

EVGENIY GABRILOVICH

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SUMMARY

Director of Research and Head of the NLP & IR Group at Yahoo! Research. 50+ publications in top international venues, 20+ patents filed. Technion Ph.D. graduate (Computer Science). **Recipient of the 2010 Karen Spärck Jones Award**. Served as a Senior PC member / Area Chair / Vice Chair at SIGIR, WWW, WSDM, AACL, IJCAI, ACL, EMNLP, ICDM, and ICWSM, and served on the program committees of virtually every major conference in the field. Taught multiple tutorials and organized a number of workshops at top conferences.

I am interested in advancing the state of the art in information retrieval and natural language processing at Web scale. I have worked extensively on computational advertising, namely, designing systems that select contextually relevant ads in sponsored search and content match. More recently, I have been working on contextual app recommendation in Web search. I am also interested in using large-scale repositories of collaboratively-generated content (e.g., all of Wikipedia) for improving text processing methods.

EDUCATION

[Technion – Israel Institute of Technology](#), Haifa, Israel

2001 – 2006 **Ph.D. in Computer Science**

- **Thesis:** “Feature Generation for Textual Information Retrieval Using World Knowledge”

1994 – 1998 **M.Sc. in Computer Science**

- **Thesis:** “Natural Language Generation by Abstract Machine for Typed Feature Structures”

1992 – 1994 **B.A. in Computer Science (*Cum Laude*)**

PROFESSIONAL EXPERIENCE

[Yahoo! Research](#), Santa Clara, California, USA

January 2007 – present **Director of Research (Principal Research Scientist) and Head, Natural Language Processing and Information Retrieval Group**

- Leading a team of world-class researchers in the fields of large-scale information retrieval and natural language processing.
- I have worked on query classification, expansion and rewriting; optimizing relevance and revenue in sponsored search; ad indexing; understanding how users interact with online ads; as well as temporal aspects of information retrieval. One common theme in my research is the use of multiple sources of information (such as Web search results, classification into an external taxonomy, users’ and advertisers’ actions), and the combination of online and offline processing to maximize the use of external knowledge.

[Yahoo! Inc. \(Search and Marketplace Group\)](#), Sunnyvale, California, USA

July 2005 – October 2005 **Summer internship**

- Developed algorithms for named entity recognition and classification.
- Participated in the development of a massively parallel infrastructure for large-scale data processing (MapReduce-like). Implemented a module for named entity recognition using this infrastructure.

[Microsoft Research \(Adaptive Systems and Interaction Group\)](#), Redmond, Washington, USA

July 2003 – September 2003 **Summer internship**

- Conducted research on analyzing differences in text corpora with applications to personalization of news services (joint work with Susan Dumais and Eric Horvitz).
- Developed new algorithms for assessing the amount of novel information in text documents, using techniques based on statistical language modeling and natural language processing.
- Designed and implemented software infrastructure for corpora analysis and comparison.

[Department of Computer Science, Technion – Israel Institute of Technology](#), Haifa, Israel

2001 – 2006 and 1994 – 1996 **Teaching Assistant (in parallel with graduate studies)**

- Courses taught: Introduction to artificial intelligence, Projects in artificial intelligence and learning systems, Object-oriented programming, Data structures, Introduction to computer science.

[Zapper Technologies Ltd.](#), Tel Aviv, Israel

1999 – 2001 **Core Technology Team Leader, Algorithms Group**

- Devised and implemented algorithms for query expansion and text categorization for Web search.
- Advised other teams on software development methodology and quality assurance.

[Comverse Technology Inc.](#), Tel Aviv, Israel

1998 – 1999 **Strategic Development Team Leader**

- Devised and implemented algorithms for retrieving information encoded in telephone network transmissions.
- Advised other teams on object-oriented design, software development methodology and quality assurance. Drafted development procedures and guidelines.
- Fostered teamwork and collaboration among employees.

1996 – 1998 **Senior Software Engineer**

- Designed and developed C/C++ libraries in Silicon Graphics IRIX and Windows NT.
- Managed full project lifecycle of the development of a software package for data communication analysis, according to the Capability Maturity Model (CMM).
- Coordinated work with customers.

[DSP Group Inc.](#), Santa Clara, California, USA

July 1995 – October 1995 **Summer internship**

- Conducted research in speech processing and automatic speaker recognition.
- Designed and developed a software environment for conducting experiments with speech processing algorithms.

PROFESSIONAL COURSES

- 2008 [Technical Management Program](#), University of California, Los Angeles, USA
- 1998 Management course for team leaders, Comverse Technology Inc., Tel Aviv, Israel

LANGUAGE PROFICIENCY

- **English** Fluent knowledge
- **Hebrew** Fluent knowledge
- **Russian** Mother tongue
- **German** Basic knowledge
- **Spanish** Basic knowledge

AWARDS AND HONORS

- Recipient of the [BCS IRSG Karen Spärck Jones Award](#) (2010)
- **Invited participant** at the [First EU-US Frontiers of Engineering Symposium](#) (2010), organized by the National Academy of Engineering and the European Council of Applied Sciences and Engineering
- **Invited participant** at the [2009 U.S. Frontiers of Engineering Symposium](#), organized by the National Academy of Engineering
- **Outstanding reviewer**, COLING-ACL 2006 (Joint Conference of the International Committee on Computational Linguistics and the Association for Computational Linguistics)

PROFESSIONAL AFFILIATIONS

- [Institute of Electrical and Electronics Engineers](#) (IEEE) – Senior Member
- [Association for Computing Machinery](#) (ACM)

PROFESSIONAL ACTIVITIES

Journal editorial board member

- [ACM Transactions on Intelligent Systems and Technology \(TIST\)](#)

Senior program committee member / area chair / vice chair

- European Conference on Information Retrieval (ECIR 2013) – Workshop Chair
- ACM Conference on Information and Knowledge Management (CIKM 2012) – Industry Track Chair
- Annual Meeting of the Association for Computational Linguistics ([ACL 2012](#)) – Area Chair
- International World Wide Web Conference ([WWW 2012](#)) – Track Chair
- ACM International Conference on Web Search and Data Mining ([WSDM 2012](#)) – Senior PC
- IEEE International Conference on Data Mining ([ICDM 2011](#)) – Vice Chair
- Annual International SIGIR Conference ([SIGIR 2012](#), [SIGIR 2011](#)) – Area Chair
- AAAI Conference on Artificial Intelligence ([AAAI 2011](#)) – Senior PC
- International Joint Conference on Artificial Intelligence ([IJCAI 2011](#)), Integrated and Embedded AI (IEAI) Track – Senior PC
- ACM Int'l Conference on Web Search and Data Mining ([WSDM 2011](#)) – Workshop Chair
- Conference on Empirical Methods in Natural Language Processing ([EMNLP 2010](#)) – Area Chair
- ACM Conference on Knowledge Discovery and Data Mining ([KDD 2010](#)) – Poster Chair
- International AAAI Conference on Weblogs and Social Media ([ICWSM 2010](#)) – Senior PC

Journal guest editor

- Special issue of the [ACM Transactions on Intelligent Systems and Technology](#) on Computational Models of Collective Intelligence in the Social Web

Journal reviewer

- [ACM Transactions on Information Systems \(TOIS\)](#)
- [ACM Transactions on Internet Technology \(TOIT\)](#)
- [ACM Transactions on the Web \(TWEB\)](#)
- [Artificial Intelligence Journal](#)
- [Communications of the ACM](#)
- [IEEE Transactions on Knowledge and Data Engineering \(TKDE\)](#)
- [Data Mining and Knowledge Discovery](#)
- [Information Processing and Management](#)
- [Journal of Natural Language Engineering](#)

Tutorial instructor

- “Mining, Search and Exploiting Collaboratively Generated Content on the Web” at [WWW 2012](#)
- “Mining, Search and Exploiting Collaboratively Generated Content on the Web” at [WSDM 2012](#)
- “Information Organization and Retrieval with Collaboratively Generated Content” at [AAAI 2011](#), [SIGIR 2011](#)
- “Information Retrieval Challenges in Computational Advertising” at [CIKM 2011](#) (invited), [SIGIR 2010](#)
- “Introduction to Computational Advertising” at [CIKM 2009](#), [IJCAI 2009](#) (invited), [EC 2008](#), [ACL-HLT 2008](#) (invited)

Workshop organizer

- “Appification of the Web” at [WWW 2012](#)
- “Feature Generation and Selection for Information Retrieval” at [SIGIR 2010](#)
- “Information Retrieval and Advertising” at [SIGIR 2009](#)
- “User-Contributed Knowledge and Artificial Intelligence: An Evolving Synergy” at [IJCAI 2009](#)
- “Information Retrieval for Advertising” at [SIGIR 2008](#)
- “Wikipedia and Artificial Intelligence: An Evolving Synergy” at [AAAI 2008](#)

Invited panelist

- [Industry Day](#) at [ECIR 2011](#)
- [Web N-gram Workshop](#) at [SIGIR 2010](#)

Program committee member (conferences)

- International Joint Conference on Artificial Intelligence ([IJCAI 2011](#))
- International Conference on Computational Linguistics ([COLING 2010](#))
- ACM International Conference on Web Search and Data Mining ([WSDM 2010](#))
- Conference on Empirical Methods in Natural Language Processing ([EMNLP 2009](#), [EMNLP-CoNLL 2007](#))
- Annual Meeting of the Association for Computational Linguistics ([ACL-HLT 2011](#), [ACL 2010](#), [ACL-IJCNLP 2009](#), [ACL-HLT 2008](#), [COLING-ACL 2006](#))
- Annual International ACM SIGIR Conference (SIGIR [2010](#), [2009](#))
- International World Wide Web Conference (WWW [2011](#), [2010](#), [2009](#), [2008](#))
- Conference on Information and Knowledge Management (CIKM [2008](#))
- AAAI Conference on Artificial Intelligence (AAAI [2008](#), [2007](#))
- Joint Conference on Digital Libraries (JCDL [2008](#))

Program committee member (workshops and symposia)

- [Workshop on Query Representation and Understanding](#) at [SIGIR 2010](#)
- [Workshop on Collaboratively-built Knowledge Sources and Artificial Intelligence \(WikiAI\)](#) at [AAAI 2010](#)
- [Graduate Students Symposium](#) at [Canadian AI 2010](#)
- [Collaborative Web Tagging Workshop](#) at [WWW 2006](#)

Tutorial committee member

- IEEE/WIC/ACM International Conferences on Web Intelligence and Intelligent Agent Technology ([WI'09/IAT'09](#))

Conference reviewer

- ACM International Conference on Web Search and Data Mining ([WSDM 2011](#))
- AAAI Conference on Artificial Intelligence (AAAI [2010](#), [2006](#), [2005](#))
- International Conference on Computational Linguistics ([Dialogue 2009](#))
(main computational linguistics conference in Russia)

- ACM Conference on Knowledge Discovery and Data Mining ([KDD 2008](#))
- ACM Conference on Information and Knowledge Management ([CIKM 2007](#))
- International World Wide Web Conference (WWW [2006](#), [2003](#))
- International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS [2004](#))

Grant reviewer

- Yahoo! Faculty Research Grant (2009–2011)
- Yahoo! [Key Scientific Challenges Program](#) (2009–2011) – served on the Advisory Committee for the [Search, Information Retrieval, and Data Mining](#) area
- [Internet Mathematics](#) grant program by [Yandex](#) (2007)

Mentor for conference paper submissions

- Annual International ACM SIGIR Conference (SIGIR [2009](#), [2007](#))

PATENTS

- 25 patent applications + 1 patent issued

PUBLICATIONS

Journals

- 1) Aris Anagnostopoulos, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Lance Riedel, “Web-Page Summarization for Just-in-Time Contextual Advertising”, ACM Transactions on Intelligent Systems and Technology, 3(1), 2011.
- 2) Ofer Egozi, Shaul Markovitch, and **Evgeniy Gabrilovich**, “Concept-Based Information Retrieval using Explicit Semantic Analysis”, ACM Transactions on Information Systems, 29(2), 2011.
- 3) **Evgeniy Gabrilovich** and Shaul Markovitch, “Wikipedia-based Semantic Interpretation for Natural Language Processing”, Journal of Artificial Intelligence Research, Vol. 34, pp. 443-498, 2009
- 4) **Evgeniy Gabrilovich**, Andrei Broder, Marcus Fontoura, Amruta Joshi, Vanja Josifovski, Lance Riedel, and Tong Zhang, “Classifying Search Queries Using the Web as a Source of Knowledge”, ACM Transactions on the Web, 3(2):1-28, April 2009
- 5) Eugene Agichtein, **Evgeniy Gabrilovich**, and Hongyuan Zha, “The Social Future of Web Search: Modeling, Exploiting, and Searching Collaboratively Generated Content”, IEEE Data Engineering Bulletin, Volume 32, Number 2, pages 52-61, June 2009
- 6) **Evgeniy Gabrilovich** and Shaul Markovitch, “Harnessing the Expertise of 70,000 Human Editors: Knowledge-Based Feature Generation for Text Categorization”, Journal of Machine Learning Research, 8 (Oct), pp. 2297-2345, 2007
- 7) **Evgeniy Gabrilovich** and Alex Gontmakher, “The Homograph Attack”, Communications of the ACM, 45(2):128, February 2002
- 8) Lev Finkelstein, **Evgeniy Gabrilovich**, Yossi Matias, Ehud Rivlin, Zach Solan, Gadi Wolfman, and Eytan Ruppin, “Placing Search in Context: The Concept Revisited”, ACM Transactions on Information Systems, 20(1):116-131, January 2002

Conferences

- 9) Chenhao Tan, **Evgeniy Gabrilovich**, and Bo Pang, “To Each His Own: Personalized Content Selection based on Text Comprehensibility”, 5th ACM International Conference on Web Search and Data Mining (WSDM), Seattle, WA, February 2012 (Acceptance rate 20.7%)
- 10) Qiaoling Liu, Eugene Agichtein, Gideon Dror, **Evgeniy Gabrilovich**, Yoelle Maarek, Dan Pelleg, Idan Szpektor, “Predicting Web Searcher Satisfaction with Existing Community-based Answers”, 34th Annual Int’l ACM SIGIR Conference, Beijing, China, July 2011 (Acceptance rate 19.8%)
- 11) Kira Radinsky, Eugene Agichtein, **Evgeniy Gabrilovich**, and Shaul Markovitch, “A Word at a Time: Computing Word Relatedness using Temporal Semantic Analysis”, 20th International World Wide Web Conference (WWW), Hyderabad, India, March 2011 (Acceptance rate 12.5%)

- 12) Jangwon Seo, Fernando Diaz, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, "Generalized Link Suggestions via Web Site Clustering", 20th International World Wide Web Conference (WWW), Hyderabad, India, March 2011 (Acceptance rate 12.5%)
- 13) Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, George Mavromatis, and Alex Smola, "Bid Generation for Advanced Match in Sponsored Search", 4th ACM International Conference on Web Search and Data Mining (WSDM), Hong Kong, February 2011 (Acceptance rate 22.3%)
- 14) Ablimit Aji, Yu Wang, Eugene Agichtein, and **Evgeniy Gabrilovich**, "Using the Past to Score the Present: Extending Term Weighting Models with Revision History Analysis", 19th ACM Conference on Information and Knowledge Management (CIKM), Toronto, Canada, October 2010 (Acceptance rate 13.4%)
- 15) Michael Bendersky, **Evgeniy Gabrilovich**, Vanja Josifovski, and Donald Metzler, "The Anatomy of an Ad: Structured Indexing and Retrieval for Sponsored Search", 19th International World Wide Web Conference (WWW), Raleigh, NC, April 2010 (Acceptance rate 14%)
- 16) Cristian Danescu-Niculescu-Mizil, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, "Competing for Users' Attention: On the Interplay between Organic and Sponsored Search Results", 19th International World Wide Web Conference (WWW), Raleigh, NC, April 2010 (Acceptance rate 14%)
- 17) Yejin Choi, Marcus Fontoura, **Evgeniy Gabrilovich**, Vanja Josifovski, Mauricio Mediano, and Bo Pang, "Using Landing Pages for Sponsored Search Ad Selection", 19th International World Wide Web Conference (WWW), Raleigh, NC, April 2010 (Acceptance rate 14%)
- 18) Sharad Goel, Andrei Broder, **Evgeniy Gabrilovich**, and Bo Pang, "Anatomy of the Long Tail: Ordinary People with Extraordinary Tastes", 3rd ACM International Conference on Web Search and Data Mining (WSDM), pp. 201-210, New York, NY, February 2010 (Acceptance rate 15.5%)
- 19) Ben Carterette, **Evgeniy Gabrilovich**, Vanja Josifovski, and Donald Metzler, "Measuring the Reusability of Test Collections", 3rd ACM International Conference on Web Search and Data Mining (WSDM), pp. 231-240, New York, NY, February 2010 (Acceptance rate 15.5%)
- 20) Sujith Ravi, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, Sandeep Pandey, and Bo Pang, "Automatic Generation of Bid Phrases for Online Advertising", 3rd ACM International Conference on Web Search and Data Mining (WSDM), pp. 341-350, New York, NY, February 2010 (Acceptance rate 15.5%)
- 21) Hila Becker, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, "What Happens after an Ad Click? Quantifying the Impact of Landing Pages in Web Advertising", 18th ACM Conference on Information and Knowledge Management (CIKM), pp. 57-66, November 2009 (Acceptance rate 14.5%)
- 22) Andrei Broder, Peter Ciccolo, **Evgeniy Gabrilovich**, Vanja Josifovski, Donald Metzler, Lance Riedel, and Jeffrey Yuan, "Online Expansion of Rare Queries for Sponsored Search", 18th International World Wide Web Conference (WWW), pp. 511-520, Madrid, Spain, April 2009 (Acceptance rate 12%)
- 23) Xuerui Wang, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, "Robust Cross-Language Query Classification with External Web Evidence", 2nd ACM International Conference on Web Search and Data Mining (WSDM), pp. 74-83, Barcelona, Spain, February 2009 (Acceptance rate 17%)
- 24) Andrei Broder, Massimiliano Ciaramita, Marcus Fontoura, **Evgeniy Gabrilovich**, Vanja Josifovski, Donald Metzler, Vanessa Murdock, and Vassilis Plachouras, "To Swing or not to Swing: Learning when (not) to Advertise", 17th Conference on Information and Knowledge Management, pp. 1003-1012, Napa, California, November 2008 (Acceptance rate 17%)
- 25) Andrei Broder, Peter Ciccolo, Marcus Fontoura, **Evgeniy Gabrilovich**, Vanja Josifovski, and Lance Riedel, "Search Advertising using Web Relevance Feedback", 17th Conference on Information and Knowledge Management, pp. 1013-1022, Napa, California, November 2008 (Acceptance rate 17%)
- 26) Filip Radlinski, Andrei Broder, Peter Ciccolo, **Evgeniy Gabrilovich**, Vanja Josifovski, and Lance Riedel, "Learning Query Substitutions for Search Advertising", 31st Annual Int'l ACM SIGIR Conference, pp. 403-410, Singapore, July 2008 (Acceptance rate 17%)
- 27) Ofer Egozi, **Evgeniy Gabrilovich**, and Shaul Markovitch, "Concept-Based Feature Generation and Selection for Information Retrieval", 23rd AAAI Conference on Artificial Intelligence, pp. 1132-1137, Chicago, IL, July 2008 (Acceptance rate 24%)
- 28) Aris Anagnostopoulos, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, Lance Riedel, "Just-in-time contextual Advertising", 16th Conference on Information and Knowledge Management, pp. 331-340, Lisbon, Portugal, November 2007 (Acceptance rate 17%)
- 29) Andrei Broder, Marcus Fontoura, **Evgeniy Gabrilovich**, Amruta Joshi, Vanja Josifovski, and Tong Zhang, "Robust Classification of Rare Queries Using Web Knowledge", 30th Annual International ACM SIGIR Conference, pp. 231-238, Amsterdam, The Netherlands, July 2007 (Acceptance rate 17.5%)

- 30) **Evgeniy Gabrilovich** and Shaul Markovitch, “Computing Semantic Relatedness using Wikipedia-based Explicit Semantic Analysis”, 20th International Joint Conference on Artificial Intelligence (IJCAI), pp. 1606-1611, Hyderabad, India, January 2007 (Acceptance rate 16%)
- 31) **Evgeniy Gabrilovich** and Shaul Markovitch, “Overcoming the Brittleness Bottleneck using Wikipedia: Enhancing Text Categorization with Encyclopedic Knowledge”, 21st National Conference on Artificial Intelligence (AAAI), pp. 1301-1306, Boston, July 2006 (Acceptance rate 22%)
- 32) **Evgeniy Gabrilovich** and Shaul Markovitch, “Feature Generation for Text Categorization Using World Knowledge”, 19th International Joint Conference on Artificial Intelligence (IJCAI), pp. 1048-1053, Edinburgh, UK, August 2005 (Acceptance rate 18%)
- 33) Dmitry Davidov, **Evgeniy Gabrilovich**, and Shaul Markovitch, “Parameterized Generation of Labeled Datasets for Text Categorization Based on a Hierarchical Directory”, 27th Annual Int’l ACM SIGIR Conference, pp. 250-257, Sheffield, UK, July 2004 (Acceptance rate 21%)
- 34) **Evgeniy Gabrilovich** and Shaul Markovitch, “Text Categorization with Many Redundant Features: Using Aggressive Feature Selection to Make SVMs Competitive with C4.5”, 21st Int’l Conference on Machine Learning (ICML), pp. 321-328, Banff, Canada, July 2004 (Acceptance rate 32%)
- 35) **Evgeniy Gabrilovich**, Susan Dumais, and Eric Horvitz, “NewsJunkie: Providing Personalized Newsfeeds via Analysis of Information Novelty”, 13th Int’l World Wide Web Conference (WWW2004), pp. 482-490, New York, May 2004 (Acceptance rate 15%)
- 36) Lev Finkelstein, **Evgeniy Gabrilovich**, Yossi Matias, Ehud Rivlin, Zach Solan, Gadi Wolfman, and Eytan Ruppin, “Placing Search in Context: The Concept Revisited”, 10th Int’l World Wide Web Conference (WWW10), pp. 406-414, Hong Kong, May 2001 (Acceptance rate: 20%)

Book chapters

- 37) Shuly Wintner, **Evgeniy Gabrilovich**, and Nissim Francez, “AMALIA – A Unified Platform for Parsing and Generation”, Nicolas Nikolov and Ruslan Mitkov (eds.), Recent Advances in Natural Language Processing II, Current Issues in Linguistic Theory, Vol. 189, pp. 257-270, John Benjamins, 2000. Selected papers from RANLP’97, Tzigrav Chark, Bulgaria, September 1997

Edited volumes

- 38) **Evgeniy Gabrilovich**, Alex Smola, and Naftali Tishby (editors), Proceedings of the SIGIR Workshop on Feature Generation and Selection for Information Retrieval, July 2010.
- 39) Mikhail Bilenko, **Evgeniy Gabrilovich**, Matthew Richardson, and Yi Zhang (editors), Proceedings of the SIGIR Workshop on Information Retrieval and Advertising”, July 2009
- 40) Razvan Bunescu, **Evgeniy Gabrilovich**, Rada Mihalcea, and Vivi Nastase (editors), Proceedings of the IJCAI Workshop on User-Contributed Knowledge and Artificial Intelligence: An Evolving Synergy (WikiAI), July 2009
- 41) Eugene Agichtein, Ewa Dominowska, **Evgeniy Gabrilovich**, and James Shanahan (editors), Proceedings of the SIGIR Workshop on Information Retrieval in Advertising”, July 2008
- 42) Razvan Bunescu, **Evgeniy Gabrilovich**, and Rada Mihalcea (editors), Proceedings of the AAAI Workshop on Wikipedia and Artificial Intelligence: An Evolving Synergy (WikiAI), July 2008

Magazines

- 43) Mikhail Bilenko, **Evgeniy Gabrilovich**, Matthew Richardson, and Yi Zhang, “Information Retrieval and Advertising” (workshop report), SIGIR Forum, Vol 43, Number 2, pp. 29-33, December 2009
- 44) Razvan Bunescu, **Evgeniy Gabrilovich** and Rada Mihalcea, “Wikipedia and Artificial Intelligence: An Evolving Synergy” (workshop report), AI Magazine, Vol 30, Number 1, 2009
- 45) **Evgeniy Gabrilovich** and Alex Gontmakher, “Human-Targeted Denial of Service”, BYTE.com, June 30, 2003
- 46) **Evgeniy Gabrilovich** and Alex Gontmakher, “Heap Ltd.”, Dr. Dobb’s Journal, 28(6):54-57, June 2003
- 47) **Evgeniy Gabrilovich** and Alex Gontmakher, “When Robots Attack”, BYTE.com, April 21, 2003
- 48) Gregory Begelman, Lev Finkelstein, and **Evgeniy Gabrilovich**, “C++ Set-Theoretic Operations on Virtual Containers”, Dr. Dobb’s Journal, 26(10):40-48, October 2001
- 49) **Evgeniy Gabrilovich** and Lev Finkelstein, “JNI – C++ integration made easy”, C/C++ Users Journal, 19(1):10-21, January 2001

- 50) **Evgeniy Gabrilovich**, “Destruction-Managed Singleton: A Compound Pattern for Reliable Deallocation of Singletons” *C++ Report*, 12(3):35-40, March 2000
- 51) **Evgeniy Gabrilovich**, “Controlling the Destruction Order of Singleton Objects”, *C/C++ Users Journal*, 17(10):57-61, October 1999

Workshops, posters, short papers etc.

- 52) Sarah Tyler, Sandeep Pandey, **Evgeniy Gabrilovich**, and Vanja Josifovski, “Retrieval Models for Audience Selection in Display Advertising”, 20th ACM Conference on Information and Knowledge Management (CIKM), October 2011
- 53) Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, George Mavromatis, Donald Metzler, and Jane Wang, “Exploiting Site-Level Information to Improve Web Search”, 19th ACM Conference on Information and Knowledge Management (CIKM), October 2010
- 54) Deepak Agarwal, **Evgeniy Gabrilovich**, Rob Hall, Vanja Josifovski, and Rajiv Khanna, “Translating Relevance Scores to Probabilities for Contextual Advertising”, 18th ACM Conference on Information and Knowledge Management (CIKM), pp. 1899-1902, November 2009
- 55) Hila Becker, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, “Context Transfer in Search Advertising”, 32nd Annual International ACM SIGIR Conference, pp. 656-657, July 2009
- 56) William Chang, Patrick Pantel, Ana-Maria Popescu, and **Evgeniy Gabrilovich**, “Towards Intent-Driven Bidterm Suggestion”, 18th International World Wide Web Conference (WWW), pp. 1093-1094, Madrid, Spain, April 2009
- 57) Xuerui Wang, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, “Cross-Lingual Query Classification: a Preliminary Study”, 2nd International ACM Workshop on Improving Non-English Web Searching (iNEWS08; in conjunction with the 17th Conference on Information and Knowledge Management), pp. 101-104, Napa, California, November 2008
- 58) Andrei Broder, Peter Ciccolo, **Evgeniy Gabrilovich**, and Bo Pang, “Domain-Specific Query Augmentation using Folksonomy Tags: the Case of Contextual Advertising”, Workshop on Information Retrieval for Advertising (in conjunction with the 31st Annual Int’l ACM SIGIR Conference), pp. 23-26, Singapore, July 2008
- 59) **Evgeniy Gabrilovich**, Nissim Francez, and Shuly Wintner, “Natural Language Generation with Abstract Machine”, 9th Int’l Workshop on Natural Language Generation, pp. 276-279, Niagara-on-the-Lake, Ontario, Canada, August 1998

Theses

- 60) **Evgeniy Gabrilovich**
“Feature Generation for Textual Information Retrieval Using World Knowledge”, *Ph.D. Thesis*, Computer Science Department, Technion, Haifa, Israel, December 2006. 180 pages.
- 61) **Evgeniy Gabrilovich**
“Natural Language Generation by Abstract Machine for Typed Feature Structures”, *M.Sc. Thesis*, Computer Science Department, Technion, Haifa, Israel, June 1998. 104 pages.

Technical reports

- 62) **Evgeniy Gabrilovich** and Shaul Markovitch, “Computing Semantic Relatedness of Words and Texts in Wikipedia-derived Semantic Space”, *Technical Report CIS-2006-04*, Computer Science Department, Technion, Haifa, Israel, July 2006
- 63) Shuly Wintner, **Evgeniy Gabrilovich** and Nissim Francez, “AMALIA – A Uniform Platform for Parsing and Generation”, *Technical Report LCL9703*, Laboratory for Computational Linguistics, Computer Science Department, Technion, Haifa, Israel, August 1997
- 64) **Evgeniy Gabrilovich** and Alberto Berstein, “Using a Vector Quantization Approach for Robust Text-Independent Speaker Identification”, *Technical Report DSPG-95-9-001*, DSP Group Inc., Santa Clara, CA, USA, September 1995

TALKS AND PRESENTATIONS

- “Design and Analysis of Computational Advertising Systems”
 - **Invited guest lecture** in the [Social Computing course \(INFO 290\)](#), School of Information, UC Berkeley, December 2, 2011
- “Advancing Natural Language Understanding with Collaboratively Generated Content”
 - **Invited talk** at the [2011 US Frontiers of Engineering Symposium](#), organized by the National Academy of Engineering, Mountain View, CA, September 19, 2011
- “Time-aware models for NLP and IR applications”
 - eBay Research, San Jose, CA, October 20, 2011
 - Microsoft Research Asia, Beijing, China, August 2, 2011
 - Department of Computer Science and Technology, Tsinghua University, Beijing, China, August 1, 2011
- “Design and Analysis of Textual Advertising Systems”
 - Yahoo! Labs, Beijing, China, July 29, 2011
- “From Information Needs to Action Needs: Towards Contextual App Search and Recommendation”
 - **Invited talk** at the [SIGIR 2011 Industry Track](#), Beijing, China, July 27, 2011
- “Ad Retrieval Systems *in vitro* and *in vivo*: Knowledge-Based Approaches to Computational Advertising”
 - **Invited keynote talk (Karen Spärck Jones Award Lecture)** at the [33rd European Conference on IR Research \(ECIR\)](#), Dublin, Ireland, April 20, 2011
- “Machine Learning in Computational Advertising: Algorithms and Applications”
 - **Invited talk** at [SDForum, Palo Alto, CA, November 3, 2010](#)
- “Recent Advances in Computational Advertising: Design and Analysis of Ad Retrieval Systems”
 - **Invited talk** at [Yandex, Moscow, Russia, July 28, 2010](#)
- “Algorithmic Approaches to Computational Advertising”
 - **Invited guest lecture** in the [Information Retrieval course \(ISM260\)](#), UC Santa Cruz, November 23, 2009
- “Social Web as a Source of World Knowledge”
 - **Invited keynote talk** at the [Workshop on Social Web Search and Mining \(SWSM 2009\)](#), held in conjunction with the 18th ACM Conference on Information and Knowledge Management (CIKM), Hong Kong, China, November 2, 2009
- “The evolution of computational advertising: from heuristic ad matching to knowledge-based ad retrieval”
 - [College of Computing, Georgia Institute of Technology, April 26, 2010](#)
 - [Computer Science Department, Rutgers University, February 3, 2010](#)
 - Computer Science and Engineering Department, Polytechnic Institute of New York University (NYU-Poly), February 2, 2010
 - [Department of Computer Science and Engineering, Hong Kong University of Science and Technology \(HKUST\), November 9, 2009](#)
 - [Computer Science Department, University of Wisconsin – Madison, October 1, 2009](#)
 - [CS Department Colloquium, University of Illinois at Urbana-Champaign, September 29, 2009](#)
- “AI in Web advertising: picking the right ad ten thousand times a second”
 - **Invited keynote talk** at [Canadian AI 2009](#), Kelowna, BC, Canada, May 26, 2009
- “Algorithmic Aspects of Computational Advertising”
 - HP Labs, Palo Alto, CA, USA, January 28, 2009
 - Microsoft Research, Redmond, WA, USA, November 5, 2008
 - Computer Science and Engineering Colloquium, University of Washington, Seattle, WA, USA, November 4, 2008
 - Google, Zurich, Switzerland, October 2, 2008
 - Yahoo Research, Haifa, Israel, September 23, 2008
 - Google, Haifa, Israel, September 23, 2008
- “An Overview of Computational Advertising”
 - [National University of Singapore, July 25, 2008](#)
- “Towards Better Contextual Advertising”
 - [Pompeu Fabra University, Barcelona, Spain, November 13, 2007](#)
- “Computing Semantic Relatedness using Wikipedia-based Explicit Semantic Analysis”
 - Yahoo Research, Santa Clara, CA, USA, February 2, 2007

- “Feature Generation for Textual Information Retrieval using World Knowledge”
 - NLP & ML groups meeting, Computer Science Department, Bar Ilan University, Ramat Gan, Israel, November 30, 2006
 - Computer Science Seminar, Tel Aviv University, Tel Aviv, Israel, November 23, 2006
 - Research Seminar, IBM Haifa Research Laboratory, Haifa, Israel, September 20, 2006
 - Computer Science Seminar, Technion – Israel Institute of Technology, Haifa, Israel, September 17, 2006
- “Enhancing Text Representation Through Knowledge-Based Feature Generation”
 - Yahoo Research, Santa Clara, CA, USA, June 20, 2006
 - [Microsoft Research, Redmond, WA, USA, June 15, 2006](#)
- “Feature Generation for Text Categorization using World Knowledge”
 - Graduate course in Natural Language Processing (guest lecture), Tel Aviv University, Tel Aviv, Israel, January 27, 2006
 - Relevance Brown Bag, Yahoo! Inc., Sunnyvale, CA, USA, July 27, 2005
- “Feature Generation for Text Categorization using Hierarchical Web Knowledge Bases”
 - Israeli Seminar on Computational Linguistics, Bar Ilan University, Ramat Gan, Israel, December 27, 2004
- “Parameterized Generation of Labeled Datasets for Text Categorization”
 - Search and Collaboration Seminar, IBM Research Laboratory, Haifa, Israel, February 16, 2004
- “NewsJunkie: In Pursuit of Personalized News Based on Information Novelty”
 - Microsoft Research, Redmond, WA, USA, September 25, 2003
- “Placing Search in Context: The Concept Revisited”
 - German-Israeli Minerva School in Computational Linguistics, Tuebingen, Germany, October 4, 2001
 - Israeli Seminar on Computational Linguistics, Haifa University, Haifa, Israel, February 15, 2001
- “Singleton Pattern Revisited”
 - Comverse Technology Inc., Tel Aviv, Israel, August 15, 1999
- “Inversion of Unification Grammars for Generation”
 - Israeli Computational Linguistics Seminar, Hebrew University, Jerusalem, Israel, June 16, 1996