

## ROSIE JONES

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### SUMMARY

Senior scientist and leader with nine years of industry experience in online web advertising and algorithmic web search. Sixteen years of machine learning and data mining experience. Extensive experience developing and working on research programs in industry and conducting technical transfer. Ten awarded patents, over thirty academic publications, and major industry product contributions in sponsored and algorithmic search. Thought leader in industry setting.

### RESEARCH INTERESTS

Query session analysis, user search behavior, web search, mobile search, applied machine learning, computational advertising, Asian language processing.

### EDUCATION

**Carnegie Mellon University**, Pittsburgh, Pennsylvania USA  
Ph.D. Language and Information Technologies, 2005  
Thesis title *Learning to Extract Entities from Labeled and Unlabeled Text*  
Committee: Tom Mitchell (chair), Alex Hauptmann, Roni Rosenfeld and Ellen Riloff

**Carnegie Mellon University**, Pittsburgh, Pennsylvania USA  
M.S. Computational Linguistics, 1997

**University of Sydney**, Sydney, AUSTRALIA  
B.Sc (Hons) Computer Science, 1994

### EXPERIENCE

Director of Data Strategy and Analytics May, 2010–present  
Akamai Technologies Cambridge, MA  
Manage scientist/analysts working on cutting edge computational advertising algorithms and data analysis. Provide scientific leadership for engineering and product on strategic directions and metrics.

Senior Research Scientist January, 2004–May 2010  
**Yahoo! Inc** Burbank, CA; Cambridge, MA  
Conducted research in information retrieval with applications to web and sponsored search. Used machine learning and statistical analysis of data to design and run experiments, test hypotheses leading to algorithm design. Mentored research engineers and scientists and acted as science lead for technical transfer in matrix organization. Supervised graduate students over summer internships.

Senior Research Scientist May 2002–January, 2004  
**Overture Services** Pasadena, CA  
Conducted research with applications to sponsored search. Mentored research engineers and acted as science lead for technical transfer. Datamined query logs for term relatedness and importance to increase sponsored search coverage and relevance, leading to significant revenue-per-search increases.

Graduate Research Assistant September 1995 - September 2001  
**Carnegie Mellon University** Pittsburgh, PA  
Conducted research in web data mining, machine learning, information retrieval and spoken retrieval and translation systems. Advisor: Professor Tom Mitchell

Visiting Researcher Feb 1998 - July 1998  
**Bar Ilan University** Ramat Gan, ISRAEL  
Conducted research on active learning under Ido Dagan.

Summer Intern June 1997 - August 1997  
**Digital Cambridge Research Labs** Cambridge, MA  
Conducted research on speech recognition on lossily compressed speech data. Mentor:  
Chris Weikart.

Summer Intern May 1995 - August 1995  
**Rank Xerox Research Centre Europe** Grenoble, FRANCE  
Modified text summarization algorithms from English to French and German. Mentor:  
Greg Grefenstette.

Research Engineer January 1995 - May 1995  
**Microsoft Research Institute** Sydney, AUSTRALIA  
Implemented algorithms for statistical natural language processing.

#### PUBLICATIONS

##### **Academic Leadership**

Presented tutorials on web mining, and open search tools at SIGIR and WWW conferences (2008 – 2010). Organized workshops on web search click data, lexical cohesion, and unsupervised data for machine learning and data mining (WSDM 2009, SIGIR 2005 and ICML 2003).

#### PATENTS

**Patents Awarded** Rosie Jones, Benjamin Rey and Tina Weyand *System and method for generating substitutable queries* US Patent No. 7,962,479 Issued June 14th, 2011

Kristina Klinkner and Rosie Jones *Segmentation of search topics in query logs* US Patent No. 7,877,389 Issued January 25, 2011

Rosie Jones and Desislava Petkova *Context-sensitive query expansion* US Patent No. 7,831,588 Issued November 9, 2010

Tina Weyand, Rosie Jones and Benjamin Rey *Alternative search query processing in a term bidding system* US Patent No. 7,752,220 Issued July 6, 2010

Rosie Jones, Benjamin Rey and Marco Zaghera *System and method for generating substitutable queries on the basis of one or more features* US Patent No. 7,739,264 Awarded June 15, 2010

Rosie Jones, Kevin Bartz and Benjamin Rey *System and method for identifying related queries for languages with multiple writing systems* US Patent No. 7,689,554 Issued March 30, 2010

Soren Riise, Devesh Patel, Bruce Campbell, David Richardson-Bunbury, Eugene Stipp and Rosie Jones *System and method for query expansion* US patent no: 7,685,119 Issued March 23, 2010

Tina Weyand, Rosie Jones and Benjamin Rey *System and method for determining alternate search queries* US Patent No. 7,634,462 Issued December 15, 2009

Rosie Jones and Fernando Diaz *System and method for providing temporal search results*

*in response to a search query* US Patent No. 7,577,651 Issued August 18, 2009

Rosemary Jones and Daniel C. Fain, *System and Methods for Ranking the Relative Value of Terms in a Multi-Term Search Query Using Deletion Prediction* US Patent No. 7,406,465 Issued July 29, 2008

AWARDS AND  
HONORS

*Senior Member of ACM* 2008 - present

*Yahoo! Internal Patent Milestone Award* in recognition of 15th Yahoo! invention, February 2008

*Nominated for Yahoo! Internal Superstar Award, 2006*

*Yahoo! Internal Roosevelt Teddy Award, August 2006*

*National Science Foundation LIS scholarship for multimedia research.* Half-tuition and stipend award. Spring 1999, Summer 2000, Fall 2000

*Canon Australia Scholarship for Excellence in Computer Science* AUS\$10,000 prize awarded May 1994

*1991 OTC Scholarship for Women in Electrical Engineering* Awarded on the basis of academic merit

*Sydney University Chancellor's Scholarship in Engineering*, awarded 1990, on the basis of academic merit

SKILLS

Programming Languages: Perl, C, C++

Tools: Linux, R, hadoop

*Los Angeles Perl Monger's Beginner's Perl Golf Challenge Winner* April 2002

Human Languages: Fluent German, Fluent French, Advanced Conversational Japanese (passed JLPT level 4), Elementary Hebrew (completed ulpan kita aleph)

Extensive overseas working and foreign language experience in France (total 14 months), Japan (3 months), Germany (7 months), Israel (5 months), USA (15 years)