Invited Talk

Internet Search Engines: Past and Future

Jan O. Pedersen

Chief Scientist, Yahoo! Inc.

Abstract

I will review the short history of Internet Search Engines from early first generation systems to the current crop of stock market darlings. Many of the underlying technology problems remain the same, but the business has become significantly more sophisticated and high-powered. I will touch on some of the economics driving the remarkable success of these services and make some predictions about future trends.

Biographical Notes

Dr Pedersen began his career at Xerox PARC where he lead a research group investigating information access technologies. In 1996 he joined Verity, the enterprise search software vendor, as manager of the Advanced Technology Group. In 1998 Dr Pedersen joined Infoseek as Director for Search and Spidering. In 2002 Dr Pedersen joined AltaVista as Chief Scientist. AltaVista was purchased by Overture which again was later purchased by Yahoo! Dr Pedersen is currently Chief Scientist for Search and Marketplace at Yahoo! He holds a PhD in statistics from Stanford University and a BA in statistics from Princeton University. He is credited with more than ten issued patents and has authored more than twenty refereed publications refereed on information access topics, seven of which are in the Special Interest Group on Information Retrieval (SIGIR) proceedings.

Invited Talk

News in the Age of the Web

Krishna Bharat

Principal Scientist, Google Inc.

Abstract

One of the most exciting and successful examples of the Web impacting society is online news. The history of the news industry from print to the online medium is an interesting journey. Broadcast news transformed society by making news available instantly rather than once a day. While more channels became available, barriers to entry remained high and mainstream opinions continued to dominate. News on the net has brought in a number of valuable transformations, allowing news to be made (potentially) more accessible, diverse, democratic, personalized and interactive than before. Blogging has now made "citizen reporting" possible. As with any disruptive technology online news has both positive and negative implications, such as the threat of disinformation. Computer assisted news is a fun area of research that draws upon prior work in information retrieval, data mining and user interfaces. Given the volume of online news being generated today, the ability to find news and related facts quickly and with high relevance affects both readers and journalists. The talk will address the social implications as well as the technical challenges in the dissemination of online news, with a focus on Google News. Google News is an automated service that makes over 4,500 online, English sources searchable and browseable in real time, with an emphasis on breadth of coverage.

Biographical Notes

Krishna is a Principal Scientist at Google Inc, working in area of UI and algorithmic support for Web search and content analysis (Web Information Retrieval). He graduated with a Ph.D. in Computer Science from Georgia Tech in 1996 and a B. Tech from IIT-Madras in 1991. Before joining Google in 1999, he was a member of the research staff at DEC Systems Research Center in Palo Alto, CA. In 2002 he created Google News (http://news.google.com/) a computer generated newspaper that unifies news from online newspapers worldwide with an emphasis on diversity and balance. Krishna currently heads Google's R&D Center in Bangalore, India, which he helped establish in 2004. This is part of Google's worldwide engineering campus which includes centers in Tokyo and Zurich.

Invited Talk

Technical Challenges in Exploiting the Web as a Business Resource

Andrew Tomkins

WebFountain Chief Scientist

IBM Almaden Research Center

Abstract

In this talk, I'll describe some recent indicators suggesting that businesses are on the cusp of operational exploitation of the web as a decision support resource. From consumer research and purchasing behavior to enterprise brand tracking, intelligence gathering, and advertising, the web is suddenly on everybody's mind — not as an exciting future possibility, but as an exploitable resource. I'll describe some technological approaches to employing this resource, talk about what's possible today, and describe some challenges for the future. As a running example, I'll cover IBM's WebFountain system: its architecture, analytical model, and applications.

Biographical Notes

Dr. Andrew Tomkins' work focuses on analysis, measurement, and modeling of large-scale unstructured collections such as the World Wide Web. Dr. Tomkins manages IBM's Information Management Principles group at the Almaden Research Center in San Jose, California. Concurrently, Andrew is chief scientist of WebFountain, an IBM "Emerging Business Opportunity" focused on extending business intelligence by exploiting the vast collections of unstructured information available outside the enterprise. He has published some 50+ scientific articles, recently focused on algorithmic analysis of the web.

Invited Talk

DoCoMo's Challenge Towards New Mobile Services

Kiyoyuki Tsujimura

Executive Vice President, Managing Director of Corporate Strategy and Planning

NTT DoCoMo

Abstract

NTT DoCoMo, the provider of "i-mode" mobile Internet service, which accommodates over 40 million subscribers in Japan, is now working to create new types of mobile communications services featuring visual content and contactless IC technology.

Biographical Notes

Kiyoyuki Tsujimura is Executive Vice President at NTT DoCoMo, Inc, the largest mobile operator in Japan. He has been overseeing the Company's strategy development for two years as Managing Director of Corporate Strategy and Planning Department. Before serving the current position, he was Senior Vice President and Managing Director of Global Business Department. Mr. Tsujimura has been working for NTT DoCoMo for 13 years since it was spun off from NTT Corporation, during which he served several director positions. He received his master degree in management from Massachusetts Institute of Technology in 1987 and ME and BE in electronic physics from Tokyo Institute of Technology in 1975 and 1973, respectively.

Invited Talk

Automatic Text Processing to Enhance Product Search for On-line Shopping

Gilles Vandelle

Project Director, Kelkoo

Abstract

The growing eCommerce business requires an advanced way of searching for products. Buyers today are not only using the web to accomplish transactions but also to search for and select products that fit their needs. The products are now global but the users want a site that uses their language when shopping. This talk will describe how Kelkoo built a solution used across. The multiple European languages have been addressed with a simple linguistic approach combined with machine learning technologies. In this talk we will put the emphasis on the use of machine learning to address local diversity.

Biographical Notes

Gilles Vandelle is project director at Kelkoo http://www.kelkoo.com a European based subsidiary of Yahoo specialized in product search and price comparison. He is responsible for searching and adapting new technology to enhance the Kelkoo products. Gilles is a graduate from Ecole Central de Paris in 1982. He co-founded in 1986 a company specialized in artificial intelligence and offering services to large financial organizations. Since 1997 he has worked on web-based solutions in both France and California.

Invited Talk

Title to be Announced

To Be Determined

Affiliation

Abstract

Coming……