, co-authored with Dr. Amanda Spink. Including AP, Yahoo! News, CNN, MSN, and numerous other television, radio, Web, and print outlets.
- 2003 Worldwide press coverage and interviews 6/30/2003-7/3/2003 reference article: Jansen, B. J., and Spink, A. (2003) *An analysis of Web pages retrieved and viewed*, IC'03: Internet Computing: Web Mining Session, Las Vegas, 4-6 June, 2003. Including: BBC, Irish Radio, Washington Times, Psychology Today, and several U.S. radio stations.
- 2003 **ISI Most Highly Cited Articles in Field of Web Searching** for the manuscript Jansen, B. J., Spink, A., and Saracevic, T. (2000) *Real Life, Real Users, and Real Needs: A Study and Analysis of User Queries on the Web*, Information Processing & Management. 38(2), 207-227.

The article was identified in May 2003 by ISI Essential Science Indicators to be one of the most cited papers in the research area of Web Searching Behavior.
- 2002 **Highly Commended Article** invited for journal publication. Jansen, B. J. (2002) *Towards Implementing a Cognitive Model of Searching*, Proceedings of the E-Learning 2002 Conference (Web Track), Montreal, Canada. 15-19 October.
- 2002 **Two Crystal Awards of Excellence** for outstanding software development in the communications field.

Honors and Awards

2002 Worldwide press coverage and interviews 3/31/02- 4/5/02 reference article: Spink, A., Jansen, B. J., Wolfram, D., and Saracevic, T. (2002). *From e-sex to e-commerce: Web search changes*, IEEE Computer, 35(3), 133-135.

Including: Associated Press, BBC, CBC, MSNBC, Wall Street Journal, New York Times, PC World, CNN, Chinese People's Daily, Toronto Star, US News and World Report, San Francisco Chronicle, The Independent (UK), Business Week, Washington Post, Financial Times (UK), Information Week, Web, TV, newspaper (200+) and magazine media.

2002 **Award of Distinction** for interactive Web site development.

2002 **Two Awards of Excellence** for exceptional multimedia application development.

2002 US Army War College **Team of the Year** for outstanding contributions as team manager.

2001 **U.S. Army Visual Information Award** for multimedia development.

2000 **Highly Commended Award** by MCB Publishers, for: Spink, A., Bateman, J., and Jansen, B. J. (1999) *Searching the Web: A survey of Excite users*, Journal of Internet Research: Electronic Networking Applications and Policy, 9(2), 117-128.

1998 **Top Paper Award** for: Spink, A., Bateman, J., and Jansen, B. J. (1998) *Users' searching behavior on the Excite Web search engine*, 1999 World Conference on the WWW and Internet, Orlando, Florida.

1997 **ACM Student Research Award** for: Jansen, B. J. (1997) *Simulated Annealing for Query Results Ranking*, Computer Science Education Conference, San Jose, CA. 28 – 30 February.

1992 **Writing and Research Award**, U.S. Marine Corps University.

1992 **Research Award** from U.S. Army Trainer Journal

Books

Jansen, B. J. (2011). Understanding Sponsored Search: Coverage of the Core Elements of Keyword Advertising. Cambridge University Press: Cambridge, UK.

Jansen, B. J. (2009) Understanding User – Web Interactions via Web Analytics. Morgan-Claypool Lecture Series. Marchionini, G. (Ed). Morgan-Claypool: San Rafael, CA.

Jansen, B. J., Spink, A., and Taksa, I. Editors. (2009) Handbook of Research on Web Log Analysis, Hershey, PA: Idea Group Publishing.

Books

Spink, A., and **Jansen, B. J.** (2004) Web Search: Public Searching of the Web, Dordrecht: Kluwer Academic Publishers.

Parts of Books

Jansen, B. J. (2016) *Log Analysis*. Research Methods in Library and Information Science. Libraries Unlimited.

Mukherjee, P, Kozlek, B., Gyorke, A., Camplese, C. and **Jansen, B. J.** (2014) *Leveraging Mobile Technology to Enhance Both Competition and Cooperation in an Undergraduate STEM Course*. Innovative Practices in Teaching Information Sciences and Technology: Experience Reports and Reflections. p. 167-178. New York: Springer.

Reddy, M. C., **Jansen, B. J.**, Spence, P. R. (2010) *Collaborative Information Behavior: Exploring Collaboration and Coordination During Information Seeking and Retrieval Activities*. Foster, J. (Ed.), Collaborative Information Behavior: User Engagement and Communication Sharing. p. 73 - 88. Hershey, PA: IGI.

Booth, D., and **Jansen, B. J.** (2009) *A review of methodologies for analyzing Websites*. In B. J. Jansen, A. Spink & I. Taksa (Eds.), Handbook of Web Log Analysis. p. 143-164. Hershey, PA: IGI.

Jansen, B. J. (2009) *The methodology of search log analysis*. In B. J. Jansen, A. Spink & I. Taksa (Eds.), Handbook of Web log analysis. p. 100-123. Hershey, PA: IGI.

Jansen, B. J., Taksa, I., and Spink, A. (2009) *Research and methodological foundations of transaction log analysis*. In B. J. Jansen, A. Spink & I. Taksa (Eds.), Handbook of Web Log Analysis. p. 1-17. Hershey, PA: IGI.

Rainie, L., and **Jansen, B. J.** (2009) *Surveys as a complementary method to Web log analysis*. In B. J. Jansen, A. Spink & I. Taksa (Eds.), Handbook of Web Log Analysis. p. 39-64. Hershey, PA: IGI.

Taksa, I., Spink, A., and **Jansen, B. J.** (2009) *A review of methods in presented in the handbook of weblog analysis*. In B. J. Jansen, A. Spink & I. Taksa (Eds.), Handbook of Web Log Analysis. p. -358. Hershey, PA: IGI.

Zhang, M., and **Jansen, B. J.** (2009) *Using action-object pairs as a conceptual framework for transaction log analysis*. In B. J. Jansen, A. Spink & Taksa, I. (Eds.), Handbook of Web Log Analysis. p. 416-435. Hershey, PA: IGI.

Jansen, B. J. and Spink, A. (2008) *Logfile analysis*. In International Encyclopedia of Communication. Editors: Robin Mansell. Oxford: Blackwell Press. 6. p. 2730-2734.

Parts of Books

Jansen, B. J. and Spink, A. (2008) *How to Define Searching Sessions on Web Search Engines*. In Lecture Notes in Artificial Intelligence, LNAI 4198, Advances in Web Mining and Web Usage Analysis. Editors: Olfa Nasraoui, Osmar Zaiane, Myra Spiliopoulou, Bamshad Mobasher, Philip Yu, Brij Masand. p. 92 – 109. Berlin Heidelberg: Springer-Verlag.

Jansen, B. J., Berkheiser, W, Spink, A., and Pedersen, J. (2007) *How people search for governmental information on the Web*. In: Encyclopedia of Digital Government. Editors: Ari-Veikko Anttiroiko and Matti Malkia. p. 933-939. Hershey, PA: Idea Group Publishing.

Wolfe, R., **Jansen, B. J.**, and Spink, A. (2006) *Semantics and the medical Web: A review of barriers and breakthroughs in effective healthcare query*. In: Advances in Electronic Business. Vol. II. Editors: E. Li and D.C. Timon. p. 267-279. Hershey, PA: Idea Group Publishing.

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Jansen, B. J. and Spink, A. (2004) *An analysis of documents viewing patterns of Web search engine users*. In Web Mining: Applications and Techniques. Editor: Anthony Scime. p. 339-354. Hershey, PA: Idea Group Publishing.

Jansen, B. J. (2004) *The use of query operators and their effect on the results of Web search engines*. In Issues of Human Computer Interaction. Editor: Dr. Anabela Sarmento. p. 50-72. Hershey, PA: Idea Group Publishing.

Refereed Journal Articles

Coughlin, D. and **Jansen, B. J.** (2016) *Modeling Journal Bibliometrics to Predict Downloads and Inform Purchase Decisions at University Research Libraries*. Journal of the Association for Information Science and Technology.

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Ortiz-Cordova, A. and **Jansen, B. J.** (2016) *Associating Searching on Search Engines to Subsequent Searching on Sites*. International Journal of Information Systems in the Service Sector. 8(2), 30-43.

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Mukherjee, P., Kozlek, B., **Jansen, B. J.**, Gyorke, A., and Campese, C. (2014) *Designing a Mobile and Socially Networked Learning Assistant for a University-level Keyword Advertising Course*. MERLOT Journal of Online Learning and Teaching. 10(3), 351-373.

Yang, Y., Qin, R., Zhang, J., Zeng, D., and **Jansen, B. J.** (2014) *Budget Planning for Coupled Campaigns in Sponsored Search*. International Journal of Electronic Commerce. 18(3), 39-66.

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Jansen, B. J., Moore, K., and Carman, S. (2013) *Evaluating The Performance of Demographic Targeting Using Gender in Keyword Advertising*. Information Processing & Management. 49(1), 286-302.

Jansen, B. J., Zhang, L., and Mattila, A. S. (2012) *Investigating Brand Knowledge of Web Search Engines: User Reactions to Search Engine Logos*. Electronic Commerce Research. 12(4), 429-454.

Zhang, L., **Jansen, B. J.**, Mattila, A. S. (2012) *A Branding Model for Web Search Engines*. International Journal of Internet Marketing and Advertising. 7(3), 195 – 216.

Ortiz-Cordova, A. and **Jansen, B. J.** (2012) *Classifying Web Search Queries in Order to Identify High Revenue Generating Customers*. Journal of the American Society for Information Science and Technology. 63(7), 1426 – 1441.

Zhang, M., **Jansen, B. J.**, and Chowdhury, A. (2011) *Influence of Business Engagement in Online Word-of-mouth Communication on Twitter: A Path Analysis*. Electronic Markets: The International Journal on Networked Business. 21(3), 161-175.

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Jansen, B. J., Sobel, K. and Cook, G. (2011) *Classifying Ecommerce Information Sharing Behaviour by Youths on Social Networking Sites*. Journal of Information Science. 37(2), 120-136.

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Kuthuria, A., **Jansen, B. J.**, Hafernik, C. (2010) *K-means Clustering to Determine User Intent of Web Queries*. Journal of Internet Research: Electronic Networking Applications and Policy. 20(5), 563-581.

Rosso, M. A. and **Jansen, B. J.** (2010) *Brand Names as Keywords in Sponsored Search Advertising*. Communications of the Association for Information Systems. 27(1), Article 6. Available at: <http://aisel.aisnet.org/cais/vol27/iss1/6>

**JASIST
Best
Paper**

Jansen, B. J., and Rieh, S. (2010) *The Seventeen Theoretical Constructs of Information Searching and Information Retrieval*. Journal of the American Society for Information Science and Technology. 61(8), 1517-1534.

Jansen, B. J., Tapia, A. H., and Spink, A. (2010) *Searching for salvation: An analysis of US religious searching on the World Wide Web*, Religion. 40(1), 39-52.

**Highly
Cited**

Jansen, B. J., Zhang, M, Sobel, K, and Chowdury, A. (2009) *Twitter Power: Tweets as Electronic Word of Mouth*. Journal of the American Society for Information Science and Technology. 60(11), 2169-2188.

Recognized as one of the **top 10 most highly cited papers in JASIST** published since 2001 http://www.asis.org/Bulletin/Aug-12/AugSep12_Bar-Ilan.html

Jansen, B. J., Booth, D. and Smith, B. (2009) *Using the taxonomy of cognitive learning to model online searching*. Information Processing & Management. 45(6), 643-663.

Tjondronegoro, D., Spink, A., and **Jansen, B. J.** (2009) *A Study and Comparison of Multimedia Web Searching: 1997-2006*. Journal of the American Society for Information Science and Technology. 60(9), 1756-1768.

Jansen, B. J., Zhang, M., and Schultz, C. (2009). *Search engine brand and the effect on user perception of searching performance*. Journal of the American Society for Information Science and Technology. 60(8), 1572-1595.

Flaherty, T. B., **Jansen, B. J.**, Hofacker, C., and Murphy, J. (2009). *Insights on the Google Online Marketing Challenge and Its Successful Classroom Implementation*. Journal of Online Learning and Teaching. 5(2), 446-457.

Refereed Journal Articles

Jansen, B. J., Booth, D. L., and Spink, A. (2009). *Patterns of query modification during Web searching.* Journal of the American Society for Information Science and Technology. 60(7), 1358-1371.

Jansen, B. J., Flaherty, T.B., Baeza-Yates, R., Hunter, L., Kitts, B., and Murphy, J. (2009). *The Components and Impact of Sponsored Search.* IEEE Computer. 42(5) 98-101.

Rosso, M., McClelland, M. K., **Jansen, B. J.,** and Fleming, S. W. (2009) *Using Google AdWords in the MBA MIS Course.* Journal of Information System Education. 20(1), 41-50.

Zhang, Y., **Jansen, B. J.,** and Spink, A. (2009) *Identification of factors predicting clickthrough in Web searching using neural network analysis.* Journal of the American Society for Information Science and Technology. 60(3), 557-570.

Zhang, Y., **Jansen, B. J.,** and Spink, A. (2009) *Time Series Analysis of a Web Search Engine Transaction Log,* Information Processing & Management. 45(2), 230-245.

Jansen, B. J. and Spink, A. (2009) *Investigating Customer Click through Behavior with Integrated Sponsored and Non-Sponsored Results,* International Journal of Internet Marketing and Advertisement, 5(1/2), 74-94.

Jansen, B. J., Ciamacca, C., and Spink, A. (2008) *An Analysis of travel searching on the Web,* Journal of Information Technology and Tourism. 10(2), 101-118.

Jansen, B. J. and Mullen, T. (2008) *Sponsored search: An overview of the concept, history, and technology,* International Journal of Electronic Business. 6(2), 114 – 131.

Spink, A., and **Jansen, B. J.** (2008) *Trends in searching for business and e-commerce information on Web search engines,* International Journal of Electronic Commerce. 9(2), 154-161.

Highly Cited

Jansen, B. J., Booth, D., and Spink, A. (2008) *Determining the informational, navigational, and transactional intent of Web queries,* Information Processing & Management. 44(3), 1251-1266.

The most cited article in IP&M published since 2008
(<http://www.journals.elsevier.com/information-processing-and-management/most-cited-articles/>)

Jansen, B. J. (2008) *Searching for digital Images on the Web,* Journal of Documentation. 64(1), 81-101.

Jansen, B. J. and Eastman, C. (2008) *Limitations of advanced searching techniques on Web search engines,* Journal of Electronic Resources in Law Librarianship. 1(1), 55-81.

Refereed Journal Articles**Highly
Cited**

Reddy, M. C. and Jansen, B. J. (2008) *A model for understanding collaborative information behavior in context: A study of two healthcare teams*, Information Processing & Management. 44 (1), 256-273.

One of the Top 25 most cited articles in IP&M published since 2008
(<http://www.journals.elsevier.com/information-processing-and-management/most-cited-articles/>)

Jansen, B. J., Zhang, M., and Spink, A. (2007) *Patterns and transitions of query reformulation during Web searching*, International Journal of Web Information Systems. 3(4), 328-340.

Jansen, B. J., Brown, A., and Resnick, M. (2007) *Factors relating to the decision to click-on a sponsored link*, Decision Support Systems. 44(1), 46-59.

Jansen, B. J. and Spink, A. (2007) *Sponsored search: Is money a motivator for providing relevant results?*, IEEE Computer. 40(8), 50-55.

Jansen, B. J. (2007) *Click fraud*. IEEE Computer. 40(7), 85-86.

Jansen, B. J. (2007) *The comparative effectiveness of sponsored and non-sponsored results for Web ecommerce queries*, ACM Transactions on the Web. 1(1), Article 3.

Jansen, B. J., Spink, A., Blakely, C., and Koshman, S. (2007) *Defining a session on Web search engines*, Journal of the American Society for Information Science and Technology. 58(6), 862-871.

Jansen, B. J., Spink, A., and Koshman, S. (2007) *Web searcher interactions with the Dogpile.com meta-search engine*, Journal of the American Society for Information Science and Technology. 58(5), 744-755.

Jansen, B. J., Mullen, T., Spink, A., and Pederson, J. (2006) *Automated gathering of Web information: An in-depth examination of agents interacting with search engines*, ACM Transactions on Internet Technology. 6(4), 442-464.

Jansen, B. J. and Resnick, M. (2006) *An examination of searcher's perceptions of non-sponsored and sponsored links during ecommerce Web searching*, Journal of the American Society for Information Science and Technology. 57(14), 1949-1961.

Koshman, S. Spink, A., Jansen, B. J., Park, M., and Fields, C. (2006) *Web Searching on the Vivisimo search engine*, Journal of the American Society for Information Science and Technology. 57(14), 1875-1887.

Spink, A., Jansen, B. J., Blakely, C., and Koshman, S. (2006) *Overlap among major search engines*, Journal of Internet Research: Electronic Networking Applications and Policy. 16(4), 419-426.

Refereed Journal Articles

Jansen, B. J. (2006) *Search log analysis: What is it; what's been done; how to do it*, Library and Information Science Research, 28(3), 407-432.

Paper Award

Spink, A., and **Jansen, B. J.** (2006) *Searching multiple federate content Web collections*, Online Information Review, 30(5), 485-495.

Spink, A., Partridge, H., and **Jansen, B. J.** (2006) *Sexual/pornographic Web searching: Trends analysis*, First Monday, 11(9).
http://www.firstmonday.org/issues/issue11_9/spink/index.html.

Jansen, B. J. (2006) *Paid search*, IEEE Computer, 39(7), 88-90.

Spink, A., **Jansen, B. J.**, Blakely, C., and Koshman, S. (2006) *A study of results overlap and uniqueness among major Web search engines*, Information Processing & Management, 42(5), 1379-1391.

Jansen, B. J. (2006) *Using temporal patterns of interactions to design effective automated searching assistance systems*, Communications of the ACM, 49(4), 72-74.

Jansen, B. J. and Molina, P. (2006) *The effectiveness of Web search engines for retrieving relevant ecommerce links*, Information Processing & Management, 42(4), 1075-1098.

Jansen, B. J. and McNeese, M. D. (2005) *Evaluating the effectiveness of and patterns of interactions with automated assistance in IR systems*, Journal of the American Society for Information Science and Technology, 56(14), 1480-1503.

Most Accessed

Jansen, B. J. and Spink, A. (2005) *How are we searching the World Wide Web?: An analysis of nine search engine transaction logs*, Information Processing & Management, 42(1), 248-263.

Routinely listed as one of the most downloaded articles published in IP&M
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Spink, A., Park, M., **Jansen, B. J.**, and Pedersen, J. (2005) *Multitasking during Web search sessions*, Information Processing & Management, 42(1), 264-275.

Jansen, B. J., Jansen, K. J., and Spink, A. (2005) *Using the Web to look for work: Implications for online job seeking and recruiting*, Journal of Internet Research: Electronic Networking Applications and Policy, 15(1), 49-66.

Jansen, B. J., Spink, A., and Pederson, J. (2005) *Trend analysis of AltaVista Web searching*, Journal of the American Society for Information Science and Technology, 56(6), 559-570.

Jansen, B. J. (2005) *Seeking and implementing automated assistance during the search process*, Information Processing & Management, 41(4), 909-928.

Refereed Journal Articles

Jansen, B. J., Spink, A., and Pederson, J. (2005) *The effect of specialized multimedia collections on Web searching*, Journal of Web Engineering. 3(3/4), 182-199.

Spink, A. and **Jansen, B. J.** (2005) *A study of Web search trends*, Webology. 1(2), Article 4, Available at: <http://www.webology.ir/2004/v1n2/a4.html>.

Jansen, B. J. and Spink, A. (2004) *An analysis of Web searching by European Alltheweb.com users*, Information Processing & Management. 41(2), 361-381.

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Jansen, B. J. and Pooch, U. (2004) *Improving IR system performance using software integration*, Journal of Internet Research: Electronic Networking Applications and Policy. 14(1), 19-33.

Spink, A., Koricich, A., and **Jansen, B. J.** (2004) *Sexual searching on Web search engines*, Cyber-psychology and Behavior. 7(1), 65-72.

Eastman, C. and **Jansen, B. J.** (2003) *Coverage, relevance, and ranking: the impact of query operators on Web search engine results*, ACM Transactions on Information Systems. 21(4), 383-411.

Spink, A., **Jansen, B. J.**, Wolfram, D., and Saracevic, T. (2002) *From e-sex to e-commerce: Web search changes*, IEEE Computer. 35(3), 107-111.

Wolfram, D., Spink, A., **Jansen, B. J.**, and Saracevic, T. (2001) *Vox populi: The public searching of the Web*, Journal of the American Society for Information Science and Technology. 52(12), 1073-1074.

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Jansen, B. J., Spink, A., and Pederson, J. (2003) *Monsters at the Gates: When Softbots Visit Web Search Engines*, Proceedings of the 4th International Conference on Internet Computing, Lap. p. 620-626. Vegas, Nevada. 23-26 June.

Spink, A., Abbas, M., and **Jansen, B. J.** (2003) *Accessing E-commerce Web Information: Implications for Bridging the Digital Divide*, The 2003 Canadian Association for Information Science Conference, p. 213-221. Halifax, CA. 28 May-1 June.

Jansen, B. J. and Spink, A. (2003) *An Analysis of Web Information Seeking and Use: Documents Retrieved Versus Documents Viewed*, Proceedings of the 4th International Conference on Internet Computing, p. 65-69. Las Vegas, Nevada, 23-26 June.

Jansen, B. J. (2003) *Operators Not Needed? The Impact of Query Structure on Web Searching Results*, Information Resource Management Association International Conference, p. 814-817. Philadelphia, PA, 18-21 May.

Duran, S., Eastman, C., and **Jansen, B. J.** (2003) *Nutritional Information on the Web: An Analysis of Information Sought and Information Provided*, Information Resource Management Association International Conference, p. 106-108. Philadelphia, PA. 18-21 May.

Refereed Conference Proceedings

Jansen, B. J. and Spink, A. (2003) *Retrieving and Viewing Web Documents, The 2003 National Online Meeting*, p. 55-57. New York, New York, 6-8 May 2003.

Jansen, B. J. and Eastman, C. (2003) *The Effects of Search Engines and Query Operators on Top Ranked Results*, The IEEE 4th International Conference on Information Technology, Coding and Computing, p. 135-139. Las Vegas, Nevada, 28-30 April.

Jansen, B. J. and Kroner, G. (2003) *The Impact of Automated Assistance on the Information Retrieval Process*, The ACM SIGCHI 2003 Conference on Human Factors in Computing Systems, p. 1004-1006. Fort Lauderdale, Florida, 5-10 April.

Paper Award

Jansen, B. J. (2002) *Towards Implementing a Cognitive Model of Searching*, Proceedings of the E-Learning 2002 Conference (Web Track), p. 493-521. Montreal, Canada, 15-19 October.

Jansen, B. J. (2002) *A Preliminary Mapping of Web Queries Using Existing Image Query Schemes*, Proceedings of the E-Learning 2002 Conference (Web Track), p. 485-492. Montreal, Canada, 15-19 October.

Jansen, B. J., Spink, A., and Pfaff, A. (2000) *Linguistic Aspects of Web Queries*, Proceedings of the Annual Meeting of the American Society of Information Science, p. 169-176. Chicago, IL. 13-16 November.

Jansen, B. J., Spink, A., Goodrum, A., and Pfaff, A. (2000) *Web Query Structure: Implications for IR System Design*, Proceedings of the 4th World Multiconference on Systems, Cybernetics and Informatics, p. 50-55. Orlando, FL. 23-26 July.

Jansen, B. J. (1999) *A Software Agent for Performance Improvement of Existing Information Retrieval Systems*, Proceedings of the 1999 International ACM Conference on Intelligent User Interfaces, p. 122-123. Los Angeles, CA. 5-8 January.

Smith, T. L., Ruocco, A., and **Jansen, B. J. (1999)** *Digital Video in Education*, Proceedings of the ACM Computer Science Education Conference, p. 122-126. New Orleans, LA. 21-25 February.

Jansen, B. J., Spink, A., and Saracevic, T. (1999) *The Use of Relevance Feedback on the Web: Implications for Web IR System Design*, 1999 World Conference on the WWW and Internet, Honolulu, Hawaii. 24-30 October.

Jansen, B. J. and Pooch, U. (1999) *A Software Agent for Performance Improvement of an Existing Information Retrieval Engine*, 5th International Conference on Information Systems Analysis and Synthesis, p. 58-60. Orlando, Florida. 31 July-4 August.

Adams, W. J., **Jansen, B. J.**, and Smith, T. L. (1999) *Planning, Building, and Using a Distributed Digital Library*, Third International Conference on Concepts in Library and Information Science, p. 10-18. Dubrovnik, Croatia. 23-26 May.

Refereed Conference Proceedings

Smith, T. L., Wolfe, D., and **Jansen, B. J.** (1999) *Digital Video in a Twenty-First Century Classroom*, Proceedings of the Information Resources Management Association Conference, Hershey, PA. 16-19 May.

Adams, W. J. and **Jansen, B. J.** (1998) *Distributed Digital Library architecture: The Key to Success for Distance Learning*, Proceedings of the IEEE Conference on Research Issues in Data Engineering, p. 2-8. Orlando, Florida. 23-24 February.

Spink, A., Chang, C., Goz, A., and **Jansen, B. J.** (1998) *User Interactions with the Excite Web Search Engine: A Query Reformulation and Relevance Feedback Analysis*, Proceedings of the Canadian Association of Information Science Conference, p. 342-354. Vancouver, Canada. 5 –10 June.

Jansen, B. J., Spink, A., and Saracevic, T. (1998) *Searchers, the Subjects They Search, and Sufficiency: A Study of a Large Sample of Excite Searches*, Proceedings of the 1998 World Conference on the WWW and Internet, Orlando, Florida.

Spink, A., Bateman, J., and **Jansen, B. J.** (1998) *Users' Searching Behavior on the Excite Web Search Engine*, 1998 World Conference on the WWW and Internet, Orlando, Florida, November.

Howard, R. and **Jansen, B. J.** (1998) *A proxy server experiment: an indication of the changing nature of the Web*, Proceedings of the Seventh International Conference on Computer Communications and Networks, p. 646-649. Lafayette, Louisiana. 12-15 November.

Adams, W. J., **Jansen, B. J.**, and Zoller, R. (1998) *Usability Measurements in an Undergraduate Programming Course*, Software Engineering Conference, Las Vegas, Nevada.

Jansen, B. J., Spink, A., and Saracevic, T. (1998) *Failure analysis in Query Construction: Data and Analysis from a Large Sample of Web Queries*, Proceedings of the 3rd ACM Conference on Digital Libraries, p. 289-290. Pittsburgh, PA. 23-26 July.

Spink, A., Bateman, J., and **Jansen, B. J.** (1998) *User's Searching Behavior on the EXCITE Web Search Engine*, Proceedings of the 19th National Online Meeting, p. 375-386. New York, NY. 12-14 May 1997.

Adams, W. J., Howard, R., and **Jansen, B. J.** (1998) *Distributed Digital Libraries: The Key to Success for Distance Learning*, Computers and Technology in Education, 1 -5 May. Cancun, Mexico.

Jansen, B. J. (1997) *An Information Retrieval Application for Simulated Annealing*, Proceedings of the 2nd ACM Conference on Digital Libraries, p. 259-260. Philadelphia, PA. 25-28 July.

**Paper
Award**

Jansen, B. J. (1997) *Simulated Annealing for Query Results Ranking*, Computer Science Education Conference, San Jose, CA. 28 – 30 February.

Refereed Conference Proceedings

Spink, A., Burkett, L., Spaid, N., Bateman, J., and **Jansen, B. J.** (1997) *Why Users Search the World Wide Web (WWW): The EXCITE Study*, First Internet Librarian Conference, Monterey, CA. 16-18 November.

Adams, W. J. and **Jansen, B. J.** (1997) *Information Technology and the Classroom of the Future*, Proceedings of the Society for Information Technology in Education Conference, Orlando, Florida. 7 May.

Hamilton, J. A. and **Jansen, B. J.** (1997) *Tactical Network Simulation in the US Army*, Simulation Multi-Conference, Atlanta, Georgia. January.

Jansen, B. J. and Hamilton, J. A. (1997) *Modeling and Simulating an Army Information Support Structure*, Simulation Multi-Conference, Atlanta, Georgia. January.

Papers Presented at Technical and Professional Meetings

An, J., Cho, H.Y., Kwak, H., and **Jansen, B. J.** (2016) *Towards Automatic Persona Generation Using Social Media*. The Third International Symposium on Social Networks Analysis, Management and Security (SNAMS 2016), The 4th International Conference on Future Internet of Things and Cloud. 22-24 August.

Mukherjee, P. and **Jansen, B. J.** (2016) *The Changing Nature of Viewership: Formality of Social Media Conversations*. Workshop on Following user pathways: Using cross platform and mixed methods analysis in social media studies. ACM Conference on Human Factors in Computing Systems (CHI2016), San Jose, CA, USA, 7-12 May.

Kwon, S., Abbar, S. and **Jansen, B. J.** (2016) *Identifying Virality Attributes of Arabic Language News Articles*. Qatar Foundation Annual Research Conference 2016 (ARC'16), Doha, Qatar. 22 March.

An, J., Kwan, H., Cho, H., Hassen, M.Z., and **Jansen, B. J.** (2016) *Efforts Towards Automatically Generating Personas in Real-time Using Actual User Data*. Qatar Foundation Annual Research Conference 2016 (ARC'16), Doha, Qatar. 22 March.

Mukherjee, P. and **Jansen, B. J.** (2015) *Correlation of Brand Mentions in Social Media and Web Searching Before and After Real Life Events: Phase Analysis of Social Media and Search Data for Super Bowl 2015 Commercials*. 1st International Workshop on Event Analytics using Social Media Data at The IEEE International Conference on Data Mining series (ICDM 2015), Atlantic City, New Jersey, USA, 14 Nov.

Mukherjee, P. and **Jansen, B. J.** (2015) *Analyzing the Social Soundtrack From Second Screens Before, During, and After Real-life Events*. The First International Workshop on Online Social Networks Technologies, 2015 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), Dead Sea, Jordan. 3-5 Nov.

Papers Presented at Technical and Professional Meetings

Jansen, B. J., Wong, J. S., Jablowski, K.W., Divinsky, A., Liu, Z., and Pursel, B. (2014) *Classifying MOOC Discussion Forum Posts as Information Seeking Interactions and Levels of Cognitive Learning*. Workshop on Learning at Scale at ACM CHI Conference on Human Factors in Computing Systems, (CHI 2014), Toronto, CA. 26 April - 1 May.

Liu, Z. and **Jansen, B. J.** (2012) *Factors Influencing the Response Rate in Social Question and Answering Behavior*. Workshop on Social Media Question Asking at 16th ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW 2013). 23-27 February. San Antonio, Texas.

Jansen, B. J. (2012) *Gender Demographic Targeting in Sponsored Search*. INFORMS International 2012. 24-27 June. Beijing, China.

Jansen, B. J. (2012) *Using Mobile Apps to Enhance Classroom Learning*. Teaching and Learning with Technology, University Park, PA, 24 March

Rosso, M. and **Jansen, B. J.** (2010) *Smart Marketing or Bait & Switch? Competitors' Brands as Keywords in Online Advertising*. 4th Workshop on Information Credibility on the Web (WICOW 2010). World Wide Web Conference (WWW 2010), Raleigh, NC. 26-30 April.

Jansen, B. J. (2009) *System Controlled Assistance for Improving Search Performance*. Human-Computer Interaction and Information Retrieval. Workshop. Washington, DC. 23 October.

Jansen, B. J., Zhang, M, Sobel, K, and Chowdury, A, (2009) *The Commercial Impact of Social Mediating Technologies: Micro-blogging as Online Word-of-Mouth Branding*. ACM Conference on Computer Human Interaction (CHI2009). Boston, Massachusetts. 4 - 9 April.

Neale, L., Hunter, L., **Jansen, B. J.**, Murphy, J. (2008) *The Google Online Marketing Challenge: A Global Teaching and Learning Initiative*. 2008 Society for Marketing Advances Annual Conference. 4-9 November. St Petersburg, Florida.

Jansen, B. J., Rosso, M., Russell, D., and Detlor, B. (2008) *The Google Online Marketing Challenge: A Multi-Disciplinary Global Teaching and Learning Initiative Using Sponsored Search*. 2008 Annual Meeting of the American Society for Information Science and Technology. 24-29 October Columbus, Ohio.

Jansen, B. J. (2008). *Viewing Searching Systems as Learning Systems*. Second Workshop on Human-Computer Interaction and Information Retrieval. 23 October. Redmond, Washington.

Murphy, J., Canhoto, A., Hofacker, C., Hunter, L., **Jansen, B. J.**, and Voorhees, C. (2008) *The Google Online Marketing Challenge: A Global Teaching and Learning Initiative*. 2008 American Marketing Association Summer Marketing Educators' Conference. 8-11 August. San Diego, California.

Papers Presented at Technical and Professional Meetings

Reddy, M. and **Jansen, B. J.** (2008) *Learning about Potential Users of Collaborative Information Retrieval Systems*. Workshop on Collaborative Information Retrieval, Joint Conference on Digital Libraries (JCDL 2008). 19 June. Pittsburgh, Pennsylvania.

Jansen, B. J., Bhavnani, S., Murray, G. C., Spink, A. and Wolfram, D. (2007) *Web Log Analysis Panel*, 2007 Annual Meeting of the American Society for Information Science and Technology. Milwaukee, Wisconsin. 18-25 October.

Spink, A. and **Jansen, B. J.** (2007) *Web Research - Results from Large-Scale Web Data Analysis*, ARC Research Network Enterprise Information Infrastructure Workshop on Data From the Field. Sydney, Australia. 24th May.

Jansen, B. J. and Spink, A. (2007) *The Effect on Click-through of Combining Sponsored and Non-Sponsored Search Engine Results in a Single Listing*, 16th International World Wide Web Conference (WWW2007) Workshop on Sponsored Search Auctions. Banff, Canada. 8-12 May.

Paper: http://opim.wharton.upenn.edu/ssa3/pdf/submission_96.pdf

Jansen, B. J. (2007) *Preserving the Collective Expressions of the Human Consciences*, 16th International World Wide Web Conference (WWW2007) Workshop on Query Log Analysis: Social and Technical Challenges. Banff, Canada. 8-12 May.

Paper: http://www2007.org/workshops/paper_58.pdf

Slides: <http://querylogs2007.webir.org/slides/JimJansenQL2007.pdf>

Jansen, B. J., Smith, B., and Booth, D. (2007) *Learning as a Paradigm for Understanding Exploratory Search*, Conference on Human Factors in Computing Systems (SIGCHI), Workshop on Exploratory Search Interfaces. San Jose, California. 28 April - 3 May.

Spink, A., Alvarado-Albertorio, F., and **Jansen, B. J.** (2007) *Web Search Behavior: What is Normative?*, Society of Australasian Social Psychologists (SASP) Conference. Brisbane, Australia. 12 – 15 April.

Jansen, B. J. and Spink, A. (2006) *Characteristics of searching on Web meta-search engines*, American Society for Information Science and Technology: Human Computer Interaction Workshop. Austin, TX. 3-9 November.

Jansen, B. J. (2006) *Implications of Trust of Sponsored Links for E-commerce Web Searching*, 6th Annual SIG-USE Research Symposium. American Society for Information Science and Technology (ASIS&T) Annual Conference. Austin, TX. 4 November.

Spink, A. and **Jansen, B. J.** (2006) *Web Searching: Trends and Impacts*, Oxford Internet Institute International Symposium. Journal of Information, Communication, Society: 10th Anniversary International Symposium. University of York, UK. 20 – 22 September.
<http://www.york.ac.uk/res/siru/icsspinketal.htm>

Papers Presented at Technical and Professional Meetings

Jansen, B. J., Spink, A., Kathura, V., and Koshman, S. (2006) *How to Define Searching Sessions on Web Search Engines*, Workshop on Web Mining and Web Usage Analysis. The 12th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2006). Philadelphia, Pennsylvania. 20-23 August.

Jansen, B. J. (2006) *Adversarial Information Retrieval Aspects of Sponsored Search*, Second International Workshop on Adversarial Information Retrieval on the Web (AIRWeb 2006). The 29th Annual International ACM SIGIR Conference on Research & Development on Information Retrieval (SIGIR2006). Seattle, Washington. 6-11 August.

Jansen, B. J., Ramadoss, R. Zhang, M., and Zang, N. (2006) *Wrapper: An Application for Evaluating Exploratory Searching Outside of the Lab*, SIGIR 2006 Workshop on Evaluating Exploratory Search Systems. The 29th Annual International ACM SIGIR Conference on Research & Development on Information Retrieval (SIGIR2006). Seattle, Washington. 6-11 August.

Buzikashvili, N. and **Jansen, B. J.** (2006) *Limits of the Web Log Analysis Artifacts*, Workshop on Logging Traces of Web Activity: The Mechanics of Data Collection, The Fifteenth International World Wide Web Conference (WWW 2006). Edinburgh, Scotland. 22-26 May.

Jansen, B. J. (2006) *The Wrapper: An Open Source Application for Logging User – System Interactions during Searching Studies*, Workshop on Logging Traces of Web Activity: The Mechanics of Data Collection. The Fifteenth International World Wide Web Conference (WWW 2006). Edinburgh, Scotland. 22-26 May.

Jansen, B. J., Rieh, S.Y., Spink, A., Wang, P., and Wolfram, D. (2005) *Panel Presentation: Internet Usage Transaction Log Studies: The Next Generation*, American Society for Information Science & Technology 2005 Annual Meeting. Charlotte, North Carolina. 28 October – 2 November.

Toms, E.L., **Jansen, B. J.**, and Muresan, G. (2005) *Panel Presentation: Evaluating Success in Search Systems*, American Society for Information Science & Technology 2005 Annual Meeting. Charlotte, North Carolina. 28 October – 2 November.

Jansen, B. J. (2005) *A Multi-Disciplinary, Multi-Level, and Multi-Spectrum View of Interaction*, The First Conference of the i-School Community: Bridging Disciplines to Confront Grand Challenges. 28-30 September 2005, State College, PA.

Jansen, B. J. and Resnick, M. (2005) *Examining Searcher Perceptions of and Interactions with Sponsored Results*, Workshop on Sponsored Search Auctions, The Sixth ACM Conference on Electronic Commerce (EC'05). Vancouver, Canada. 5-8 June.

Jansen, B. J. (2005) *Automated Searching Assistance for Exploratory Search*, Seminar on Exploratory Search Interfaces at the University of Maryland sponsored by the Human-Computer Interaction (HCI) Lab. College Park, Maryland. 2 June.

Papers Presented at Technical and Professional Meetings

Shingle, A. **Jansen, B. J.**, and Spink, A. (2005) *Television Advertising of Prescription Drugs: A Study of Its Effect on Consumer Web Searching*, IEEE 6th International Conference on Information Technology, Coding and Computing, Las Vegas, Nevada, 11-13 April, 2005.

Jansen, B. J., Spink, A., and Pederson, J. (2004) *An Analysis of Multimedia Searching on AltaVista*, Presentation at Workshop on User Searching, World Wide Web Conference, New York, New York, 18 May 2004.

De Ycaza, S., Doran, S., Eastman, C., and **Jansen, B. J.** (2003) *Nutritional Information on the Web: An Analysis of Information Sought and Information Provided*, South Carolina Nutrition Research Summit, Columbia, SC. 17 October 2004.

Jansen, B. J. (1998) *An Analysis of User Queries on the Web: The Implications for the Design of Military Information Retrieval Systems*, Fifth Annual US Army Research Laboratory and United States Military Academy Technical Symposium, West Point, New York.

Jansen, B. J. (1997) *Simulated Annealing in Information Retrieval*, Fifth Annual US Army Research Laboratory and United States Military Academy Technical Symposium, West Point, New York.

Adams, W. J. and **Jansen, B. J.** (1997) *Integrating Usability Design Principles into an Existing Engineering Curriculum*, The American Society for Engineering Education National Conference, Milwaukee, Wisconsin.

Jansen, B. J. and Adams, W. L. (1997) *Integrating User Centered Design into an Introductory Engineering Course*, American Society for Engineering Education Zone 1 Meeting, West Point, New York.

Scholarly Reports

Jansen, B. J. (2011) *The civic and community engagement of religiously active Americans*. Pew Internet & American Life Project, Pew Research Center. 13 December.
<http://pewinternet.org/Reports/2011/Social-side-of-religious.aspx>

Jansen, B. J. (2010) *65% of Internet Users Have Paid for Online Content*. Pew Internet & American Life Project, Pew Research Center. 30 December.
<http://www.pewinternet.org/Reports/2010/Paying-for-Content.aspx>

Jansen, B. J. (2010) *Use of the internet by higher income households*. Pew Internet & American Life Project, Pew Research Center. 24 November.
<http://www.pewinternet.org/Reports/2010/Better-off-households.aspx>

Jansen, B. J. (2010) *Online Product Research*. Pew Internet & American Life Project, Pew Research Center. 29 September.
<http://pewinternet.org/Reports/2010/Online-Product-Research.aspx>

Funded Projects, Grants, Commissions, and Contracts	
2015 - 2014	Title: Web Analytics for a Research University Library Granting Agency: Penn State, University Library Total Amount: \$19,717 Role: Principal Investigator
2015 - 2013	Title: Exploring Scholarly Discourse in MOOC Discussion Forums Granting Agency: Penn State, Center for Online Innovation in Learning Total Amount: \$30,383 Role: Principal Investigator
2014 - 2010	Title: Broadband to Support SMEs in Pennsylvania Granting Agency: Commonwealth of Pennsylvania Total Amount: \$500,000 Role: Faculty Investigator (\$70,000)
2014 - 2010	Title: Semantic CiteSeerX Granting Agency: National Science Foundation Total Amount: \$1,100,000 Role: Principal Investigator (\$130,000)
2011 - 2008	Title: Affective and Cognitive Factors Affecting the Evaluation of Search Engines by Users Granting Agency: Google Amount: \$50,000 Role: Principal Investigator
2011 - 2009	Title: Using Keyword Advertising for Economic and Workforce Development Granting Agency: The Pennsylvania State University Amount: \$25,000 Role: Principal Investigator
2011 - 2010	Title: Toolkits for Deployable Best Practices Granting Agency: Office of Naval Research STTR Phase II Total Amount: \$750,000 Role: Principal Investigator (\$87,500)
2011 - 2010	Title: RAPID: Text Message-based Infrastructure for Emergency Response Granting Agency: National Science Foundation Total Amount: \$75,000 Role: Principal Investigator (\$15,000)

Funded Projects, Grants, Commissions, and Contracts	
2009 - 2008	Title: Toolkits for Deployable Best Practices Granting Agency: Office of Naval Research STTR Phase I Total Amount: \$100,000 Role: Principal Investigator (\$15,000)
2009 - 2007	Title: REU Supplement for CRI: Collaborative: Next Generation CiteSeer Granting Agency: National Science Foundation Amount: \$12,000 Role: Co-Principal Investigator (\$12,000).
2009 - 2006	Title: Synchronized Interactions Among Users, Systems, and Information Granting Agency: Air Force Research Lab Amount: \$463,000 Role: Principal Investigator (\$463,000).
2008 - 2005	Title: The Next Generation CiteSeer Granting Agency: National Science Foundation Amount: approximately \$1,444,984 Role: Co-principal Investigator with Dr. Lee Giles, Dr. Susan Gauch, and Dr. Jack Carroll (\$48,701)
2009 - 2007	Title: Triggers in Collaborative Information Searching Granting Agency: National Science Foundation Amount: \$76,000 Role: Co-principal Investigator with Dr. Madhu Reddy (\$18,119)
2009 - 2008	Title: REU Supplement for Triggers in Collaborative Information Searching Granting Agency: National Science Foundation Amount: \$12,000 Role: Co-principal Investigator with Dr. Madhu Reddy (\$6,000)
2007 - 2006	Title: REU Supplement for CRI: Collaborative: Next Generation CiteSeer Granting Agency: National Science Foundation Amount: \$9,000 Role: Co-Principal Investigator (\$9,000).
2005 - 2004	Title: Design of Tools for Information Seeking, Management, and Analysis for a Lessons Learned Knowledge System Granting Agency: US Marine Corps Research University Amount: \$500,000 Role: Co-Principal Investigator (\$83,957)

<u>Funded Projects, Grants, Commissions, and Contracts</u>	
2005	Title: Knowledge Management Granting Agency: US. Department of Defense, Defense Threat Reduction Agency (DTRA) Amount: \$625,832 Role: Co-Principal Investigator (\$18,439).
2006 - 2005	Title: REU Supplement for CRI: Collaborative: Next Generation CiteSeer Granting Agency: National Science Foundation Amount: \$6,000 Role: Co-Principal Investigator (\$6,000).
1998 -1996	Title: The use of software agents in information retrieval. Granting Agency: Army Research Laboratory Amount: \$68,000 Role: Principal Investigator (\$68,000)
1998	Title: Information Searching on Web Search Engines Granting Agency: Army Research Laboratory Amount: \$5,000 Role: Principal Investigator (\$5,000)
1997	Title: Software agents for information retrieval. Granting Agency: Army Research Laboratory Amount: \$5,000 Role: Principal Investigator (\$5,000)

Software Developed

Software Development: Client-side Application for Automated Searching: that automates searching tactics via user implicit feedback.

Software Development: Application for Real-time Evaluation of Search Engine Performance: that automates the evaluation of Web search engines.

Teaching

At *The Pennsylvania State University* (current – 2002), I have taught a variety of information technology-related courses, including the undergraduate capstone project leadership course, the introductory freshman course, online marketing, graduate seminar course, and a graduate course on human information interaction. Additionally, I have mentored students in a variety of independent studies and have been on several course development committees.

At *The Pennsylvania State University* (current – 2002):

Teaching

- Committee Lead, curriculum development team for a college-level executive masters program.
- Committee Lead, curriculum development committee for re-design of the undergraduate senior – level capstone course.
- Committee Member, curriculum development team for re-design of the undergraduate freshmen level introductory course.
- Committee Member, curriculum development team for the establishment of a university-wide Business Analytics minor
- Faculty Lead, development team for the establishment of a university-wide professional library certification program
- Committee Member, curriculum development team for the establishment of a college Entrepreneurship minor
- Course Development: (1) undergraduate capstone course in IT project management, (2) graduate course in information searching, (3) undergraduate course in keyword advertising, (4) graduate course in web analytics, (5) undergraduate course in entrepreneurship technology

2015 – Mentor for one team in the **Google Final 15 in The Google Online Marketing Challenge** for 2014. The team was in the top fifteen from 4,000 teams from around the world (top 0.4%).

Mentor for team in the **Google Non-profit Challenge** for 2014. The teams were the top more than 4,000 teams from around the world (top 0.4%).

2014 – Mentor for three teams in the **Global Final 15 in The Google Online Marketing Challenge** for 2013. The teams were in the top fifteen from 4,000 teams from around the world (top 0.4%).

Mentor for two teams in the **Google Media Marketing Challenge** for 2013. The teams were the top more than 4,000 teams from around the world (top 0.4%).

2013 – Mentor for one team in the **Global Final 15 in The Google Online Marketing Challenge** for 2012. The team was in the top fifteen from more than 4,000 teams from around the world (top 0.4%).

2012 – Mentor for three teams in the **Global Final 15 in The Google Online Marketing Challenge** for 2011. The three teams were in the top fifteen from 4,000 teams from around the world (top 0.4%).

2010 – Mentor for two teams in the **Global Final 15 in The Google Online Marketing Challenge** for 2009. The two teams were in the top fifteen from 3,000+ teams from around the world (top 0.5%).

Had eight other teams get honorable mention by placing in the Top 100 Global Teams and five other teams place in the Top 10% of all teams.

Teaching

2010 – Mentor for two student teams that took 1st and 3rd in the **Penn State IdeaPitch Competition**, which is a university wide Penn State entrepreneurship competition.

2009 – Mentor for three teams in the **Global Final 15 in The Google Online Marketing Challenge** for 2009. The three teams were in the top fifteen from 2,107 teams from around the world.

Had seven other teams get honorable mention by placing in the top 50 teams in the Americas region.

2009 - **Schreyer Honors College Teaching Grant** Recipient for developing multi-disciplinary keyword advertising, marketing, and technology course.

2008 – Mentor for the **winning team in the Americas region in The Google Online Marketing Challenge for 2008**. One of the top four teams from 1,620 teams from around the world. Won a trip to the GooglePlex with the students, plus the students all won laptops.

Had two other teams get honorable mention by placing in the top 50 teams in the Americas region.

2008 – Selected as **Faculty Marshall** by Student Marshall of Computer Science and Engineering Department, College of Engineering, The Pennsylvania State University as faculty member who had the biggest impact on student's academic career

2008 – **Professor of the Year nominee** for College of Information Sciences and Technology, The Pennsylvania State University, 16802

2003 Selected as **Faculty Marshall** by Student Marshall of School of Information Sciences and Technology, The Pennsylvania State University as faculty member who had the biggest impact on student's academic career

Guest lecturer for a month (2000) at the *Korean Military Academy* in Seoul, Republic of Korea.

At the *University of Maryland* (Asian Division) (2000 – 1999), taught courses on Web/Internet and multimedia design.

At the *United States Military Academy* (1999 – 1996), I taught several computer science-related courses including introductory programming, advanced programming, micro-computing, and databases. Also, mentored students in a variety of independent studies.

As executive officer for the department (1999 – mid 1997), was responsible for course scheduling, instructor assignments, classroom allocation, student counseling, as well as many other duties concerning the day-to-day operation of the department.

Membership on Degree Committees

The Pennsylvania State University
College of Information Sciences and Technology

Chair or Co-Chair

Partha Mukherjee (Committee Chair) (PhD degree expected in 2016)
Alex Brown (Committee Chair) (M.S. degree expected in 2016)
Zhe Liu (Committee Chair) (PhD degree conferred in 2014)
Dan Coughlin (Committee Chair) (PhD degree conferred in 2014)
Carolyn Hafernik (Committee Chair) (M.S. degree conferred in 2013)
Adan Ortiz-Cordova (Committee Chair) (M.S. degree conferred in 2013)
Jian-Syuan Wong (Committee Chair [until 2016]) (PhD degree expected in 2018)
Steve Carmen (Committee Chair [until 2013]) (M.S. degree conferred in 2013)
Kathleen Moore (Committee Chair [until 2012]) (PhD degree expected in 2015)
Mimi Zhang (Committee Chair) (PhD degree conferred in 2010)
Mike Hills (Committee Chair) (PhD degree conferred in 2010)
Hyun-Woo Kim (Committee Co-Chair) (M.S. degree conferred in 2010)
Young Shin Kim (Committee Co-Chair) (M.S. degree conferred in 2010)

Committee Member

Eric McMillan (Committee Member) (PhD degree expected in 2017)
Nathan McNeese (Committee Member) (PhD degree conferred in 2014)
Patricia Spence (Committee Member) (PhD degree conferred in 2013)
Arvind Karunakaran (Committee Member) (M.S. degree conferred in 2011)
Yusuf Raza (Committee Member) (M.S. degree conferred in 2009)
Sharoda Paul (Committee Member) (PhD degree conferred in 2009)
Allison Morgan (Committee Member) (PhD degree conferred in 2008)
Mithu Bhattacharya (Candidacy Committee Member, 2005)
Scott Robertson (Candidacy Committee Chair, 2004)

The Pennsylvania State University
Workforce Education and Development Program, College of Education
John Dolan (Committee Co-Chair [until 2012]) (PhD degree expected in 2013)

The Pennsylvania State University
School of Hospitality and Management
Lu Zhang (Committee Co-Chair) (M.S. degree conferred in 2009)

The Pennsylvania State University
Department of Industrial and Manufacturing Engineering
Himanshu Sharma (Committee Chair) (M.S. degree conferred in 2005)
Sourav Sengupta (Committee Chair) (M.S. degree conferred in 2005)
Ying Zhang (Committee Chair) (M.S. degree conferred in 2008)

The Pennsylvania State University
Department of Electrical Engineering
Vijay Mohan (Committee Co-Chair) (M.S. degree conferred in 2009)
Dheepak Ramaswamy (Committee Co-Chair) (M.S. degree conferred in 2009)
Ashish Kathuria (Committee Chair) (M.S. degree conferred in 2007)

Membership on Degree Committees

The Pennsylvania State University

Department of Computer Science and Engineering

YanJun Gao (Committee co-Chair) (PhD degree expected in 2018)

Chandrika Gopalakrishna (Committee Chair) (M.S. degree conferred in 2008)

The University of Pittsburgh

School of Information Sciences

Department of Library and Information Science

Zhen Yue (Committee Member) (Ph.D. degree conferred in 2014)

Minsoo Park (Committee Member) (Ph.D. degree conferred in 2008)

Rutgers, the State University of New Jersey

School of Communication, Information and Library Studies

Yuelin Lee (Committee Member) (Ph.D. degree conferred in 2008)

The Pennsylvania State University

Schreyer Honors College, thesis advising

Megan Krause (B.S. degree expected 2107)

Allie Whitman (B.S. degree expected 2106)

Adan Ortiz-Cordova (B.S. degree conferred 2011)

Bradley Shively (B.S. degree conferred 2010)

Kate Sobel (B.S. degree conferred 2010)

Steven Troxell (B.S. degree conferred in 2008)

Steven Clancy (B.S. degree conferred in 2007)

Paulo Molina (B.S. degree conferred in 2004)

Chris Catalano (B.S. degree conferred in 2004)

Andy Shingle (B.S. degree conferred in 2004)

Supervision of Other Undergraduate Research

Student	Degree	Major	University	Role
Arielle Amchin	BS	Marketing	Penn State	Research Mentor
Arun Das	BS	CS	Brown University	Research Mentor
Manisha Daredy	BS	MIS	Carnegie Mellon Qatar	Research Mentor
Satyajit Narayanan	BS	CS	Bharati Vidyapeeth University	Research Mentor
Will Berkheiser	BS	IST	Penn State	Work Study Mentor
				http://studentaid.psu.edu/types-of-aid/work-study-and-employment/work-study/about
Pat Bonner	BS	IST	Penn State	Research Mentor
Danielle Booth	BS	IST	Penn State	Research Mentor
Anna Brown	BS	IST	Penn State	Research Mentor
Nicole Butera	BS	Chemistry	Penn State	Women in Science and Engineering Research

Supervision of Other Undergraduate Research

Student	Degree	Major	University	Role
				(WISER) Mentor http://pa.spacegrant.org/wiser
Chris Ciamacca	BS	IST	Penn State	Research Mentor
Karen Lee	BS	IST	Penn State	Research Mentor
Dana Kracow	BS	IST	Penn State	Research Mentor
Daehee Park	BS	IST	Penn State	Research Mentor
Melissa Reizner	BS	IST	Penn State	Research Mentor
Mitchell Rukat	BS	IST	Penn State	Research Mentor
Paul Rinaldi	BS	IST	Penn State	Research Mentor
Simone Schuster	BS	Advertising	Penn State	Research Mentor
Laura Solomon	BS	Advertising	Penn State	Research Mentor
Meng Ting Sun	BS	Accounting	Penn State	Research Mentor
Pete Smith	BS	IST	Penn State	Research Mentor
Megan Tan	BS	Marketing	Penn State	Research Mentor
Courtney Weaver	BS	IST	Penn State	Research Mentor

Professional Service**Editorial Boards**

Current – 2016	Editor-in-chief, <u>Information Processing & Management</u> (Elsevier)
Current – 2016	Editorial Board Member, <u>Information Discovery and Delivery</u>
Current – 2012	Editorial Advisory Board Member, <u>Social Networks</u>
Current – 2011	Editorial Advisory Board Member, <u>International Journal of Electronic Business</u>
Current – 2009	Editorial Advisory Board Member, <u>Journal of the American Society for Information Science and Technology</u>
Current – 2009	Editorial Advisory Board Member, <u>Future Internet</u>
Current – 2006	Editorial Panel, <u>International Journal of Internet Science</u>
Current – 2006	Editorial Advisory Board Member, <u>Information Research</u>
Current – 2004	Editorial Advisory Board Member, <u>Information Processing & Management</u>
2016 – 2011	Editor-in-chief, <u>Internet Research</u> (Emerald)
2011 - 2004	Editorial Advisory Board Member, <u>Journal of Internet Research</u>

Professional Service**Editorial Boards**

- 2010 - 2004 Editorial Advisory Board Member, Library and Information Science Journal
- 2008 - 2004 Associate Editor (Book Reviews), Information Processing & Management
- 1996 –1998 Student Editor, SIG Computer Human Interaction SIGCHI Bulletin

Professional Service**Tenure Letters**

- 2016 External Tenure Letter Writer for faculty member of School of Business, McMaster University
- 2016 External Tenure Letter Writer for faculty member of Department of Library and Information Science, The Catholic University of America
- 2015 External Tenure Letter Writer for faculty member of School of Communication and Information, Rutgers University
- 2013 External Tenure Letter Writer for faculty member of College of Information Science and Technology, Drexel University
- 2013 External Tenure Letter Writer for faculty member of Graduate School of Management, University of Haifa
- 2012 External Tenure Letter Writer for faculty member of Faculty of Social Sciences, Bar-Ilan University
- 2012 External Tenure Letter Writer for faculty member of Henry B. Tippie College of Business, The University of Iowa
- 2012 External Tenure Letter Writer for faculty member of School of Business, North Carolina Central University
- 2010 External Tenure Letter Writer for faculty member of School of Business Administration, Bar Ilan University, Israel
- 2009 External Tenure Letter Writer for faculty member of Computer Information Systems Department, Bentley University

Professional Service**Ad hoc Reviewing**

- 2016 Reviewer, IEEE Systems, Man and Cybernetics, Computers in Human Behavior, International Journal of Human Computer Interaction, Cornell Hospitality Review
- 2015 Reviewer, Transactions on Intelligent Systems and Technology, Journal of Organizational Computing and Electronic Commerce, European Journal of Marketing, Journal of Information Management, Transactions on Management Information Systems
- 2014 Reviewer, MIS Quarterly, Journal of Organizational Computing and Electronic Commerce, Computers in Human Behavior, Journal of Documentation, IEEE Systems, Man and Cybernetics, Tourism Management
- 2013 Reviewer, Technological Forecasting & Social Change, IEEE Systems, Man and Cybernetics, International Journal of Electronic Commerce, ACM Transactions on the Web, Journal of Interactive Marketing, Journal of Electronic Commerce Research (2x), Electronic Commerce Research, Communications of the Association for Information Systems, Transactions on Computer-Human Interaction, Information Research, Information and Management
- 2012 Reviewer, Electronic Commerce Research, International Journal of Information Management, Journal of Information Science, Communication Research, International Journal of Internet Science, Journal of Organizational Computing and Electronic Commerce, Social Science Computer Review, Information Research, MIS Quarterly, Journal of Organizational Computing and Electronic Commerce, Library and Information Science, IEEE Transactions on Multimedia, Advances in Human-Computer Interaction (2x), Journal of Theoretical and Applied Electronic Commerce Research (3x), ACM Transactions on Computer-Human Interaction
- 2011 Reviewer, IEEE Transactions on Multimedia, Information Technology and People, Journal of Computer-Mediated Communication (2x), Sage Publishing, Electronic Commerce Research, International Journal of Electronic Commerce, Journal of Interactive Marketing (2x), ACM Transactions on the Web, ACM Transactions on Computer-Human Interaction
- 2010 Reviewer, International Journal of Information Management (2x), ACM Transactions on the Web, Social Science Computing Review, MIS Quarterly, International Journal of Human-Computer Studies, PLoS One, Information Research, Netherlands Organisation for Scientific Research, Computing Surveys, Information Sciences, Future Internet, International Information and Library Review, International Journal of Internet Science, Behaviour & Information Technology, Journal of Media Economics
- Reviewer Award**
- 2010 Reviewer, Internet Research
- 2009 Reviewer, The Computer Journal, ACM Transactions on the Web, International Journal of Electronic Commerce, Data & Knowledge Engineering Journal, ACM Transactions on Information Systems

Professional Service**Ad hoc Reviewing**

- 2008 Reviewer, Journal of the Academy of Marketing Science, ACM Transactions on the Web, ACM Transactions on Information Systems, Decision Support Systems, New Media & Society, IEEE Internet Computing, Journal of Service Science and Management, IEEE Transactions on Professional Communication, International Journal of Knowledge Management Studies
- 2007 Reviewer, Simulation Modelling Practice and Theory, ACM Transactions on Information Systems
- 2006 Reviewer, Journal of Information Science, ACM Transactions on Information Systems
- 2005 Reviewer, Journal of Medical Internet Research, ACM Transactions on Information Systems
- 2005 Reviewer, IEEE Systems, Man and Cybernetics Journal, Computer Networks Journal
- 2004 Reviewer, Information Retrieval, Information Processing & Management, Journal of Web Engineering, Journal of Library & Information Science Research
- 2003 Reviewer, IEEE Proceedings-Software, Information Processing & Management
- 2002 Reviewer, Journal of Informing Science, Information Processing & Management, The World Wide Web Journal
- 2001 Reviewer, International Journal of Human Computer Studies, Information Processing & Management
- 1999 Reviewer, Information Processing & Management
- 1998 Reviewer, Computer Science Education Journal, Information Processing & Management

Professional Service**Grant Reviewing**

- 2015 Reviewer, Qatar Research Program, Qatar Foundation
- 2014 Reviewer, grant panelist for National Science Foundation, CISE Research Infrastructure (CRI) program February 2014.
- 2013 Reviewer for grant proposal for Reviewer, American Association for the Advancement of Science (AAAS) Research Competitiveness Program Grant Proposal for funding through the Maine Technology Institute's Development Awards
- 2012 Reviewer, Army Research Lab Grant Proposal

Professional Service**Grant Reviewing**

- 2011 Reviewer, National Science Foundation Grant Proposal
- 2011 Reviewer, American Association for the Advancement of Science (AAAS) Research Competitiveness Program Grant Proposal for funding through the Maine Technology Institute's Development Awards
- 2010 Reviewer, Standard Research Grants program of the Social Sciences and Humanities Research Council of Canada (SSHRC) Grant Proposal
- 2010 Reviewer for grant proposal for Reviewer, American Association for the Advancement of Science (AAAS) Research Competitiveness Program Grant Proposal for funding through the Maine Technology Institute's Development Awards
- 2008 Reviewer, Israel Science Foundation Grant Proposal
- 2007 Reviewer, Air Force Office of Scientific Research Grant Proposal
- 2007 Reviewer, Israel Science Foundation Grant Proposal
- 2004 Grant Reviewer, Arts and Humanities Research Board Grant Proposal, Whitefairs, Lewins Mead, Bristol, UK, BS1 2AE

Professional Service**Other**

- 2016 Special Issue on Computational Advertising, IEEE Intelligent Systems. Guest Editors: Yanwu Yang, Huazhong University of Science and Technology, China; Yinghui Yang, University of California, Davis, US; Bernard J. Jansen, Qatar Computing Research Institute, HBKU; Mounia Lalmas, Yahoo Labs, UK.
- 2016 – 2007 Academic Panelist for The Google Online Marketing Challenge (<http://www.google.com/onlinechallenge/>). Based on registrations from more than 100 countries and more than 11,000 student teams, the Challenge may be the largest, worldwide educational course ever done.
- 2015 External Examiner for Spanish PhD thesis (Universitat Pompeu Fabra Barcelona)
- 2014 – 2013 Faculty Advisor for the Penn State Digital Marketing Association
- 2012 External Examiner for Australian PhD thesis (Queensland University of Technology)
- 2012 - 2011 Member, Research Committee, Search Engine Marketing Professional Organization (SEMPO)

Professional Service**Other**

- 2011 – 2009 Chair of the American Society for Information Science and Technology (ASIST) Information Science Education Committee
- 2010 Reviewer, Cambridge University Press book proposal
- 2010 Reviewer, Cambridge University Press book proposal
- 2010 External Examiner for Australian PhD thesis (University of Sydney)
- 2009 – 2006 Chair of the American Society for Information Science and Technology (ASIST) Information Science Education Committee Dissertation Jury
- 2008 External Examiner for Australian PhD thesis (The University of New South Wales)
- 2008 External Examiner for Australian PhD thesis (The University of New South Wales)
- 2008 Guest Editor, International Journal of Electronic Business (IJEB). Special Issue on Sponsored Search
- 2007 External Examiner for Australian PhD thesis (Monash University)
- 2007 Guest Editor, with Andy Edmond, Kirstie Hawkey, Melanie Kellar, and Don Turnbull. Journal of Web Engineering. Special Issue on Logging Traces of Web Activity
- 2006 Guest Editor, Bulletin of the American Society for Information Science and Technology. Special Issue on Paid Search, January 2006
- 1995 -1994 President, Computer Science Graduate Students Association, Texas A&M University, College Station, Texas.

Professional Service**Conference Activities**

- 2016 Chair, Program Committee, The Second International Workshop on Online Social Networks Technologies (OSNT-2016), 13th ACS/IEEE International Conference on Computer Systems and Applications AICCSA 2016. 29 November - 2 December.
- 2016 Chair, Program Committee, The Third International Workshop on Social Networks Analysis, Management and Security (SNAMS - 2016), The 4th International Conference on Future Internet of Things and Cloud (FiCloud-2016), Vienna, Austria. 22-24 August.
- 2016 Reviewer, Papers and Posters, 79th Annual Meeting of the American Society for Information Science and Technology (ASIST 2016). Copenhagen, Denmark. 14-18 October.

Professional Service

Conference Activities

- 2015 Program Committee, 7th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management, Lisbon, Portugal. 12-14 Nov.
- 2015 Meta-Reviewer, Papers and Posters, 78th Annual Meeting of the American Society for Information Science and Technology (ASIST 2015). St. Louis, Mo. 6-10 November.
- 2015 Reviewer, ACM CHI Conference on Human Factors in Computing Systems, Seoul, South Korea. 18-23 April.
- 2014 Reviewer, Papers and Posters, 77th Annual Meeting of the American Society for Information Science and Technology (ASIST 2014). Montreal, Canada. 31 October - 4 November.
- 2014 Program Committee: 3rd International Information Systems for Crisis Response and Management Conference (ISCRAM 2014), State College, PA. May 2014.
- 2014 Reviewer, ACM CHI Conference on Human Factors in Computing Systems, Toronto, Canada. 26 April – 1 May.
- 2013 Reviewer, Papers, 76th Annual Meeting of the American Society for Information Science and Technology (ASIST 2013). Montreal, Canada. 1-6 November.
- 2013 Reviewer, Posters, 76th Annual Meeting of the American Society for Information Science and Technology (ASIST 2013). Montreal, Canada. 1-6 November.
- 2013 Reviewer, 22nd International World Wide Web Conference (WWW 2013). 13th-17th, May, Rio de Janeiro, Brazil.
- 2013 Program Committee: European Conference on Information Retrieval (ECIR 2013) Workshop on Group Membership and Search (GRUMPS), 24 March, Moscow, Russia
- 2013 Program Committee: Sixth ACM WSDM Conference on Web Search and Data Mining Workshop on Web Search Click Data, 4-8 February, Rome, Italy.
- 2012 Program Committee: Fourth Information Interaction in Context Conference (IIIX 2012), Nijmegen, the Netherlands, 21-24 August 2012.
- 2011 Session Track Chair, 74th Annual Meeting of the American Society for Information Science and Technology (ASIST 2011). 9-13 October. New Orleans, LA.
- 2011 Program Committee, iConference. Toronto, Canada, 7-10 February.
- 2011 Program Committee: 33rd European Conference on Information Retrieval (ECIR 2011), Best Paper Committee, Dublin, Ireland, 19-21 April 2011

Professional Service

Conference Activities

- 2011 Program Committee: 33rd European Conference on Information Retrieval (ECIR 2011), Workshop on Information Retrieval Over Query Sessions, Dublin, Ireland, 19-21 April 2011.
- 2011 Program Committee: 12th ACM Conference on Electronic Commerce (EC11). San Jose, CA. 5-9 June.
- 2011 Program Committee: Conference on Multilingual and Multimodal Information Access Evaluation (CLEF 2011). Amsterdam, the Netherlands, 19-22 September 2011.
- 2011 Program Committee: 33rd European Conference on Information Retrieval (ECIR 2011). Dublin, Ireland. 18-21 April.
- 2010 Program Committee, American Society for Information Science and Technology Annual Meeting 2010. Pittsburgh, PA. 22-27 October.
- 2010 Program Committee: Conference on Multilingual and Multimodal Information Access Evaluation (CLEF 2010). Padua, Italy, 20-23 September.
- 2010 Program Committee: LREC 2010 Workshop on Web Logs and Question Answering (WLQA2010). Malta, 22 May.
- 2010 Program Committee: 32st European Conference on Information Retrieval (ECIR 2010). Keynes, UK. 28-31 March.
- 2009 Program Committee: Web Information and Data Management. 19th International Conference on Information and Knowledge Management (CIKM 2009). Hong Kong. 6 November.
- 2009 Program Committee: Workshop on the Analysis of System Logs. 22nd ACM Symposium on Operating Systems Principles. Big Sky, MT. 14 October.
- 2009 Program Committee: Collaborative Information Behavior. GROUP 2000. Sanibel Island, Florida. 10 May.
- 2009 Program Committee: Qualitative and Quantitative Methods in Libraries International Conference (QQML2009). Chania, Crete, Greece, 26-29 May.
- 2009 Program Committee: 31st European Conference on Information Retrieval (ECIR 2009). Toulouse, France. 6-9 April.
- 2009 Reviewer, ACM Conference on Computer Human Interaction 2009 (CHI 2009), Boston, MA, 4 – 9 April.
- 2008 Reviewer, 18th Conference on Information and Knowledge Management (CIKM 2008). Napa Valley, California. 26-30 October.

Professional Service

Conference Activities

- 2008 Program Committee: Workshop on Human-Computer Interaction and Information Retrieval (HCIR 2008). Redmond, Washington. 23 October.
- 2008 Program Committee: 1st Information Interaction in Context Symposium (IiX 2008). London, United Kingdom. 14-17 October.
- 2008 Program Committee: 2008 Ad Auctions Workshop. ACM Conference on Electronic Commerce in Chicago, IL. 8-9 July.
- 2008 Reviewer, Southern Association for Information Systems Conference (SAIC 2008), Richmond, VA, USA 13–15 March.
- 2007 Program Committee, IEEE International Conference on Intelligence and Security Informatics 2007 (ISI 2007), New Brunswick, New Jersey. 23-24 May, 2007
- 2007 Reviewer, Graphics Interface 2007, Montréal, Canada, 28 – 30 May 2007.
- 2007 Reviewer, American Society for Information Science and Technology Annual Meeting 2007. Milwaukee, Wisconsin. 18-25 October.
- 2007 Program Committee, 8th World Congress on the Management of eBusiness. Toronto, Canada. 11-13 July.
- 2007 Program Committee, WWW'07 Workshop on Query Log Analysis: Social and Technological Challenges. World Wide Web 2007, Banff, Alberta, Canada. 8 May.
- 2007 Program Committee, WWW'07 Workshop on Sponsored Search. World Wide Web 2007, Banff, Alberta, Canada. 8 May.
- 2007 Program Committee, Chi'07 Workshop on Exploratory Search and HCI: Designing and Evaluating Interfaces to Support Exploratory Search Interaction. ACM CHI2005, Conference on Human Factors in Computing Systems (CHI'07), San Jose, CA. 29 April 2007.
- 2007 Program Committee, IEEE Intelligence and Security Informatics Conference (ISI 2007), New Brunswick, NJ. 23 – 24 May, 2007.
- 2006 Program Committee: 2006 Research Symposium of the Special Interest Group on Human-Computer Interaction. American Society for Information Science and Technology. Austin, Texas. 5 November 5, 2006
- 2006 Reviewer, Hawaii International Conference on System Sciences 2007. Waikoloa, Big Island, Hawaii. 3-6 January, 2007.
- 2006 Program Committee: IEEE Information Technology: New Generations (ITNG) 2006, Las Vegas, NV. 16 -19 April 2007.

Professional Service

Conference Activities

- 2006 Reviewer for SIGIR 2006 Workshop on Evaluating Exploratory Search Systems. The 29th Annual International ACM SIGIR Conference on Research & Development on Information Retrieval (SIGIR2006). 6-11 August. Seattle, Washington.
- 2006 Program Committee: 4th International Conference on Information Technology: New Generations, 16-19 April, 2007, Las Vegas, Nevada.
- 2006 Program Committee: 1st Information Interaction in Context Symposium (IiiX symposium). Copenhagen, Denmark. 18-20 October 2006.
- 2006 Program Committee: IEEE Information Technology: New Generations (ITNG) 2006, Las Vegas, NV. 10 – 12 April 2006.
- 2006 Reviewer, The Fourth Annual Pre-ICIS Workshop on HCI Research in MIS, International Conference on Information Systems, 2005.
- 2006 Reviewer, Human Factors and Ergonomics Society 49th Annual Meeting, 2005.
- 2006 Program Committee: IEEE 6th International Conference on Information Technology, Coding and Computing. Las Vegas, Nevada. 5-7 April 2005.
- 2006 Program Committee: the 5^h International Conference on Conceptions of Library and Information Science, Glasgow, Scotland, 6-9 June 2005.
- 2006- 2002 Reviewer, ACM SIGIR International Conference on Information Retrieval.
- 2006 Session Track Co-chair, Web Searching Sessions (Three tracks), the IEEE 5th International Conference on Information Technology, Coding and Computing. Las Vegas, Nevada. 4-6 April 2005.
- 2005 Program Committee, IEEE 6th International Conference on Information Technology, Coding and Computing. Las Vegas, Nevada. 5-7 April, 2005.
- 2005 Program Committee, the 5^h International Conference on Conceptions of Library and Information Science, Glasgow, Scotland, 6-9 June 2005.
- 2004 Session Track Co-chair, Web Searching Sessions (Three tracks), the IEEE 5th International Conference on Information Technology, Coding and Computing. Las Vegas, Nevada. 5-7 April, 2004.
- 2004 Reviewer, ACM CHI2005, Conference on Human Factors in Computing Systems
- 1998 Session Moderator, New Engineering Educators Conference, June 1998, Seattle, Washington.
- 1998 Co-organizer for ACM Computer Science Education Research Competition, February 1998, Atlanta, Georgia.

Professional Service**Conference Activities**

- 1998 Reviewer, New Engineering Educators Conference
- 1998 Reviewer, American Society for Engineering Education National Conference
- 1997 Session Moderator for American Society for Engineering Education National Conference, June 1997, Milwaukee, Wisconsin.

Advisory Boards

- Current - 2012 CLAK Impressions <http://www.linkedin.com/company/clak-impressions>
- Current - 2010 The Pennsylvania Technical Assistance Program (PennTAP), <http://penntap.psu.edu/action-council/>
- Current - 2010 Innoblue, <http://innoblue.org/>
- 2016 - 2007 Global Academic Panel, Google Online Marketing Challenge, <http://www.google.com/onlinechallenge/discover/judging-panel.html>
- 2012 - 2010 Chief Marketing Officer (CMO Council) Advisory Board for research initiative, Localize to Optimize Sales Channel Effectiveness
- 2012 - 2010 Jabbit Board of Advisors, <http://www.jabbit.com/>

Invited Talks (Selected)

- Keynote** Keynote, 2016 Sixth National Doctoral Forum of Information Science, 7-18 July 2016, Tianjin, China.
<http://jimjansen.blogspot.qa/2016/07/keynote-speaker-at-2016-sixth-national.html>
- Keynote** Keynote, The 7th International IEEE on Information and Communication Systems (ICICS 2016), 5-7 April, Irbid, Jordan.
- Keynote** Keynote, The 10th International ACM Conference on Ubiquitous Information Management and Communication (IMCOM 2016), 4-6 January, Danang, Vietnam.
<http://jimjansen.blogspot.qa/2015/12/imcom-2016-keynote-transformed-role-of.html>
- Presentation, Sungkyunkwan University (Sowan Campus), 23 April 2015, Seoul, South Korea. <http://jimjansen.blogspot.com/2015/04/visit-to-department-of-interaction.html>
- Presentation, National Research University Higher School of Economics, 10 March 2014, St. Petersburg, Russia
<http://jimjansen.blogspot.com/2014/03/presentation-at-national-research.html>

Invited Talks (Selected)

Presentation, Yandex, 11 March 2014, St. Petersburg Russia.

<http://jimjansen.blogspot.com/2014/03/visit-to-yandex-headquarters-in-st.html>

Presentation, Sungkyunkwan University (Sowan Campus), 20-21 June 2013, Seoul, South Korea.

<http://jimjansen.blogspot.com/2013/06/research-workshop-discussion-on-web.html>

Presentation, Library and Information Science Department and College of Information and Media, Duksung Women's College, 19 June 2013, Seoul, South Korea.

<http://jimjansen.blogspot.com/2013/06/theoretical-constructs-of-searching-and.html>

Presentation, Library and Information Science Department, College of Liberal Arts, Sungkyunkwan University, 18 June 2013, Seoul, South Korea.

<http://jimjansen.blogspot.com/2013/06/keyword-advertising-research.html>

Presentation, Qatar Computer Research Institute, 24-29 April 2013, Doha, Qatar.

<http://jimjansen.blogspot.com/2013/04/research-presentation-to-folks-at-qatar.html>

Presentation, Department of Decision Sciences, College of Business and Public Administration, Old Dominion University, 14-15 April 2013, Norfolk, VA.

<http://jimjansen.blogspot.com/2013/04/keyword-advertising-presentation-to.html>

Presentation, Google Online Marketing Challenge Workshop, The University of Illinois at Urbana-Champaign, 11 March 2013.

<http://jimjansen.blogspot.com/2013/03/gomc-presentation-to-students-at.html>

Keynote

Presentation, Casual Living Conference 2012, 22-24 February 2012, Sarasota, FL.

<http://accentsandfurnishings.com/conferences/casuallivingconference/2012/index.html>

Keynote, The Direct Marketing Association of Washington (DMAW) Professor Institute. 3-4 January 2012, Washington. DC.

http://www.dmawef.org/Professors_Page/Professors_Page.html

Presentation, Advance 2011: Rediscovering the Customer. 20-22 September 2011, San Diego, CA. <http://www.idanalytics.com/advance2011/>

Webinar, Web Analytics Webinar for the American Society for Information Science and Technology, 17 June 2011. <http://asist.org/Conferences/webinars/2011/web-analytics.html>

Keynote

Keynote, Buying and Selling eContent 2011. 28 March 2011, Scottsdale, AR. <http://www.buy-sell-econtent.com/2011/Speakers/JimJansen.aspx>

Presentation, Evri (semantic news aggregation company). 10 February 2011, Seattle, WA <http://jimjansen.blogspot.com/2011/02/visit-to-evri-semantic-news-aggregation.html>

Presentation, IMPAQT (search engine marketing agency). 10 November 2010, Pittsburgh, PA. <http://jimjansen.blogspot.com/2010/11/visit-to-search-engine-marketing.html>

Invited Talks (Selected)

Presentation, Yahoo! Research Lab. 9 November 2010, New York, New York.
<http://jimjansen.blogspot.com/2010/11/visit-to-yahoo-research-labs-new-york.html>

Presentation, School of Communication and Information, Rutgers University. 8 November 2010, New Brunswick, NJ.

University-wide Presentation, Ryerson University, 18 October 2009, Toronto, Canada.

Presentation, Query Log Analysis: From Research to Best Practice 2009/ 27-28 May. London, UK. Funded by European Union project on Evaluation, Best Practices and Collaboration for Multilingual Information Access.
<http://ir.shef.ac.uk/cloughie/qlaw2009/index.html>

Presentation, Query Log Analysis: From Research to Best Practice 2009/ 27-28 May. London, UK. Funded by European Union project on Evaluation, Best Practices and Collaboration for Multilingual Information Access.
<http://ir.shef.ac.uk/cloughie/qlaw2009/index.html>

Presentation, Google. 30 October 2008. Mountain View, CA.

Presentation, IMPAQT (search engine marketing agency). 28 October 2008, Pittsburgh, PA.
<http://jimjansen.blogspot.com/2008/10/visit-to-sem-impact.html>

Presentation, Mahalo (a human power search engine). 6 July 2008, Los Angeles, CA.
<http://jimjansen.blogspot.com/2008/07/mahalo-human-power-search-engine.html>

Presentation, Pepperjam (search engine marketing agency). 24 June 2008, Wilkes-Barre, PA. <http://jimjansen.blogspot.com/2008/06/visit-to-pepperjam.html>

Presentation, School of Communication and Information, Rutgers University. 2 September 2005, New Brunswick, NJ.

Presentation, College of Information, University of North Texas, 15 June 1998. Denton, TX

Membership in Professional Societies

American Society for Information Science and Technology (ASIST)

Armed Forces Communications and Electronics Association (AFCEA)

Association for Computing Machinery (ACM)

The Institute of Electrical and Electronics Engineers (IEEE)
Societies: Computer Society

Keynote

Professional Experience

Numerous **consulting projects** and **expert witnessing** (class action suits, patent litigation, and civil litigation)

US Army Officer (2002 – 1985): Held various command and staff positions of progressively increasing responsibility. Responsible for vision articulation, planning, directing, and day-to-day management of organizations ranging in size from 10 to over 200 personnel. Served in numerous locations in the United States, Europe, Central America, and the Far East as a communication officer. Responsible for the planning and installation of various types of communication systems including radio, telephone, computer and other digital networks. Served with the 8th U.S. Army Y2K Operational Evaluation Team validating critical information management systems. Responsible for the long term planning, developing, and budgeting of communication systems of all types for the U.S. Forces stationed on the Korean Peninsula. Responsible for a 22-person division that develops photographic, graphical, audio-visual and multimedia material for the U.S. Army War College.

Security Clearance

TS-SCI: Cleared for Top Secret information and granted access to Sensitive Compartmental Information based on a single scope background investigation by the Defense Security Service, Office of Personnel Management on 17 March 2011.

Appendix B Testimony Cases

Year	Deliverables	Retained by	Case
2016	Testimony Deposition	Plaintiff	ERIN ANDREWS, Plaintiff, vs MARRIOTT INTERNATIONAL, INC., a Delaware Corporation; WESTEND HOTEL PARTNERS, LLC dba NASHVILLE MARRIOTT AT VANDERBILT UNIVERSITY, a Delaware Limited Liability Company, and MICHAEL DAVID BARRETT, an individual, Defendants. CASE NO. 11C4831, which is pending in the Circuit Court for Davidson County Tennessee at Nashville. Law Firm: Greene Broillet & Wheeler LLP
2015	Deposition	Plaintiff	ENCORE MEDIA METRICS, LLC fka SPUR DIGITAL L.P., dba SPUR INTERACTIVE and STEVE LATHAM VS ADOMETRY, INC. fka CLICK FORENSICS, INC. Cause 2012-44351 / Court: 281. (The District Court of Travis County, Texas.) Law Firm: Watts & Guerra LLP and DiNovo Price Ellwanger & Hardy LLP
2014	Deposition	Defendant	M.B. AS NEXT FRIEND OF J.B., A MINOR <i>Plaintiffs</i> , V. CAMP STEWART FOR BOYS, INC., AMERICAN INSTITUTE FOR FOREIGN STUDY, INC. D/B/A CAMP AMERICA, AND SCOTT ASH JAMES ZIRUS <i>Defendant</i> . NO. 5:12-CV-1133 (Western District of Texas) Law Firm: Rymer, Moore, Jackson, & Echols PC
2014	Testimony, Deposition	Defendant	REAL LOCAL PAGE PARTNERS, LLC, Claimant, v. PAYMENT ALLIANCE INTERNATIONAL, INC., Respondent & PAYMENT ALLIANCE INTERNATIONAL, INC. Counter-Claimant, v. REAL LOCAL PAGE PARTNERS, LLC, Counter-Respondent. CASE NO. 32 147 Y 0021413. AMERICAN ARBITRATION ASSOCIATION, MIAMI, FLORIDA Law Firm: Kirkland & Ellis LLP
2013	Deposition	Plaintiff	CABLE WHOLESALE.COM, INC. v. SF CABLE, INC. Case No. CV 11-2966 EMC (Northern District of California) Law Firm: Law Offices of James G. Schwartz P.C.

Appendix C Documents Referenced

Web Services

- Alexa www.alexa.com/
- Bing Search Engine <https://www.bing.com/>
- Compete <https://www.compete.com/>
- Google Keyword Tool <https://adwords.google.com/KeywordPlanner>
- Google Search Engine www.google.com/
- Google Trends <https://www.google.com/trends/>
- Microsoft Bing Keyword Tool www.bing.com/toolbox/keywords
- Million Short <https://millionshort.com/>
- SimiliarWeb www.similarweb.com/
- SpyFu www.spyfu.com/
- W3Snoop <http://www.w3snoop.com/>

Documents

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- Daily Mirror https://en.wikipedia.org/wiki/Daily_Mirror
- GIUFFRE001120
- GM_00068 (Gow E-Mail)
- <http://digitalmeasurement.nielsen.com/files/metrics-guidelines.pdf>
- <http://www.ebizmba.com/articles/news-websites>
- <http://www.mirror.co.uk/news/uk-news/prince-andrews-pal-ghislaine-maxwell-5081971>
- <http://www.nydailynews.com/news/world/alleged-madame-accused-supplying-prince-andrew-article-1.2065505>
- <http://www.pewresearch.org/fact-tank/2014/02/03/6-new-facts-about-facebook/>
- https://www.google.com/advanced_search
- <https://www.thesun.co.uk/archives/news/6754/prince-andrews-pal-ghislaine-groped-teen-girls/>
- Mail Online https://en.wikipedia.org/wiki/Mail_Online
- Power Law https://en.wikipedia.org/wiki/Power_law
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http://en.wikipedia.org/wiki/Triangulation_%28social_science%29
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EXHIBIT 25

(Filed Under Seal)

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

VIRGINIA L. GIUFFRE.

Plaintiff,

v.

GHISLAINE MAXWELL

Defendants

15-cv-07433-RWS

EXPERT REPORT

OF

PETER KENT

OCTOBER 28TH, 2016

Slave, Virginia Roberts Lies, Virginia Giuffre Lies, Virginia Roberts Giuffre Lies, Virginia Roberts Untrue, Virginia Giuffre Untrue, Virginia Roberts Giuffre Untrue, Virginia Roberts Liar, Virginia Giuffre Liar, Virginia Roberts Giuffre Liar, Virginia Roberts Ross Gow, Virginia Giuffre Ross Gow, Virginia Roberts Giuffre Ross Gow, Virginia Roberts Ross dishonest, Virginia Giuffre Ross dishonest, Virginia Roberts Giuffre dishonest, victims refuse silence sex slave

32. However, nowhere in his report does Mr. Anderson explain why these 26 search terms are important, beyond the fact that, he claims incorrectly, searching the major search engines with these phrases results in links to Web pages that contain allegedly defamatory material. However, this is true of literally thousands of different search phrases – it’s a simple task to create search terms to match particular pages – but he never explains why these particular 26 phrases are relevant.

33. As I explain below in detail, Mr. Anderson’s testimony is unreliable because it is *not* based on sufficient facts or data, nor is it the product of reliable principles and methods. Rather, it is seriously flawed in a number of ways.

1. Mr. Anderson’s Choice of Search Terms Is Arbitrary

34. Mr. Anderson, in his report, provides a list of 26 search terms (Page 7) that appear to have been chosen in an arbitrary manner; furthermore, Mr. Anderson does not explain how these search terms are relevant to this case. Most of the examples are rarely if ever searched upon, and return few, if any, relevant results (that is, links to pages that discuss or recount Defendant’s alleged defamatory statements).

35. Search terms are only relevant to this case if a searcher, wishing to find information about Plaintiff, would type the terms into a search engine. Mr. Anderson does not explain why such a person would type, for instance, the term *victims refuse silence sex slave*; in fact there seems no reason to believe that such a person would use this term. Why would someone wanting to research information about Plaintiff use the term *virginia roberts lies*, or *virginia roberts ross gow*? Mr. Anderson does not suggest any reason that somebody should use such terms. Indeed, these are terms unlikely to be used by anyone unfamiliar with this litigation or the fact that Defendant had denied Plaintiff’s original allegations. These are not terms likely to be used by Mr. Anderson’s “casual searcher” (“I conducted an investigation to determine the

106. However, this 3-step process (create pages, place them on Web sites, create links to the pages) is not very efficient, regardless of the fact that it is common in the ORM business. One should keep in mind that the primary goal of any business is maximizing profits, not efficiency. The 3-step process may be inefficient, but it has the advantage of increasing the income of ORM firms; rather than merely creating links, they can also charge for the creation and placement of Web pages. There is, however, an alternative strategy that some ORM firms in fact *do* use, as I describe later in this report.

2. The Problems With Mr. Anderson's Strategy

107. Mr. Anderson's strategy is unnecessarily expensive and complicated, for a number of reasons:

- Mr. Anderson exaggerates the number of Web pages (780) that must be pushed down in the search results
- Placing new Web pages on quality Web sites will be very difficult, and unnecessary
- Pushing the new Web pages up in the search results will be very difficult

a) Mr. Anderson Exaggerates the Number of Web Pages (780) That Must Be Pushed Down In The Search Results

108. Mr. Anderson has stated that 780 Web pages must be pushed down in the search results; he takes his 26 search phrases, and multiplies by 30 results (in theory 10 results per search-result page, over three pages, in order to push the "offending" pages down to the fourth page, though in some cases, in particular on Google, there may actually be fewer results on the first page, perhaps 8 or 9.) This is wrong for various reasons.

Most of the Search Terms Will be Used Infrequently If Ever

109. As noted earlier, most of Mr. Anderson's 26 search terms are infrequently if ever employed by searchers. Why, for instance, would it be necessary to push down offending Web pages in the results that the search engines provide for the term *victims refuse silence sex slave*, when this term is likely never used (and furthermore, that the search results contain no

EXHIBIT 26

(Filed Under Seal)

From: <ross@acuityreputation.com>
Date: 2 January 2015 at 20:38
Subject: Ghislaine Maxwell
To: Rossacuity Gow <ross@acuityreputation.com>
bcc: martin.robinson@mailonline.co.uk,
P.Peachey@independent.co.uk,
nick.sommerlad@mirror.co.uk,
david.brown@thetimes.co.uk,
nick.alway@bbc.co.uk,
jo-anne.pugh@bbc.co.uk

To Whom It May Concern,
Please find attached a quotable statement on behalf of Ms Maxwell.

No further communication will be provided by her on this matter.
Thanks for your understanding.
Best
Ross

Ross Gow
ACUITY Reputation

Jane Doe 3 is Virginia Roberts - so not a new individual. The allegations made by Victoria Roberts against Ghislaine Maxwell are untrue. The original allegations are not new and have been fully responded to and shown to be untrue.

Each time the story is re told it changes with new salacious details about public figures and world leaders and now it is alleged by Ms Roberts that Alan Dershowitz is involved in having sexual relations with her, which he denies.

Ms Roberts claims are obvious lies and should be treated as such and not publicised as news, as they are defamatory.

Ghislaine Maxwell's original response to the lies and defamatory claims remains the same. Maxwell strongly denies allegations of an unsavoury nature, which have appeared in the British press and elsewhere and reserves her right to seek redress at the repetition of such old defamatory claims.

Sent from my BlackBerry® wireless device

EXHIBIT 27

(Filed Under Seal)

Page: 1 Document Name: untitled

PANEL: _____ A07. ASSIGNMENT HISTORY YEAR: 16
T234 Monday May 23, 2016 9:04 am
STDT: [REDACTED] ROBERTS, VIRGINIA L SCHL: 3390 GR: 10 ST: I

A	ENTRY			WITHDRAWAL			P										E
C	CD	DATE	OD	CD	DATE	R	PF	SY	CL	DS	SCHL	DESC	GR	PRS	ABS	UNX	Y
—	R02	101201	—	W26	030702	N	—	02	01	—	3390	SURVIVORS	10	56	31	—	Y
—	R02	092001	—	W02	101101	N	—	02	01	—	2331	ROYAL PALM HIG	10	13	1	—	—
—	EA1	081401	—	W32	092001	Z	—	02	A1	—	2192	WLLNGTN HS ADL	30	—	—	—	—
—	EA1	081600	—	W47	081301	Z	—	01	A1	—	2192	WLLNGTN HS ADL	30	—	—	—	Y
—	EA1	062100	—	W47	081500	Z	—	00	A1	—	2192	WLLNGTN HS ADL	30	—	—	—	Y
—	E01	081699	—	W03	081699	N	—	00	01	—	2331	ROYAL PALM HIG	10	—	—	—	—
—	E01	081998	—	W02	060999	P	—	99	01	—	0581	FOREST HILL HI	09	155	25	—	Y
—	E01	082097	—	W01	061098	R	—	98	01	—	2331	ROYAL PALM HIG	09	147	33	—	Y
—	E01	082097	—	W22	082097	N	—	98	01	—	2191	WELLINGTON HIG	09	—	—	—	—
—	R03	040797	—	W02	061197	P	—	97	01	—	1691	CRESTWOOD MID	08	40	5	—	Y
—	E01	082294	—	DNE	082294	N	—	95	01	—	1703	ROYAL PINES SC	06	—	—	—	—
—	E01	082393	—	W02	061094	P	—	94	01	—	1901	LOXAHATCHEE EL	05	167	13	—	Y
—	E01	082592	—	W01	061193	P	—	93	01	—	1901	LOXAHATCHEE EL	04	176	4	—	Y

PF1=HELP 3=EXIT 5=REFRESH 7=BKWD 8=FWD 9=NEXT PAGE 12=ESCAPE
PAGE FULL...CONTINUE.

TERML: I1B5

TO - DISTRICT: 0000050 PALM BEACH SCHOOL DISTRICT SCHOOL: 3390 COURSE INFORMATION FILE: SRTS121S
 GRADE LEVEL: 10 PREPARED DATE: 05/23/2016 CURRENT DISTRICT: 50 PALM BEACH SCHOOL PAGE 3
 CURRENT SCHOOL: 3390 SURVIVORS CHARTER SCHOOL

LEGAL NAME: ROBERTS, VIRGINIA L

DISTRICT: 50 SCHOOL: 0581 FOREST HILL HIGH
 YEAR: 1998-1999 GRADE LEVEL: 09

T	COURSE#	COURSE TITLE	SUBJECT	CRSE	G	A	O	CREDIT
1	0500500	PERS,CAR,SCH DEV 1	EL	BJ	B	Z	N	0.50 0.50
1	0701320	FRENCH 1	FL	RJ	C	Z	N	0.50 0.50
1	1001340	ENG 2	EN	RJ	A	Z	N	0.50 0.50
1	1200380	ALG 1-B	MA	JR	F	Z	N	0.50 0.00
1	1900300	DRIVER ED CLASS	EL	B	B	Z	N	0.50 0.50
1	2000310	BIO 1	SC	RJ	A	Z	N	0.50 0.50
1	2109310	WORLD HIST	WH	RJ	C	Z	N	0.50 0.50
2	0500500	PERS,CAR,SCH DEV 1	EL	F	F	Z	N	0.50 0.00
2	0701320	FRENCH 1	FL	RJ	F	Z	N	0.50 0.00
2	0800300	HEALTH-LIF MGMT SK	LM	RJ	F	Z	N	0.50 0.00
2	1001340	ENG 2	EN	RJ	F	Z	N	0.50 0.00
2	1200380	ALG 1-B	MA	JR	F	Z	N	0.50 0.00
2	2000310	BIO 1	SC	RJ	F	Z	N	0.50 0.00
2	2109310	WORLD HIST	WH	RJ	F	Z	N	0.50 0.00

CREDIT, TERM: 7.00 3.00

GPA	QTY	PTS	GPA	QTY	PTS
DISTRICT-TERM:	1.2857	9.00	CUM:	1.5714	22.00
STATE-TERM:	1.2857	9.00	CUM:	1.5714	22.00

1998-1999 ANNUAL DAYS-PRESENT: 155 ABSENT: 25
 SUMMER TERMS DAYS-PRESENT: 0 ABSENT: 0
 ACADEMICALLY PROMOTED

DISTRICT: 50 SCHOOL: 3390 NO COURSES TAKEN
 YEAR: 1999-2000 GRADE LEVEL: NA

GPA	QTY	PTS	GPA	QTY	PTS
DISTRICT-TERM:	1.4286	5.00	CUM:	1.5429	27.00
STATE-TERM:	1.4286	5.00	CUM:	1.5429	27.00

1999-2000 ANNUAL DAYS-PRESENT: 0 ABSENT: 0
 SUMMER TERMS DAYS-PRESENT: 0 ABSENT: 0
 PROMOTION STATUS NOT APPLICABLE

DISTRICT: 50 SCHOOL: 3390 NO COURSES TAKEN
 YEAR: 2000-2001 GRADE LEVEL: NA

GPA	QTY	PTS	GPA	QTY	PTS
DISTRICT-TERM:	1.4286	5.00	CUM:	1.5429	27.00
STATE-TERM:	1.4286	5.00	CUM:	1.5429	27.00

2000-2001 ANNUAL DAYS-PRESENT: 0 ABSENT: 0
 SUMMER TERMS DAYS-PRESENT: 0 ABSENT: 0
 PROMOTION STATUS NOT APPLICABLE

DISTRICT: 50 SCHOOL: 3390 SURVIVORS CHARTER SCHOOL
 YEAR: 2001-2002 GRADE LEVEL: 10

T	COURSE#	COURSE TITLE	SUBJECT	CRSE	G	A	O	CREDIT
1	0500530	PERS,CAR,SCH DEV 4	EL	C	C	Z	N	0.50 0.50
1	1001440	BUS ENG I	EN	J	B	Z	N	0.50 0.50
1	1205370	CONSUMER MATH	MA	C	C	Z	N	0.50 0.50
1	8300310	WORKPLACE ESSENTIAL	VO	B	Z	N	0.50 0.50	
1	8301610	WORK EXP 1	VO	F	Z	N	0.50 0.00	
1	8301650	WORK EXP-OJT	VO	F	Z	N	1.00 0.00	

CREDIT, TERM: 3.50 2.00

GPA	QTY	PTS	GPA	QTY	PTS
DISTRICT-TERM:	1.4286	5.00	CUM:	1.5429	27.00
STATE-TERM:	1.4286	5.00	CUM:	1.5429	27.00

2001-2002 ANNUAL DAYS-PRESENT: 69 ABSENT: 32
 SUMMER TERMS DAYS-PRESENT: 0 ABSENT: 0
 NOT ENROLLED IN DISTRICT K-12 AT END OF SCHOOL YEAR