EVGENIY GABRILOVICH

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SUMMARY

Vice President of Applied Science at Microsoft. 70+ publications in top international venues, 40+ patents filed. Ph.D. in Computer Science (Technion). **ACM Fellow, IEEE Fellow, SIGIR Academy Member. Recipient of the Karen Spärck Jones Award and the IJCAI-JAIR Best Paper Prize.** Program chair for WSDM 2021, WWW 2017, and WSDM 2015.

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

Microsoft, Mountain View, California, USA

2025 – present   **Vice President of Applied Science**
- Using AI to support multi-user collaboration in Microsoft Teams

Meta, Menlo Park, California, USA

2022 – 2025   **Research Director**
- Monetization GenAI - conversational agents for businesses
- Reality Labs - research on neuromotor interfaces

Google Health, Palo Alto, California, USA

2012 – 2022   **Principal Research Scientist / Research Director**
- I founded the Public & Environmental Health team in Google Health. Our team led the creation of COVID-19 Community Mobility Reports (recipient of the FPF Award for Research Data Stewardship), as well as many other public health datasets and tools.
- Prior to that, I led research teams working on health search, internationalization, and machine-learned epidemiology in Google Research. I also led the Knowledge Vault project, which focused on automatically mining the Web to discover new facts for the Knowledge Graph, and on estimating the trustworthiness of Web sources.

Yahoo! Research, Santa Clara, California, USA

2007 – 2012   **Director of Research (Principal Research Scientist) and Head, Natural Language Processing and Information Retrieval Group**
- Led 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
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
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
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
- 2016   Executive MD Program, Harvard Medical School
- 2014   Engineering Leadership Professional Program, University of California, Berkeley
- 2008   Technical Management Program, University of California, Los Angeles
- 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

AWARDS AND HONORS

- **SIGIR Academy** **Member** (2025)

  Citation: "For development of new research directions, innovations, and service to the field of Information Retrieval"

- **ACM Fellow** (2021)

  Citation: "For contributions to the acquisition, representation, and dissemination of web-knowledge in the medical domain"

- Future of Privacy Forum (FPF) Award for Research Data Stewardship (2021)

- **IEEE Fellow** (2021)

  Citation: "For contributions to web information retrieval technology"

- Award for critical contributions to Alphabet's COVID-19 response (2020)

- Google Research Hiring Committee Superstar (2015)

- **IJCAI-JAIR Best Paper Prize** (2014)

- **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

- Association for Computing Machinery (ACM) – Fellow

- Institute of Electrical and Electronics Engineers (IEEE) – Fellow

PROFESSIONAL ACTIVITIES

Program chair
- WSDM 2021
- WWW 2017
- WSDM 2015

Senior program committee member / area chair / vice chair
- AAAI 2011 – Senior PC
- ACL 2012 – Area Chair
- CIKM 2015, 2013, 2012 – Senior PC
- EMNLP 2010 – Area Chair
- ICDM 2011 – Vice Chair
- ICWSM 2010 – Senior PC
- IJCAI 2016 – Track Chair (AI and the Web Track)
- IJCAI 2015 – Senior PC
- IJCAI 2011 – Senior PC (Integrated and Embedded AI Track)
- KDD 2016, 2015, 2014 – Senior PC
- SIGIR 2020, 2019, 2017, 2016, 2013, 2012, 2011 – Area Chair
- WSDM 2019, 2016, 2012 – Senior PC
- WWW 2013, 2012 – Track Chair

Other conference organization roles
- Web Conference 2026 – Industry Track Chair
- Web Conference 2022 – Test of Time Award Committee Member
- Future of the Web @ WWW 2021 – Track Chair
- AI in Practice @ AAAI 2020 - Chair
- SIGIR 2019 – Best Paper Award Chair
- Google Healthcare Workshop 2018, 2019 – Chair
- Member of the AAAI Special Committee on AI and Industry (formulated recommendations to the AAAI Executive Council on industry presence at AAAI; invited by the AAAI president)
- The Web of Health @ WWW 2019 – Chair
- BIG Web @ WWW 2018 – Track Chair
- WSDM 2018 – VC & Industry Day Chair
- KDD 2017 – Best Paper Award Committee Member (Applied Data Science Track)
- AAAI 2017 – Industry Event Chair
- WSDM 2014 – Doctoral Consortium Mentor
- ECIR 2013 – Workshop Chair
- WSDM 2013 – Doctoral Consortium Committee Member
- CIKM 2012 – Industry Event Chair
- SIGIR 2012 – Best Paper Award Committee Member
- WSDM 2011 – Workshop Chair
- KDD 2010 – Poster Chair

Journal editorial board member
- ACM Transactions on Intelligent Systems and Technology (2010 – 2016)

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
- Journal of the ACM
- 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
- "Constructing and Mining Web-Scale Knowledge Graphs" at SIGIR 2016 (**invited**; slides), WWW 2015 (**invited**), KDD 2014
- "Mining, Searching and Exploiting Collaboratively Generated Content on the Web" at WWW 2012, 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
- NSF PREPARE workshop on DATA – Access, Creation, and Maintenance of Data and Computing Resources, May 12-13, 2021
- "Knowledge Representation and Reasoning: Integrating Symbolic and Neural Approaches", AAAI 2015 Spring Symposium, Stanford University, March 23-25, 2015
- "Entity Recognition and Disambiguation Challenge" at SIGIR 2014
- "Automatic Construction and Curation of Knowledge Bases" at SIGMOD 2014
- "Sixth International Workshop on Exploiting Semantic Annotations in Information Retrieval" at CIKM 2013
- "Structured Learning: Inferring Graphs from Structured and Unstructured Inputs" at ICML 2013
- "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

Ph.D. thesis committee member
- Nan Du (College of Computing, Georgia Institute of Technology, advisor: Prof. Le Song), graduated in 2016
- Hongning Wang (Department of Computer Science, UIUC, advisor: Prof. ChengXiang Zhai), graduated in 2014
- Yuanhua Lv (Department of Computer Science, UIUC, advisor: Prof. ChengXiang Zhai), graduated in 2012

Invited panelist
- "Structured Knowledge on the Web" at WWW 2018
- "Rethinking the Turing Test" panel at IJCAI 2015
- Industry Day at ECIR 2011
- Web N-gram Workshop at SIGIR 2010

Program committee member (conferences)
- DESIRES 2024, 2022, 2020, 2018 (Design of Experimental Search & Information Retrieval Systems, new biennial international conference in IR)
- IJCAI 2011
- COLING 2010
- WSDM 2013, 2010
- WI'09/IAT'09 – tutorial committee member
- EMNLP 2009, EMNLP-CoNLL 2007
- ACL 2014, ACL 2013, ACL-HLT 2011, ACL 2010, ACL-IJCNLP 2009, ACL-HLT 2008, COLING-ACL 2006
- SIGIR 2010, 2009
- WWW 2014, 2011, 2010, 2009, 2008
- CIKM 2008
- AAAI 2008, 2007
- JCDL 2008

Grant reviewer
- Google Faculty Research Awards (2012–2016)
- Yahoo! Faculty Research Grants (2009–2011)
- Yahoo! Key Scientific Challenges Program (2009–2012) – 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
- SIGIR 2009, 2007

PATENTS
- 17 patents issued + 26 patent applications

PUBLICATIONS

Journals

1) T. Kaufmann, S. Vispute, M. Kansal, D. O'Brien, T. Shekel, **E. Gabrilovich**, G. Wellenius, L. Dijkstra, P. Veneri, "Variation in access to urban parks across six OECD countries", Nature Urban Sustainability 5:40, 2025

2) M. Young, S. Vispute, S. Serghiou, A. Kumok, Y. Shah, K. Lane, F. Black-Ingersoll, P. Brochu, M. Bharel, S. Skenazy, A. Karthikesalingam, S. Bavadekar, M. Kansal, T. Shekel, **E. Gabrilovich**, G. Wellenius, "Quantifying urban park use in the USA at scale: empirical estimates of realised park usage using smartphone location data", Lancet Planetary Health 8(8), 2024

3) K. Gligoric, C. Kamath, D.J. Weiss, S. Bavadekar, Y. Liu, T. Shekel, K. Schulman, **E. Gabrilovich**, "Revealed versus potential spatial accessibility of healthcare and changing patterns during the COVID-19 pandemic", Nature Communications Medicine 3:157, 2023

4) R. Weintraub, K. Miller, B. Rader, J. Rosenberg, S. Srinath, S. Woodbury, M. Schultheiss, M. Kansal, S. Vispute, S. Serghiou, G. Flores, A. Kumok, T. Shekel, **E. Gabrilovich**, I. Ahmad, M. Chiang, J. Brownstein, "Identifying COVID-19 Vaccine Deserts and Ways to Reduce Them: A Digital Tool to Support Public Health Decision-Making", American Journal of Public Health e1–e5, 2023

5) U. Vaidyanathan, Y. Sun, T. Shekel, K. Chou, S. Galea, **E. Gabrilovich**, G. Wellenius, "An evaluation of Internet searches as a marker of trends in population mental health in the US", Nature Scientific Reports 12:8946, 2022

6) L. Woskie, J. Hennessy, V. Espinosa, T. Tsai, S. Vispute, B. Jacobson, C. Cattuto, L. Gauvin, M. Tizzoni, A. Fabrikant, K. Gadepalli, A. Boulanger, A. Pearce, C. Kamath, A. Schlosberg, C. Stanton, S. Bavadekar, M. Abueg, M. Hogue, A. Oplinger, K. Chou, G. Corrado, T. Shekel, A. Jha, G. Wellenius, **E. Gabrilovich**, "Early social distancing policies in Europe, changes in mobility & COVID-19 case trajectories: Insights from Spring 2020", PLoS ONE 16(6), 2021

7) G. Wellenius, S. Vispute, V. Espinosa, A.Fabrikant, T. Tsai, J. Hennessy, A. Dai, B. Williams, K. Gadepalli, A. Boulanger, A. Pearce, C. Kamath, A. Schlosberg, C. Bendebury, C. Mandayam, C. Stanton, S. Bavadekar, C. Pluntke, D. Desfontaines, B. Jacobson, Z. Armstrong, B. Gipson, R. Wilson, A. Widdowson, K. Chou, A. Oplinger, T. Shekel, A. Jha, **E. Gabrilovich**, "Impacts of social distancing policies on mobility and COVID-19 case growth in the US", Nature Communications, 2020

8) D. J. Weiss, A. Nelson, C. A. Vargas-Ruiz, K. Gligorić, S. Bavadekar, **E. Gabrilovich**, A. Bertozzi-Villa, J. Rozier, H. S. Gibson, T. Shekel, C. Kamath, A. Lieber, K. Schulman, Y. Shao, V. Qarkaxhija, A. K. Nandi, S. H. Keddie, S. Rumisha, P. Amratia, R. Arambepola, E. G. Chestnutt, J. J. Millar, T. L. Symons, E. Cameron, K. E. Battle, S. Bhatt, and P. W. Gething, "Global maps of travel time to healthcare facilities", Nature Medicine, 2020

9) A. Sadilek, Y. Hswen, S. Bavadekar, T. Shekel, J. Brownstein, and **E. Gabrilovich**, "Lymelight: forecasting Lyme disease risk using web search data", Nature Digital Medicine, Volume 3, 2020

10) Adam Sadilek, Stephanie Caty, Lauren DiPrete, Raed Mansour, Tom Schenk, Mark Bergtholdt, Ashish Jha, Prem Ramaswami, and **Evgeniy Gabrilovich**, "Machine-learned epidemiology: real-time detection of foodborne illness at scale", Nature Digital Medicine, Volume 1, 2018

11) Xin Luna Dong, **Evgeniy Gabrilovich**, Kevin Murphy, Van Dang, Wilko Horn, Camillo Lugaresi, Shaohua Sun, and Wei Zhang, "Knowledge-Based Trust: Estimating the Trustworthiness of Web Sources", IEEE Data Engineering Bulletin, Volume 39, Number 2, pages 106-117, 2016

12) Maximilian Nickel, Kevin Murphy, Volker Tresp, and **Evgeniy Gabrilovich**, "A Review of Relational Machine Learning for Knowledge Graphs", Proceedings of the IEEE, 104(1): 11-33, 2016 **[Invited paper]**

13) Xin Luna Dong, **Evgeniy Gabrilovich**, Kevin Murphy, Van Dang, Wilko Horn, Camillo Lugaresi, Shaohua Sun, and Wei Zhang, "Knowledge-Based Trust: Estimating the Trustworthiness of Web Sources", Proceedings of the VLDB Endowment 8(9): 938-949, 2015

14) Xin Luna Dong, **Evgeniy Gabrilovich**, Geremy Heitz, Wilko Horn, Kevin Murphy, Shaohua Sun, and Wei Zhang, "From Data Fusion to Knowledge Fusion", Proceedings of the VLDB Endowment 7(10): 881-892, 2014

15) Elad Yom-Tov and **Evgeniy Gabrilovich**, "Postmarket Drug Surveillance Without Trial Costs: Discovery of Adverse Drug Reactions Through Large-Scale Analysis of Web Search Queries", Journal of Medical Internet Research, 15(6):e124, June 2013

16) 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

17) Ofer Egozi, Shaul Markovitch, and **Evgeniy Gabrilovich**, "Concept-Based Information Retrieval using Explicit Semantic Analysis", ACM Transactions on Information Systems, 29(2), 2011

18) **Evgeniy Gabrilovich** and Shaul Markovitch, "Wikipedia-based Semantic Interpretation for Natural Language Processing", Journal of Artificial Intelligence Research, Vol. 34, pp. 443-498, 2009
   - **Winner of the IJCAI-JAIR Best Paper Prize (Awarded in 2014)**

19) **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

20) 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

21) **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

22) **Evgeniy Gabrilovich** and Alex Gontmakher, "The Homograph Attack", Communications of the ACM, 45(2):128, February 2002

23) 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

24) Ari Kobren, Chun How Tan, Panagiotis Ipeirotis, and **Evgeniy Gabrilovich**, "Getting More for Less: Optimized Crowdsourcing with Dynamic Tasks and Goals", WWW 2015 (Acceptance rate 14.1%)

25) Xin Luna Dong, **Evgeniy Gabrilovich**, Geremy Heitz, Wilko Horn, Ni Lao, Kevin Murphy, Thomas Strohmann, Shaohua Sun, and Wei Zhang, "Knowledge Vault: a Web-Scale Approach to Probabilistic Knowledge Fusion", KDD 2014 (Acceptance rate 14.6%)

26) Robert West, **Evgeniy Gabrilovich**, Kevin Murphy, Shaohua Sun, Rahul Gupta, and Dekang Lin, "Knowledge Base Completion via Search-Based Question Answering", WWW 2014 (Acceptance rate 12.9%)

27) Panos Ipeirotis and **Evgeniy Gabrilovich**, "Quizz: Targeted Crowdsourcing with a Billion (Potential) Users", WWW 2014 (Acceptance rate 12.9%)

28) Chun How Tan, Eugene Agichtein, Panos Ipeirotis, and **Evgeniy Gabrilovich**, "Trust, but Verify: Predicting Contribution Quality for Knowledge Base Construction and Curation", WSDM 2014 (Acceptance rate 18%)

29) Guy Halawi, Gideon Dror, **Evgeniy Gabrilovich**, and Yehuda Koren, "Large-Scale Learning of Word Relatedness with Constraints", KDD 2012

30) Hongning Wang, Anlei Dong, Lihong Li, Yi Chang, and **Evgeniy Gabrilovich**, "Joint Relevance and Freshness Learning From Clickthroughs for News Search", WWW 2012 (Acceptance rate 12.2%)

31) Chenhao Tan, **Evgeniy Gabrilovich**, and Bo Pang, "To Each His Own: Personalized Content Selection based on Text Comprehensibility", WSDM 2012 (Acceptance rate 20.7%)

32) Qiaoling Liu, Eugene Agichtein, Gideon Dror, **Evgeniy Gabrilovich**, Yoelle Maarek, Dan Pelleg, Idan Szpektor, "Predicting Web Searcher Satisfaction with Existing Community-based Answers", SIGIR 2011 (Acceptance rate 19.8%)

33) Kira Radinsky, Eugene Agichtein, **Evgeniy Gabrilovich**, and Shaul Markovitch, "A Word at a Time: Computing Word Relatedness using Temporal Semantic Analysis", WWW 2011 (Acceptance rate 12.5%)

34) Jangwon Seo, Fernando Diaz, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, "Generalized Link Suggestions via Web Site Clustering", WWW 2011 (Acceptance rate 12.5%)

35) Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, George Mavromatis, and Alex Smola, "Bid Generation for Advanced Match in Sponsored Search", WSDM 2011 (Acceptance rate 22.3%)

36) Ablimit Aji, Yu Wang, Eugene Agichtein, and **Evgeniy Gabrilovich**, "Using the Past to Score the Present: Extending Term Weighting Models with Revision History Analysis", CIKM 2010 (Acceptance rate 13.4%)

37) Michael Bendersky, **Evgeniy Gabrilovich**, Vanja Josifovski, and Donald Metzler, "The Anatomy of an Ad: Structured Indexing and Retrieval for Sponsored Search", WWW 2010 (Acceptance rate 14%)

38) 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", WWW 2010 (Acceptance rate 14%)

39) Yejin Choi, Marcus Fontoura, **Evgeniy Gabrilovich**, Vanja Josifovski, Mauricio Mediano, and Bo Pang, "Using Landing Pages for Sponsored Search Ad Selection", WWW 2010 (Acceptance rate 14%)

40) Sharad Goel, Andrei Broder, **Evgeniy Gabrilovich**, and Bo Pang, "Anatomy of the Long Tail: Ordinary People with Extraordinary Tastes", WSDM 2010 (Acceptance rate 15.5%)

41) Ben Carterette, **Evgeniy Gabrilovich**, Vanja Josifovski, and Donald Metzler, "Measuring the Reusability of Test Collections", WSDM 2010 (Acceptance rate 15.5%)

42) Sujith Ravi, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, Sandeep Pandey, and Bo Pang, "Automatic Generation of Bid Phrases for Online Advertising", WSDM 2010 (Acceptance rate 15.5%)

43) 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", CIKM 2009 (Acceptance rate 14.5%)

44) Andrei Broder, Peter Ciccolo, **Evgeniy Gabrilovich**, Vanja Josifovski, Donald Metzler, Lance Riedel, and Jeffrey Yuan, "Online Expansion of Rare Queries for Sponsored Search", WWW 2009 (Acceptance rate 12%)

45) Xuerui Wang, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, "Robust Cross-Language Query Classification with External Web Evidence", WSDM 2009 (Acceptance rate 17%)

46) 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", CIKM 2008 (Acceptance rate 17%)

47) Andrei Broder, Peter Ciccolo, Marcus Fontoura, **Evgeniy Gabrilovich**, Vanja Josifovski, and Lance Riedel, "Search Advertising using Web Relevance Feedback", CIKM 2008 (Acceptance rate 17%)

48) Filip Radlinski, Andrei Broder, Peter Ciccolo, **Evgeniy Gabrilovich**, Vanja Josifovski, and Lance Riedel, "Optimizing relevance and revenue in ad search: a query substitution approach", SIGIR 2008 (Acceptance rate 17%)

49) Ofer Egozi, **Evgeniy Gabrilovich,** and Shaul Markovitch, "Concept-Based Feature Generation and Selection for Information Retrieval", AAAI 2008 (Acceptance rate 24%)

50) Aris Anagnostopoulos, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, Lance Riedel, "Just-in-time contextual Advertising", CIKM 2007 (Acceptance rate 17%)

51) Andrei Broder, Marcus Fontoura, **Evgeniy Gabrilovich**, Amruta Joshi, Vanja Josifovski, and Tong Zhang, "Robust Classification of Rare Queries Using Web Knowledge", SIGIR 2007 (Acceptance rate 17.5%)

52) **Evgeniy Gabrilovich** and Shaul Markovitch, "Computing Semantic Relatedness using Wikipedia-based Explicit Semantic Analysis", IJCAI 2007 (Acceptance rate 16%)

53) **Evgeniy Gabrilovich** and Shaul Markovitch, "Overcoming the Brittleness Bottleneck using Wikipedia: Enhancing Text Categorization with Encyclopedic Knowledge", AAAI 2006 (Acceptance rate 22%)

54) **Evgeniy Gabrilovich** and Shaul Markovitch, "Feature Generation for Text Categorization Using World Knowledge", IJCAI 2005 (Acceptance rate 18%)

55) Dmitry Davidov, **Evgeniy Gabrilovich**, and Shaul Markovitch, "Parameterized Generation of Labeled Datasets for Text Categorization Based on a Hierarchical Directory", SIGIR 2004 (Acceptance rate 21%)

56) **Evgeniy Gabrilovich** and Shaul Markovitch, "Text Categorization with Many Redundant Features: Using Aggressive Feature Selection to Make SVMs Competitive with C4.5", ICML 2004 (Acceptance rate 32%)

57) **Evgeniy Gabrilovich**, Susan Dumais, and Eric Horvitz, "NewsJunkie: Providing Personalized Newsfeeds via Analysis of Information Novelty", WWW 2004 (Acceptance rate 15%)

58) Lev Finkelstein, **Evgeniy Gabrilovich**, Yossi Matias, Ehud Rivlin, Zach Solan, Gadi Wolfman, and Eytan Ruppin, "Placing Search in Context: The Concept Revisited", WWW 2001 (Acceptance rate: 20%)

Book chapters

59) 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, Tzigov Chark, Bulgaria, September 1997

Edited volumes

60) **Evgeniy Gabrilovich**, Zhong Su, and Jie Tang (editors), "Computational Models of Collective Intelligence in the Social Web", Special Issue of the ACM Transactions on Intelligent Systems and Technology, 2012

61) **Evgeniy Gabrilovich**, Alex Smola, and Naftali Tishby (editors), Proceedings of the SIGIR Workshop on Feature Generation and Selection for Information Retrieval, July 2010

62) Mikhail Bilenko, **Evgeniy Gabrilovich**, Matthew Richardson, and Yi Zhang (editors), Proceedings of the SIGIR Workshop on Information Retrieval and Advertising", July 2009

63) 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

64) Eugene Agichtein, Ewa Dominowska, **Evgeniy Gabrilovich**, and James Shanahan (editors), Proceedings of the SIGIR Workshop on Information Retrieval in Advertising", July 2008

65) 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 and other publications

66) David Carmel, Ming-Wei Chang, **Evgeniy Gabrilovich**, Bo-June Paul Hsu, and Kuansan Wang, "ERD'14: Entity Recognition and Disambiguation Challenge" (workshop report), SIGIR Forum 48(2): 63-77, 2014

67) Paul Bennett, **Evgeniy Gabrilovich**, Jaap Kamps, and Jussi Karlgren, "Report on the sixth workshop on exploiting semantic annotations in Information Retrieval (ESAIR'13)", SIGIR Forum 48(1): 13-20, 2014

68) **Evgeniy Gabrilovich**, "Advancing Natural Language Understanding with Collaboratively Generated Content", Reports from the 2011 Frontiers of Engineering Symposium, National Academy of Engineering, pp. 55-59. The National Academies Press, Washington, D.C., 2012.

69) Mikhail Bilenko, **Evgeniy Gabrilovich**, Matthew Richardson, and Yi Zhang, "Information Retrieval and Advertising" (workshop report), SIGIR Forum, 43(2): 29-33, 2009

70) Razvan Bunescu, **Evgeniy Gabrilovich** and Rada Mihalcea, "Wikipedia and Artificial Intelligence: An Evolving Synergy" (workshop report), AI Magazine, Vol 30, Number 1, 2009

71) **Evgeniy Gabrilovich** and Alex Gontmakher, "Human-Targeted Denial of Service", BYTE.com, June 30, 2003

72) **Evgeniy Gabrilovich** and Alex Gontmakher, "Heap Ltd.", Dr. Dobb's Journal, 28(6):54-57, June 2003

73) **Evgeniy Gabrilovich** and Alex Gontmakher, "When Robots Attack", BYTE.com, April 21, 2003

74) Gregory Begelman, Lev Finkelstein, and **Evgeniy Gabrilovich,** "C++ Set-Theoretic Operations on Virtual Containers", Dr. Dobb's Journal, 26(10):40-48, October 2001

75) **Evgeniy Gabrilovich** and Lev Finkelstein, "JNI – C++ integration made easy", C/C++ Users Journal, 19(1):10-21, January 2001

76) **Evgeniy Gabrilovich**, "Destruction-Managed Singleton: A Compound Pattern for Reliable Deallocation of Singletons" C++ Report, 12(3):35-40, March 2000

77) **Evgeniy Gabrilovich,** "Controlling the Destruction Order of Singleton Objects", C/C++ Users Journal, 17(10):57-61, October 1999

Workshops, posters, short papers etc.

78) Sarah Tyler, Sandeep Pandey, **Evgeniy Gabrilovich**, and Vanja Josifovski, "Retrieval Models for Audience Selection in Display Advertising", CIKM 2011

79) Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, George Mavromatis, Donald Metzler, and Jane Wang, "Exploiting Site-Level Information to Improve Web Search", CIKM 2010

80) Deepak Agarwal, **Evgeniy Gabrilovich**, Rob Hall, Vanja Josifovski, and Rajiv Khanna, "Translating Relevance Scores to Probabilities for Contextual Advertising", CIKM 2009

81) Hila Becker, Andrei Broder, **Evgeniy Gabrilovich**, Vanja Josifovski, and Bo Pang, "Context Transfer in Search Advertising", SIGIR 2009

82) William Chang, Patrick Pantel, Ana-Maria Popescu, and **Evgeniy Gabrilovich**, "Towards Intent-Driven Bidterm Suggestion", WWW 2009

83) 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 CIKM 2008

84) 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 SIGIR 2008

85) **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

86) **Evgeniy Gabrilovich**
"Feature Generation for Textual Information Retrieval Using World Knowledge", *Ph.D. Thesis*, Computer Science Department, Technion, Haifa, Israel, December 2006. 180 pages.

87) **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, whitepapers

88) Talia Kaufmann et al., "Comparing access to urban parks across six OECD countries", OECD Regional Development Paper, March 2023. https://www.oecd-ilibrary.org/urban-rural-and-regional-development/comparing-access-to-urban-parks-across-six-oecd-countries_4d17ce4c-en

89) Shailesh Bavadekar et al., "Google COVID-19 Vaccination Search Insights: Anonymization Process Description", 2021, https://arxiv.org/abs/2107.01179

90) Shailesh Bavadekar et al., "Google COVID-19 Search Trends Symptoms Dataset: Anonymization Process Description (version 1.0)", 2020, https://arxiv.org/abs/2009.01265

91) Ahmet Aktay et al., "Google COVID-19 Community Mobility Reports: Anonymization Process Description (version 1.0)", 2020, https://arxiv.org/abs/2004.04145

92) Shuxin Nie, Abhimanyu Das, **Evgeniy Gabrilovich**, Wei-Lwun Lu, Boris Mazniker, Chris Schilling, "STEPS: Predicting place attributes via spatio-temporal analysis", 2016, https://arxiv.org/abs/1610.07090

93) **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

94) 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

95) **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

INVITED TALKS

- "Implicit User-Generated Content in the service of Public Health"
  - **Keynote talk** at CIKM 2022, Atlanta, GA, October 18, 2022
  - **Distinguished seminar series**: Accelerating science with AI, Penn State University, May 9, 2022
  - Guest lecture in the Information Retrieval and Data Mining course, University College London, February 3, 2022
  - **Distinguished lecture** at the Computer Science Seminar, Emory University, October 29, 2021
  - MRC Centre for Environment and Health, Imperial College London, October 28, 2021
- "Health search and machine-learned epidemiology"
  - **Keynote talk** at the AI & Health track, Applied ML Days, EPFL, January 29, 2019
  - Biostatistics and bioinformatics seminar, UCSF, San Francisco, CA, December 5, 2019

- "Cura te ipsum: Health Search @ Google"
  - NCEZID Speaker Series, [National Center for Emerging and Zoonotic Infectious Diseases,](#) Centers for Disease Control and Prevention (CDC), Atlanta, GA, September 20, 2017
  - [Joint Seminar of the Big Data Institute and the Department of Computer Science and Engineering,](#) The Hong Kong University of Science and Technology, July 19, 2017
  - **Keynote talk** at the [Next Generation Informatics for Global Health: Disease Dynamics and Digital Epidemiology](#) conference , The University of Hong Kong, July 18, 2017
  - Noah's Ark Lab, Huawei Technologies, Hong Kong, July 14, 2017
  - [CS and Engineering Department Seminar,](#) The Chinese University of Hong Kong, July 14, 2017
  - [TiEcon 2017,](#) Santa Clara, CA, May 5, 2017
  - [The Hive](#) Annual Summit, Palo Alto, CA, March 13, 2017
- "Cura te ipsum: Answering symptom queries with question intent"
  - Emory University, Atlanta, GA, December 14, 2016
  - **Invited talk** at the [Second WebQA workshop,](#) [SIGIR 2016,](#) Pisa, Italy, July 21, 2016
- "In Knowledge We Trust"
  - **Keynote talk** at [IJCAI 2015,](#) Buenos Aires, Argentina, July 29, 2015
- "Wikipedia-based Semantic Interpretation for Natural Language Processing"
  - **Invited talk (IJCAI-JAIR Best Paper Award Talk)** at [AAAI 2014,](#) Quebec City, Canada, July 31, 2014
- "Crowdsourcing knowledge, one billion facts at a time"
  - **Keynote talk** at the [NIPS'13 Workshop on Crowdsourcing: Theory, Algorithms and Applications,](#) [NIPS 2013,](#) Lake Tahoe, NV, December 9, 2013
- "Knowledge Vault: A Web-Scale Approach to Probabilistic Knowledge Fusion"
  - Facebook, Menlo Park, CA, October 6, 2014
  - AI Seminar, Nuance Communications, Sunnyvale, CA, May 29, 2014
  - **Invited talk** at the [Stanford Workshop on AI and Knowledge (SWANK),](#) Stanford University, April 16, 2014
  - **Keynote talk** at the [Third Workshop on Automated Knowledge Base Construction (AKBC),](#) [CIKM 2013,](#) San Francisco, CA, October 27, 2013
- "Understanding the Web using Big Knowledge"
  - Netflix, Los Gatos, CA, September 23, 2013
  - School of Information, University of Michigan, Ann Arbor, MI, August 27, 2013
  - Computer Science Department, Wayne State University, Detroit, MI, August 26, 2013
  - **Keynote talk** at the [Eleventh Workshop on Mining and Learning with Graphs (MLG),](#) [KDD 2013,](#) Chicago, IL, August 11, 2013
  - Adobe Developer Seminar, San Jose, CA, March 26, 2013
  - [Thought Leaders in Data Science and Analytics Seminar (INFO 296A),](#) School of Information, UC Berkeley, March 6, 2013
- "Understanding the Web using Large-Scale Knowledge Repositories"
  - [Stanford InfoSeminar (CS545),](#) Stanford University InfoLab, January 11, 2013
- "From text annotation to text understanding"
  - **Keynote talk** at the [Text Analytics Summit West 2012,](#) San Francisco, November 13, 2012
- "Understanding the Web using Large-Scale Knowledge Repositories"
  - **Keynote talk** at the [Fifth International Workshop on Exploiting Semantic Annotations in Information Retrieval,](#) [CIKM 2012,](#) Maui, Hawaii, November 2, 2012
- "Time-aware models for NLP and IR applications"
  - Computer Science Colloquium, Bar Ilan University, Ramat Gan, Israel, April 24, 2012
- "Design and Analysis of Textual Advertising Systems"
  - Amazon.com, Seattle, WA, February 8, 2012
- "Design and Analysis of Computational Advertising Systems"
  - **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"
  - [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"
  - SIGIR 2011 Industry Track, Beijing, China, July 27, 2011
- "Ad Retrieval Systems *in vitro* and *in vivo*: Knowledge-Based Approaches to Computational Advertising"
  - **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"
  - SDForum, Palo Alto, CA, November 3, 2010
- "Recent Advances in Computational Advertising: Design and Analysis of Ad Retrieval Systems"
  - Yandex, Moscow, Russia, July 28, 2010
- "Algorithmic Approaches to Computational Advertising"
  - **Guest lecture** in the Information Retrieval course (ISM260), UC Santa Cruz, November 23, 2009
- "Social Web as a Source of World Knowledge"
  - **Keynote talk** at the Workshop on Social Web Search and Mining (SWSM 2009), CIKM 2009, 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"
  - **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 group 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
- "Feature Generation for Text Categorization using World Knowledge"
  - Guest lecture in the graduate course on Natural Language Processing, Tel Aviv University, Tel Aviv, Israel, January 27, 2006
  - Relevance Brown Bag, Yahoo! Inc., Sunnyvale, CA, USA, July 27, 2005

- "Parameterized Generation of Labeled Datasets for Text Categorization"
  - Search and Collaboration Seminar, IBM Research Laboratory, Haifa, Israel, February 16, 2004