

Detailed Curriculum Vitae

1 Personal Information

Name	Ricardo Baeza-Yates
E-mail	rbaeza@acm.org
Personal website	http://www.baeza.cl/

2 Current Activities

- Director of Research at the Institute for Experiential AI, Northeastern University, Silicon Valley, USA, since 2021.
- Member of the Steering Committee of the Global Partnership of AI of OECD, ACM's Policy Technology Committee, IEEE's AI & Automated Systems Policy Committee, and Catalonia's AI Observatory Advisory Board.
- Member of the Academia Europaea since 2023.
- Founding member of the Chilean Academy of Engineering since 2010.
- Member of the Chilean Academy of Sciences since 2023 (corresponding member 2002-2022).
- Corresponding member of the Brazilian Academy of Sciences since 2019.
- Member of the advisory board of the National Portuguese Research Lab in CS, INESC, since 2012.
- Member of the advisory board of the CSE Department of UC Riverside as well as the Department of Informatics Engineering, University of Porto, Portugal, since 2020.
- Member of the Advisory Board of the Professional Association of Computing Professionals of Catalonia since 2009.

3 Highlights

- World class expert in responsible AI, search, data mining and data science in general.
- Research innovator and team builder with leadership and multitasking skills.
- National scientific awards from Chile and Spain.
- Member of Spain's Advisory Council of AI from July 2020 to March 2023.
- Lead co-author with Jeanna Matthews of the ACM Statement on Responsible Algorithmic Systems, Oct 2022.

- VP of Research for Yahoo Labs (2006-2016) with experience as research manager (up to 150 people) and technical lead in applied projects on web search, usage data mining and web advertising (sponsored search and native).
- Co-author of the most used and cited textbook on search concepts and technology: Modern Information Retrieval (two editions and translated to Japanese, Korean, and Portuguese).
- ACM Fellow (less than 1% of the members) and IEEE Fellow.
- My main research areas are responsible AI, information retrieval and its application to the Web, web data mining, data structures, design and analysis of algorithms, among others.

4 Studies

- Ph.D. in Computer Science, University of Waterloo, Ontario, Canada, May 1989. Supervised by Gaston Gonnet, and working on searching algorithms for the New Oxford English Dictionary Project.
- M.Eng. in Electrical Engineering (Digital Systems and Automatic Control), Univ. de Chile, 1986.
- M.Sc. in Computer Science, Universidad de Chile, 1985.
- Electrical Engineer, specialization in Digital Systems, Universidad de Chile, 1985.
- Bachelor in Computer Science, Universidad de Chile, 1983.

5 Awards, Distinctions, Fellowships and Scholarships

- Person of the Year Award given by the Association of Technological Companies, CHILETEC, Chile, 2024.
- National Award for Applied and Technological Sciences (given every other year), Chile, 2024.
- Named Full Member of the Chilean Academy of Sciences, 2023.
- Named Corresponding Member of the Brazilian Academy of Sciences, 2019.
- Award Salvà i Campillo to the Person of the Year, Catalan Association of Telecommunications Engineers with the cooperation of the Association of Computing Engineers of Catalonia, 2019.
- National Research Award “Ángela Ruiz Robles” for applied research and technology transfer, Scientific Computing Societies of Spain & BBVA Foundation, Spain, 2018.
- Best paper award at Techpulse 2014, the main annual technical event of Yahoo. This award was obtained with Di Jiang, Fabrizio Silvestri and Beverly Harrison for a new algorithm that using deep learning allows to predict the next mobile app that a person will use with more than 90% accuracy.
- Computer World Spain Award to Yahoo Labs Barcelona for contributions to big data in 2014.

- Master inventor award, Yahoo, 2012.
- 2012 ASIS&T Best Information Science Book Award for the second edition of Modern Information Retrieval (see books).
- Named IEEE Fellow for contributions to the development of computer science, 2011.
- National Award of the Chilean Association of Engineers, 2010.
- Founding member of the Chilean Academy of Engineering, 2010.
- Named ACM Fellow for contributions to information retrieval algorithms and techniques, 2009.
- CLEI Distinction to Achievements in Informatics, given by the Latin American association of CS departments to people that has contributed to the development of CS in the region, 2009.
- J. W. Graham Medal in Computing & Innovation given to distinguished alumni of the University of Waterloo, Canada, 2007.
- Erskine Fellowship from the University of Canterbury, New Zealand, 2004.
- Chilean Fulbright Commission Fellowship in Information Technology, 2003.
- Manuel Montt award to “Modern Information Retrieval” (co-authored with Berthier Ribeiro-Neto) as the best technical book published by Chilean authors during 1997-2001 (shared with Tomás Moulian’s essay “Current Chile: Anatomy of a Myth”), 2002.
- Named corresponding member of the Chilean Academy of Sciences, 2002.
- Recognition from Informatics Magazine (IDG Chile) for the Development of IT in Chile, 2001.
- COMPAQ Award to the best Brazilian research article in CS published in 1996 (with Eduardo Barbosa and Nivio Ziviani), 1997.
- Fellowship from the Education and Science Ministry of Spain to have a sabbatical year at the Polytechnic Univ. of Catalunya, 1996.
- Award “Ramón Salas Edwards” of the Institute of Engineers of Chile to the best research on engineering on the last 4 years in 1994.
- Recipient of a United States Information Service Important Visitor program, June 1994.
- Award of the Organization of American States (OAS) for young researchers in Exact Sciences, 1993.
- Award from PC Software magazine to the best Chilean software, SearchCity, designed together with Pablo Palma in 1992. This software for Windows 3.1 was similar to Google Desktop but was too ahead in time to succeed.
- Special mention, University of Chile Award for Young Researchers, 1992.

- Award “Marcos Orrego Puelma” of the Institute of Engineers of Chile to the best engineering student graduated in Chile during 1985.
- Ontario Graduate Scholarship, May 1988-April 1989.
- Institute for Computer Research scholarship for graduate studies, University of Waterloo, May 1986-August 1988.
- University of Waterloo graduate scholarship, January 1987-April 1988, and January 1988-April 1988.
- Department of Computer Science Fellowship (Univ. of Waterloo), September 1988-March 1989.
- Information Technology and Research Centre graduate scholarship (Canada), January 1989-April 1989.

6 Professional and Entrepreneurship Experience

- Co-founder of Theodora.ai, a Chilean startup focused in document bias detection and mitigation since 2022.
- Consultant to the Inter American Development Bank since 2019.
- CEO of NTENT Hispania, a R&D subsidiary of NTENT USA, Barcelona, Spain (April 2017 - December 2020).
- CTO of NTENT, a semantic search technology company, Carlsbad, USA (June 2016 - June 2020).
- Chief Research Scientist of Yahoo Labs from October 2015 to February 2016 in Sunnyvale, USA.
- VP of Research at Yahoo Inc. from August 2014 to February 2016 in Sunnyvale, USA.
- VP of Research for EMEA and Latin America at Yahoo Inc. from January 2006 to September 2015, where I started and lead the labs in Europe (Barcelona, Spain) and Latin America (Santiago, Chile).
- Member of the Scientific Advisory board of EURECAT, Barcelona (2015-2017).
- Member of the Executive Board of Barcelona Media Foundation (2010-2015).
- Member of the board of directors of Yahoo Hungary (2009-2016) and Yahoo Israel (2009-2012).
- Supervised Yahoo Labs London from its inception in 2012 and until 2015.
- Supervised Yahoo Labs Haifa from its inception in 2008 and until 2012.
- Co-founder of Raditech in 2001, a Spanish company that offered vertical search as a service, particularly Buscopio, a Spanish web search engine. The company was sold to Fonetic, another Spanish company, in 2007.
- Founder and CEO of TodoCL, a web search engine that covered Chilean websites from 2000 to 2015. It had more than 100 thousand indexed websites and millions of queries per month.

- Member of the consulting committee for the design and evaluation of the new identity card and passport for the National Chilean Civil Registry from 1995 to 2005. In particular I was in charge of evaluating the AFIS (Automated Fingerprint Identification System) system for identity verification.
- International consultant for the United Nations (PNUD) for a governmental system in Perú, 1998.
- Consultant for the International Organization for Migrations, United Nations, for the analysis of the information systems of the Chilean Congress, 1990.
- Consultant for many companies in Chile, including IBM, Langton-Clarke, Sonda, etc., 1990-1992.

7 Academic Experience

- Director for Graduate Programs in Data Science (half-time), Northeastern University at Silicon Valley, USA (2018-2020).
- ICREA Research Professor, Dept. of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona, Spain, Dec 2004-Dec 2005. Part-time Professor since 2006.
- Faculty member at the Department of Computer Science, University of Chile, Santiago, Chile, 1985-2005 (Professor since April 1995). Part-time Professor since 2006.
- Adjunct Professor, Dept. of Computer Science, University of Waterloo, Canada, June 2016-today.
- Founder and first director of the Center for Web Research (www.cwr.cl), Santiago, Chile, 2002-2005.
- Chair of the CS Dept. (Univ. of Chile) from June 1993 to September 1995, and also from November 2002 to November 2004.
- Founder and director of the post-graduate program on Software Projects Management, 1998-2004.
- Visiting Professor at the Technical University of Vienna and IWM (Digital Humanism Fellowship), Austria (June 2023).
- Visiting Professor at Griffith University, Brisbane, Australia (August 2012).
- Visiting Professor (sabbatical) at the CS Dept., Canterbury University, New Zealand (February-March, 2004).
- Visiting Professor (sabbatical) at the CS Dept., Univ. of Sydney, Australia (January 2004).
- Visiting Professor (sabbatical) at the CS & SE Dept., Univ. of Melbourne, Australia, (November-December, 2003).
- Visiting Professor at the CS Dept., Stanford University, July 2003.
- Visiting Professor at the Technology Dept., Pompeu Fabra University (February 2000, 2001, 2002 and 2003).

- Visiting Professor (sabbatical) at the LSI Dept., Polytechnic Univ. of Catalunya, Barcelona, Apr to Dec 1996.
- Visiting Professor (sabbatical) at the Mathematics Research Center (CRM), Barcelona, Jan to Mar 1996.
- Coordinator for the Univ. of Chile of a M.Sc. program at Univ. Mayor de San Simón, Cochabamba, Bolivia, jointly given with Utrecht University (Netherlands) and Catholic University of Chile, 1996-1999.
- Member of the Post-graduate Engineering Committee of the University of Chile, 1991-1995.
- Member of the Exact and Earth Sciences Research Committee of the University of Chile, 1992-2000.
- Coordinator for the M.Sc. program in Computer Science, University of Chile, 1990-1991.
- Postdoctoral fellowship at the University of Waterloo from May to September of 1989.
- Lecturer at the Universidad de Chile from 1984 to 1986.
- Part time lecturer at the Pontificia Universidad Católica de Chile in 1985.
- Part time lecturer at the Universidad de Santiago from 1984 to 1985.
- Research assistant at the Computer Science Department of University of Waterloo (1986-89), and Universidad de Chile (1982-83).
- Research assistant at the Department of Electrical Engineering of Universidad de Chile in 1982.
- Teaching assistant of several courses at the Computer Science Department of University of Waterloo (1986-89) and Universidad de Chile (1981-83).

8 Service Experience

- Member of the editorial committee of ACM Books since 2013.
- Advisory board member for the National Portuguese Research Lab in CS, INESC Lisbon, since 2012. Member of Spain's Advisory Council of AI, from July 2020 to March 2023.
- Member of the ACM Council, USA, from July 2012 to June 2016.
- Member of the advisory board of ISI Foundation, Torino, Italy, from 2014 to 2022.
- Member of the ACM European Council from 2010 to 2014.
- Member of the Publications Board of the ACM, USA, from 2007 to 2009.
- Member of the ACM SIGMOD Doctoral Dissertation Award committee from 2006 to 2007.
- Member of the governmental committee for the Chilean Digital Agenda from 1998 to 2005.

- Chilean site director of the regional ACM Programming Contest and member of the South American steering committee, 1998-2005.
- Chilean representative in the European Molecular Biology Network (EMBNET), 2000-2005.
- Member of the Board of Governors of the IEEE Computer Society, USA, from 2002 to 2004.
- President of CLEI (Latin American Center of Studies in Informatics, a Latin American association that gathers more than 60 computer science departments in 14 countries) from 2000-2004.
- International Coordinator of the Ibero-American cooperation program in science and technology (CYTED) in the areas of Applied Electronics and Informatics, 2000-2004.
- Member of the board of the European Association for Theoretical Computer Science (EATCS), 2001-2003.
- President of the Chilean Computer Science Society (SCCC) from October 1992 to November 1995 and from December 1996 to November 1998. Board member from December 1995 to November 1996 and from November 1998 to November 2002.
- Member of the evaluation committee for FONDEF (technology transfer program), National Research Council for Science and Technology, Chile, 1991-1995 and 2001-2002.
- Member of the evaluation committee for FONDECYT (basic research program), National Research Council for Science and Technology, Chile, 1999-2000.
- President of the Chilean IEEE Computer Society chapter, 1998-2000.
- Coordinator of the Algorithms and Data Structures group of the Ibero-American Network on Software Technology (RITOS), 1992-1997.
- Coordinator of UNESCO courses in Informatics in Bolivia, Perú, Ecuador, Panamá, Paraguay and Chile, 1995-97.
- Coordinator for an IFIP project to support electronic networks in Bolivia and Peru, 1993-94.

9 Patents

1. Ricardo Baeza-Yates and Barbara Poblete. User Query Data Mining and Related Techniques, Yahoo! Inc. and Univ. of Chile, September 2006. USA Patent #7,617,208, granted Nov 10, 2009.
2. Ricardo Baeza-Yates. Techniques for Searching Future Events, Yahoo! Inc. and Univ. of Chile, August 2006. USA Patent #7,668,813, granted Feb 23, 2010.
3. Luciano Barbosa, Flavio Junqueira, Vassilis Plachouras, Ricardo Baeza-Yates. Method and System for Quantifying the Quality of Search Results based on Cohesion, Yahoo! Inc., December 2007. USA patent #7,720,870, granted May 18, 2010.

4. Ricardo Baeza-Yates, Aristides Gionis, Flavio Junqueira and Vassilis Plachouras. System and Method for Caching Posting Lists, Yahoo! Inc., October 2007. USA Patent #7,890,488, granted Feb 5, 2011.
5. Ricardo Baeza-Yates, Alessandro Tiberi. Extracting Semantic Relations from Query Logs, Yahoo! Inc., December 2007. USA Patent #7,895,235, granted Feb 22, 2011.
6. Ricardo Baeza-Yates, Aristidis Gionis, Flavio Junqueira, Vassilis Plachouras and Luca Telloli. System and Methodology for a Multi-Site Search Engine, Yahoo! Inc., October 2008. USA patent #8,095,545, granted January 10, 2012.
7. Barbara Poblete, Ricardo Baeza-Yates. Classifying Documents using Implicit Feedback and Query Patterns, Yahoo! Inc., July 2008. USA patent # 8,645,369, granted February 4, 2014.
8. Barbara Poblete, Ricardo Baeza-Yates. Methods for Web Site Analysis, Yahoo! Inc., April 2010. USA patent #8,751,632, granted June 10, 2014.
9. Fabrizio Silvestri, Ricardo Baeza-Yates, Beverly Harrison, Di Jiang. Predicting the Next Application that You are going to Use on Aviate, Yahoo! Inc., December 2014. USA Patent 9971972B2, granted May 15, 2018.
10. Lizi Zhang, Hongbo Deng, Amit Goyal, Yi Chang, Ricardo Baeza-Yates. Computerized System and Method for Search Query Auto-completion, Yahoo! Inc, September 2015. USA Patent #10049149B2, granted August 14, 2018.
11. Manjana Chandrasekharan, Keiko Horiguchi, Amanda Stent, Ricardo Baeza-Yates, Jeffrey Kuwano, Achint Thomas, Yi Chang. Audio Verification, Yahoo! Inc., September 2015. USA Patent #10277581B2, granted April 30, 2019.
12. Ricardo Baeza-Yates, Berkant Barla Cambazoglu, Darshan M. Shankaralingappa, Matteo Catena. Pipeline for Document Scoring, NTENT, September 2019. USA Patent #11436235, granted September 6, 2022.
13. Ricardo Baeza-Yates, Juan Garay, Sebastián Acuña-Keller, Andrés Villavicencio-Theodoluz, Sebastián Gálvez-Ortiz. Cryptographic systems and methods for providing services to authenticated users, Khosla Ventures, October 2023. USA Patent #US12137166B2, granted November 2024.

10 Research Projects

At Yahoo Labs I was involved in many internal applied research projects in several areas, including web search, computational advertising (sponsored search and native), web usage data mining, and social media analytics. They included many aspects, in particular efficiency and scalability. For confidentiality reasons more details cannot be given.

I have coordinated or participated in EU Research Projects, Ibero-American Research Projects (CYTED, ALFA), bilateral projects (Chile-Brazil, Chile-France, Chile-Spain), and national American (NSF), Chilean (Millennium, CONICYT, FONDEF) and Spanish (CENIT, MICINN, AGAUR) Research Projects.

The following are publicly funded research projects:

1. Seeing the world through LLM-Colored glasses - detecting biases and deficiencies in a=language model presentation of underrepresented topics, Notre Dame-IBM Technology Ethics Lab, 7/2024-1/2025. Project co-leader.
2. Table-as-Query: Unifying Data Discovery and Alignment. NSF Medium Grant IIS-1956096. PIs: René Miller, Mirek Riedewald, Wolfgang Gatterbauer. Key senior researcher, 7/2020-6/2024.
3. Privacy Alerts: Would be possible to empower online social network users with tools such that they control the privacy of their data?, Ministry of Science and Innovation, Spain, 2015 (TIN2013-49814-EXP). Project co-leader.
4. Understanding Social Media: An Integrated Data Mining Approach, Ministry of Science and Innovation, Spain, 2013-2015 (TIN2012-38741). Project Leader.
5. Social Media CENIT Project. Industrial research project involving several companies coordinated by Yahoo! Spain, Ministry of Industry, Spain, 2010-13. Project leader.
6. HIPERGRAPH: High Performance processing of large data represented as Graphs. Ministry of Science and Innovation, Spain, 2009-2013 (TIN2009-14560-C03-01). Coordinated project between Pompeu Fabra Univ., Polytechnic Univ. of Catalonia and Univ. of A Coruña. Project leader.
7. SEMEDIA (Search Environments for Media), STREP project of the VI Research Framework of the European Union, 2007-2009. Project leader.
8. WEBMIN: A Platform for Web Mining, Ministry of Education and Science, Spain, 2006-2008. Project leader.
9. Web Mining Research Group, Universitat Pompeu Fabra, AGAUR (Catalonia Government), 2006-2008. Project leader.
10. A modular and extensible platform for Web mining, Ministry of Education and Science, Spain, 2005-2006. Project Leader.
11. Functional Genomics in Nectarines, Chilean Genomics Program, 2004-2006. Project leader: Ariel Orellana. I was in charge of creating and leading the first two years of the bioinformatics group of the project.
12. Center for Web Research (www.cwr.cl), Millennium Nucleus, Mideplan, Chile, 2002-2005. Project leader. This was the first large grant awarded to computer science in Chile.
13. Intelligent Multimedia Information Retrieval in the Net, ALFA Project (EU-Latinamerican Cooperation), 2004-2005. Project co-leader with Vicente López.
14. Web Mining, CONICYT (Chilean National Science Funding), 2002-2003. Project leader.
15. Pattern Matching and Applications. Project ECOS-CONICYT with Univ. Marne-la-Vallee, Paris, France, 2000-2002. Project co-leader with Maxime Crochemore.

16. Design and Analysis of Sequential and Parallel Algorithms with Applications, CONICYT (Chilean National Science Funding), 1999-2001. Project leader.
17. Exchange of Postgraduates in Parallel and Distributed Processing (PARNET), ALFA Project (EU-Latinamerican Cooperation), 1999-2003. Project leader: Claude Giralt. This project involved six countries and I was the leader of the Chilean counterpart.
18. Environment for Manipulation and Retrieval of Information in WWW (AMYRI), CYTED (Iberoamerican countries), 1997-1999. Project leader.
19. Infocommunication in Broadband Networks, FONDEF (Chilean fund for technology transfer), 1997-1999 (Project leader: Eduardo Vera). This was part of the AccessNova program between NTT Japan and the University of Chile which started in 1995.
20. Parallelism and search. Cooperation project Chile-Catalunya with Polytechnic Univ. of Catalunya, Barcelona, 1997. Project co-leader with Joaquim Gabarró.
21. Applications on Broadband Networks. Project ECOS-CONICYT with Univ. Joseph Fourier, Grenoble, 1996-98. Project co-leader with Jacques Lamordant.
22. Data Structures: Design, Analysis and Applications, CONICYT (Chilean National Science Funding), 1995-98. Project leader.
23. Collaborative Systems: User Interfaces, CONICYT (Chilean National Science Funding), 1994-99. Co-researcher (Project leader: José Pino).
24. Textual Databases: Algorithms, Interfaces and Applications, CONICYT (Chilean National Science Funding), 1993-94. Project leader.
25. Visualization Techniques for Software Design, Fifth Centennial (Spain), 1993-95. Project co-leader with Gonzalo León, Polytechnic Univ. of Madrid.
26. Algorithms for Text Processing, Fundación Andes, Chile-Brazil cooperation program (with Univ. of Campinas and Univ. Fed. of Minas Gerais), 1993-94. Project leader.
27. Collaborative Systems, CONICYT (Chilean National Science Funding), 1992-1993. Co-researcher (Project leader: José Pino).
28. Program Visualization, CONICYT (Chilean National Science Funding), 1991-1992. Project leader.
29. Evaluation of Graphical User Interface Toolkits, DTI (University of Chile Funding), 1991-1992. Project leader.
30. Integrated Software with Graphical Interfaces for Text Processing, Fundación Andes C-11001, 1990-1992. Project leader.
31. New Oxford English Dictionary Project, University of Waterloo, 1987-1989. Research Assistant (Project leaders: Gaston Gonnet & Frank Tompa).

32. Design and Analysis of Data Structures for Dictionary Implementation, Chilean National Science Funding 1153/85, 1985-86. Research Assistant (Project leader: Patricio Poblete).
33. Data Structures for Storing and Retrieving Information, University of Chile, E 1949-8522, 1985. Research Assistant (Project leader: Patricio Poblete).

11 Citations

According to Google Scholar there are more than 57,000 citations to more than 600 publications found (December 2024), with an h-index of 92. Citations below are mainly from this source (see my personal entry). I am the most cited researcher in algorithms and data structures, 2nd most cited in web search, the 3rd most cited in web mining, and 15th most cited in information retrieval.

In December 2022, the ACM Digital Library had more than 8,700 citations to more than 320 publications, with more than 9,100 downloads in the previous 12 months and 112,000 overall.

In May 2012, CiteSeerX found more than 5,380 independent citations and ranked me the 528th most cited author in CS from a universe of more than 800 thousand authors (since then has not been updated). In their statistics my information retrieval book is the third most cited work of 1999 and the 86th most cited overall (2015).

On March 2020, Microsoft Academic Search had 487 of my publications with almost 44,000 citations. I appear in 16th place in information retrieval and 42nd place in web related research.

12 Publication Record

Papers with at least 100 citations in Google Scholar and 1,000 downloads in the ACM Digital Library are highlighted. Note that short papers, most posters and papers in regional and national conferences have been omitted.

12.1 Books

- [1] Omar Alonso and Ricardo Baeza-Yates (editors). Information Retrieval: Advanced Topics and Techniques (1st. ed.). Vol. 60. ACM Books, New York, NY, USA, 2025.
- [2] B.B. Cambazoglu and R. Baeza-Yates. *Scalability Challenges in Web Search Engines*, in Synthesis Lectures on Information Concepts, Retrieval, and Services (Gary Marchionini, editor). Morgan & Claypool Publishers, USA, 122 pages, 2015.
- [3] R. Baeza-Yates and B. Ribeiro-Neto. *Modern Information Retrieval: the concepts and technology behind search*, second edition. Addison-Wesley, UK, 913 pages, 2011. This is a cooperative book mainly written by the two leading authors, but include fully integrated chapters by other contributors. This edition won the 2012 ASIS&T Book of the Year award and has been already translated to Chinese (2012, 672 pages) and the 10 main chapters to Portuguese (2013, 614 pages). Part of the book is available at mir2ed.org. The first edition was published by ACM Press/Addison-Wesley, UK, 513 pages, in 1999, and was translated to Chinese and Korean and printed in special editions for China and India. According

to CiteseerX in 2015 this is the third most cited CS work published in 1999 and the 86th overall. More than **22,000** citations.

- [4] G.H. Gonnet and R. Baeza-Yates. *Handbook of Algorithms and Data Structures - In Pascal and C*. Addison-Wesley, Wokingham, UK, 424 pages, 1991. (second edition). Source code is available in my personal WWW page. More than **980** citations.
- [5] M. Melucci and R. Baeza-Yates (editors). *Advanced Information Retrieval*, Springer, Berlin, 2011. Based in the European IR summer school organized in Padova, 2009.
- [6] I. King and R. Baeza-Yates (editors). *Weaving Services and People on the World Wide Web*, Springer, Berlin, 2009. Selection of papers presented at the Workshop Track of the 17th International World Wide Web Conference (WWW 2008) held at Beijing, China, 2008.
- [7] R. Baeza-Yates, J. Glaz, H. Gzyl, J. Hüsler, and J.L. Palacios (editors). *Applied Probability: Recent Advances*, Kluwer Academic Publishers, 2004.
- [8] R. Peña, R. Baeza-Yates and J.V. Rodriguez Muñoz, *Digital management of information: from bits to digital libraries and the Web* (In Spanish: Gestión digital de la Información: de bits a bibliotecas digitales y la Web), ISBN: 84-7897-514-4. Ra-Ma, Spain, 2002.
- [9] W. Frakes and R. Baeza-Yates (editors). *Information Retrieval: Data Structures and Algorithms*. Prentice-Hall, Englewood Cliffs, NJ, USA, 504 pages, 1992. I authored or co-authored 4 chapters and the source code is available in my personal web page. More than **3,900** citations.

12.2 Editor of Proceedings

- [1] Zsuzsanna Lipták, Edleno Moura, Karina Figueroa, Ricardo Baeza-Yates. Proc. of the 31st String Processing and Information Retrieval Symposium (SPIRE 2024), Springer LNCS 14899, Puerto Vallarta, Mexico, Sep 2024.
- [2] Ricardo Baeza-Yates, Francesco Bonchi. Proceedings of the 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, KDD 2024, Barcelona, Spain, August 25-29, 2024.
- [3] Marc Spaniol, Ricardo Baeza-Yates, Omar Alonso. Proc. of the 13th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2023 (WWW Companion Volume), Austin, USA, May 2023.
- [4] Omar Alonso, Ricardo Baeza-Yates, Tracy Holloway King, Gianmaria Silvello. Proceedings of the Third International Conference on Design of Experimental Search & Information REtrieval Systems, CEUR Workshop Proceedings 3480, San Jose, USA, August 30-31, 2022.
- [5] Marc Spaniol, Ricardo Baeza-Yates, Omar Alonso. Proc. of the 12th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2022 (WWW Companion Volume), Lyon, France, Apr 2022.
- [6] Marc Spaniol, Ricardo Baeza-Yates, Omar Alonso. Proc. of the 11th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2021 (WWW Companion Volume), Ljubljana, Slovenia, Apr 2021.
- [7] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. Proc. of the 10th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2020 (WWW Companion Volume), Taipei, Taiwan, Apr 2020.

- [8] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. The 9th Temporal Web Analytics Workshop (TempWeb'19). WWW (Companion Volume), San Francisco, USA, May 2019.
- [9] Ling Liu, Ryen W. White, Amin Mantrach, Fabrizio Silvestri, Julian J. McAuley, Ricardo Baeza-Yates, Leila Zia. The World Wide Web Conference (WWW 2019), ISBN 978-1-4503-6674-8, ACM Press, San Francisco, CA, USA, May 2019.
- [10] Sihem Amer-Yahia, Mohammad Mahdian, Ashish Goel, Geert-Jan Houben, Kristina Lerman, Julian J. McAuley, Ricardo Baeza-Yates, Leila Zia. Companion of The 2019 World Wide Web Conference (WWW 2019), ISBN 978-1-4503-6675-5, ACM Press, San Francisco, CA, USA, May 2019.
- [11] Leman Akoglu, Emilio Ferrara, Mallayya Deivamani, Ricardo Baeza-Yates, Palanisamy Yogesh. Advances in Data Science, 3rd ICIIT, Springer CCIS 941, Chennai, India, Dec 2018.
- [12] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. The 8th Temporal Web Analytics Workshop (TempWeb'18). WWW (Companion Volume), Lyon, France, Apr 2018.
- [13] Jian-Yun Nie, Zoran Obradovic, Toyotaro Suzumura, Rumi Ghosh, Raghunath Nambiar, Chonggang Wang, Hui Zang, Ricardo A. Baeza-Yates, Xiaohua Hu, Jeremy Kepner, Alfredo Cuzzocrea, Jian Tang, Masashi Toyoda. 2017 IEEE International Conference on Big Data, Boston, MA, USA, Dec 2017.
- [14] Ana Freire, Ricardo Baeza-Yates. Seventh BCS-IRSG Symposium on Future Directions in Information Access, FDIA 2017, Sept 2017, Barcelona, Spain. Workshops in Computing, BCS 2017.
- [15] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. The 7th Temporal Web Analytics Workshop (TempWeb'17). WWW (Companion Volume), Perth, Australia, Apr 2017.
- [16] Francesco Bonchi, Josep Domingo-Ferrer, Ricardo Baeza-Yates, Zhi-Hua Zhou, Xindong Wu. IEEE 16th International Conference on Data Mining, Barcelona, Spain, Dec 2016.
- [17] Carlotta Domeniconi, Francesco Gullo, Francesco Bonchi, Josep Domingo-Ferrer, Ricardo Baeza-Yates, Zhi-Hua Zhou, Xindong Wu. IEEE International Conference on Data Mining Workshops, Barcelona, Spain, Dec 2016.
- [18] Marc Spaniol, Julien Masanès, Ricardo Baeza-Yates. The 6th Temporal Web Analytics Workshop (TempWeb'16). WWW (Companion Volume), Montreal, Apr 2016.
- [19] Ricardo Baeza-Yates, Mounia Lalmas, Alistair Moffat, Berthier Ribeiro-Neto. Proceedings of the 38th International ACM SIGIR Conference on Research and Development in Information Retrieval, Santiago, Chile, August 9-13, 2015.
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12.7 Selected Invited Papers

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- [3] Ricardo Baeza-Yates. The Next Generation of Search. In *Online Information 2009*, London, UK, December 2009, 3-9.
- [4] Ricardo Baeza-Yates. User generated content: how good is it? In *WICOW '09: Proceedings of the 3rd workshop on Information credibility on the Web*, Apr 2009. More than **1,000** downloads.
- [5] Ricardo Baeza-Yates, Massi Ciaramita, Peter Mika, and Hugo Zaragoza. Towards Semantic Search. In *NLDB 2008*, E. Kapetanios, V. Sugumaran and M. Spiliopoulou, editors. Springer LNCS 5039, London, UK, June 2008, p. 4-11.
- [6] Barbara Poblete, Myra Spiliopoulou, Ricardo Baeza-Yates. Website Privacy Preservation for Query Log Publishing. In F. Fogelman-Soulié, D. Perrotta, J. Piskorski, R. Steinberger, editors. *Mining Massive Data Sets for Security*. NATO Science for Peace and Security Series, D: Information and Communication Security, v. 19, IOS Press, 2008, 130-133.
- [7] Ricardo Baeza-Yates, Raghu Ramakrishnan. Data challenges at Yahoo!. In *EDBT 2008*, Nantes, France, Mar 2008, 652-655. More than **1000** downloads.
- [8] Ricardo Baeza-Yates, Carlos Castillo, Flavio Junqueira, Vassilis Plachouras and Fabrizio Silvestri. Challenges on Distributed Web Retrieval. In *ICDE 2007*, IEEE Computer Society Press, Estambul, Turkey, 2007, 6–20. More than **130** citations.

- [9] Ricardo Baeza-Yates, Paolo Boldi and José María Gómez. Adversarial Retrieval in the Web. *Upgrade*, February 2007 (Vol. VIII, issue no. 1), pp. 33-40. In Spanish in *Novática* 185, pp. 29-35. **Best paper of 2007**.
- [10] Ricardo Baeza-Yates, Mari Carmen Marcos. The Different Faces of the Web (in Spanish). In *The Human Factor in the Cyberculture*, Margarita Schultz, editor, Alfagrama, Argentina, 65–114, 2007.
- [11] Ricardo Baeza-Yates. Graphs from Search Engine Queries. In *SOFSEM 2007: Theory and Practice of Computer Science*, Springer LNCS 4362, Harrachov, Czech Republic, January 2007, 1–8.
- [12] Mariano P. Consens, Ricardo Baeza-Yates. Database and Information Retrieval Techniques for XML. In *ASIAN 2005*, China, 22-27.
- [13] Ricardo Baeza-Yates. Applications of Web Query Mining. In *European Conference on Information Retrieval (ECIR'05)*, D. Losada, J. Fernández-Luna (editors), Springer LNCS 3408, Santiago de Compostela, Spain, March 2005, 7–22. More than **100** citations.
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- [15] Ricardo Baeza-Yates. Challenges in the Interaction of Natural Language Processing and Information Retrieval. *CICLING 2004*, Springer LNAI 2945, Seoul, Korea, 445–456, February 2004.
- [16] Ricardo Baeza-Yates. Web mining in Search Engines. In *Proceedings of the 27th Australasian conference on Computer Science*, vol. 26, Jan 2004. More than **1,500** downloads.
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- [20] R. Baeza-Yates, T. Jones, and G. Rawlins. New Approaches to Information Management: Attribute-Centric Data Systems, 7th International Symposium on String Processing and Information Retrieval (SPIRE), IEEE Computer Science Press, pages 18–27, A Coruña, Spain, 27-29 September, 2000.
- [21] R. Baeza-Yates. Searching the Web: Challenges and partial solutions. In *IBERAMIA'97*, Helder Coelho, editor, Springer LNAI 1484, 39–51, Lisbon, Portugal, October 1998.
- [22] R. Baeza-Yates and A. Benavides. Multimedia in Chile. In *IFIP WG 9.4/5 Workshop: IT for Competitiveness*, Florianopolis, Brazil, Jun 1997. Published in CD-ROM.

- [23] R. Baeza-Yates. A unified view of string matching algorithms. In Keith Jeffery, Jaroslav Král, and Miroslav Bartosek, editors, *SOFSEM'96: Theory and Practice of Informatics, Springer LNCS 1175*, pages 1–15, Milovy, Czech Republic, November 1996.
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- [27] R. Baeza-Yates. How to teach algorithms. Invited paper in IV Ibero-American Congress on CS Higher Education, Canela, Brasil, 1995, 51–60.
- [28] R. Baeza-Yates and H. Von Borries. Object orientation in Chile. *First Class, OMG Newsletter*, 4(4):12/17, Dec 1994.
- [29] R. Baeza-Yates. Space-time trade-offs in text retrieval. In *Proc. of First South American Workshop on String Processing*, pages 15–21, Belo Horizonte, Brazil, September 1993.
- [30] R. Baeza-Yates. Applications of Markov chains to the analysis of algorithms. In *Pan-American Workshop in Applied and Computational Mathematics*, Caracas, Venezuela, January 1993.

12.8 Theses

- [1] R.A. Baeza-Yates. *Efficient Text Searching*. PhD thesis, Dept. of Computer Science, University of Waterloo, May 1989. Also as Research Report CS-89-17. More than **70** citations.
- [2] R.A. Baeza-Yates. Portable graphical editor for three dimensional objects. Master's thesis, Dept. of Electrical Engineering, University of Chile, Santiago, Chile, April 1986. (in Spanish).
- [3] R.A. Baeza-Yates. Analysis of algorithms in search trees. Master's thesis, Dept. of Computer Science, University of Chile, Santiago, Chile, January 1985. (in Spanish).

13 Teaching Record

I have taught the following undergraduate courses in Spanish at Universidad de Chile (1985-2004) and Universitat Pompeu Fabra, Spain (2005-14) (most recent first, although many were taught more than once): Information Retrieval (also taught in English at University of Canterbury, New Zealand, in 2004), Data Structures, Design and Analysis of Algorithms, Bioinformatics, Introduction to Computer Programming,

Software Project, Object Oriented Programming, Software Workshop on Graphical Interfaces, Computer Architecture, Automata Theory and Formal Languages, Design and Construction of Compilers, Information Systems, Programming Languages, Introduction to Computer Graphics, Numerical Algorithms, Digital Systems, Operating Systems, and Software Tools.

The courses on Computer Graphics (1985), Object Oriented Programming (1990), Software Workshop on Graphical Interfaces (1991), Problem Solving Seminar (1993), Visualization Seminar (1997), and Bioinformatics (2001) were incorporated to the computer engineering studies of Universidad de Chile by myself, as well as the current M.Sc. curricula while being the graduate coordinator. The course of Information Retrieval was incorporated in the curricula of Universitat Pompeu Fabra by myself in 2005.

I have taught the following graduate courses (university, language and years are indicated): Web Retrieval and Data Mining (Universitat Pompeu Fabra, English, 2010-14), Web Search (Univ. Carlos III, Spain, Spanish, 2005-07), Advanced Data Structures, Problem Solving Seminar, Visualization Seminar and Text Searching Seminar (Universidad de Chile, Spanish, 1990-95).

Have been professor of the CS Ph.D. programs at University Carlos III, Madrid, Spain; Univ. Rovira i Virgili, Tarragona, Spain; Polytechnic Univ. of Madrid, Spain; Polytechnic Univ. of Catalunya, Spain; and Catholic University, Santiago, Chile.

14 Theses and Student Projects Supervised

14.1 Ph.D.

1. Diana Ramírez-Cifuentes. A Data Driven Framework for Mental Health States Assessment in Social Platform. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, July 2022. Co-advisor: Ana Freire.
2. Maria Rauschenberger. Early Screening of Dyslexia using a Language-Independent Content Game and Machine Learning. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2019. Co-advisor: Luz Rello.
3. Necati Bora Edizel. Word Embeddings with Applications to Web Search and Advertising. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, July 2019. Co-advisor: Amin Mantrach.
4. Ioanna Tsalouchidou. Temporal Analysis of Dynamic Large Graphs. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2018. Co-advisor: Francesco Bonchi.
5. Lorena Recalde. Modeling User Preferences in Online Social Networks. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2018. Co-advisor: David Nettleton.
6. Zeinab Liaghat. Quality-Efficiency Trade-offs in Machine Learning Applied to Text Processing. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, March 2017.
7. Çigdem Aslay. From Viral Marketing to Social Advertising: Ad Allocation under Social Influence. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, December 2016. Co-advisor: Francesco Bonchi.
8. Adiya Abisheva. Opinion Polarization in Online Communities. Ph.D. in Sciences, ETH Zurich, Switzerland, December 2016. Main advisor: Frank Schweitzer.

9. Yasir Mehmood. Modeling the Roles of Users and Groups in the Dynamics of Information Propagation. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, April 2016. Co-advisor: Francesco Bonchi.
10. Eduardo Graells-Garrido. Biased Behavior in Web Activities: From Understanding to Unbiased Visual Exploration. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, May 2015. Co-advisor: Mounia Lalmas.
11. Janette Lehmann. From Site to Inter-site User Engagement: Fundamentals and Applications. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, February 2015. Co-advisor: Mounia Lalmas.
12. Ruth García-Gavilanes. User Behavior in Microblogging with a Cultural Emphasis. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, February 2015.
13. Michele Trevisiol. Exploiting Implicit User Activity for Media Recommendation. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2014. Co-advisor: Alejandro Jaimes.
14. Luca Chiarandini. Characterizing and Modelling Web Sessions with Applications. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2014. Co-advisor: Alejandro Jaimes.
15. Luz Rello. Dyswebxia: A Text Accessibility Model for People with Dyslexia. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, June 2014. Co-advisor: Horacio Saggion.
16. Diego Saéz-Trumper. Finding Relevant People in Online Social Networks. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, December 2013.
17. Hossein Vahabi. Recommendation Techniques for Web Search and Social Media. Ph.D. in Computer Science, Institute for Advanced Studies, Lucca, Italy. July 2012. Co-advisor: Fabrizio Silvestri.
18. Liliana Calderón-Benavides. Unsupervised Identification of the User's Query Intent in Web Search. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, September 2011.
19. Cristina González-Caro. Supervised Identification of the User Intent of Web Search Queries. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, September 2011.
20. Ximena Olivares. Large Scale Image Retrieval based on User Generated Content. Ph.D. in Computer Science, Univ. Pompeu Fabra, Spain, March 2011. Co-advisor: Roelof Van Zwol.
21. Víctor Pascual. Visual Exploration of Web Spaces. Ph.D. in Computer Science, Univ. Pompeu Fabra, Spain, December 2010. Co-advisor: Juan Carlos Dürsteler.
22. Ilaria Bordino. Graph Mining and Its Application to the Web. Ph.D. in Computer Science, Università di Roma "La Sapienza", Italy, and Univ. Pompeu Fabra, Spain, June 2010. Co-advisor: Stefano Leonardi.
23. Barbara Poblete. Query Based Data Mining for the Web. Ph.D. in Computer Science, Univ. Pompeu Fabra, Spain, October 2009. Co-advisor: Myra Spiliopoulou.

24. Omar Alonso. Temporal Information Retrieval. Ph.D. in Computer Science, Univ. of California at Davis, USA, September 2008. Co-advisor: Michael Gertz.
25. Alvaro Pereira Jr. A Model for Fast Web Mining Prototyping: Design, Algebra, Implementation and Use Cases. Ph.D. in Computer Science, Univ. Federal de Minas Gerais, Brazil, September 2008. Co-advisor: Nivio Ziviani.
26. Mendoza, Marcelo. Query Log Mining in Search Engines. Ph.D. in Computer Science, Univ. de Chile, June 2007. Co-advisor: Carlos Hurtado.
27. Badue, Claudine. Design and Analysis of Web Search Systems. Ph.D. in Computer Science, Univ. Fed. de Minas Gerais, Brazil, February 2007. Main advisor: Nivio Ziviani.
28. Castillo, Carlos. Effective Web Crawling, Ph.D. in Computer Science, Univ. de Chile, November 2004.
29. Chávez, Edgar. Similarity Searching on Metric Spaces, Ph.D. in Computer Science, CIMAT, México, September 1999. Co-advisor: José Luis Marroquín.
30. Vegas, Jesús. An Information Retrieval System on Structure and Content (in Spanish), Ph.D. in Computer Science, Univ. de Valladolid, Spain, May 1999. Main advisor: Pablo de la Fuente.
31. Navarro, Gonzalo. Approximate Text Searching, Ph.D. in Computer Science, Univ. de Chile, December 1998.
32. Barbosa, Eduardo. Efficient Text Retrieval Methods for Secondary Memory, Ph.D. in Computer Science, Univ. Fed. de Minas Gerais, Brazil, July 1995. Main advisor: Nivio Ziviani.

14.2 M.Sc.

Some of them are in Spanish:

1. Aida Sharif Rohani. Bias Measurement in Small Datasets. M.Sc. in Computer Science, Northeastern University at Silicon Valley, January 2021.
2. Martí Mayo. Feasibility of Word Difficulty Prediction. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2014.
3. Nacati Bora Edizel. Enriching User Profiles for News Personalization. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2014. Co-advisor: Berkant Barla Cambazoglu.
4. Guillem Frances. A Machine Learning Approach for Query Forwarding on Distributed Search Engines. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2013. Co-advisor: Berkant Barla Cambazoglu.
5. David Martín-Borregón. Space and Time Clusterization of Social Media Groups. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2013. Co-advisor: Luca Aiello.

6. Sandra Gilabert. Analysis of Temporal User Habits from Query Logs. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2013. Co-advisor: Peter Mika.
7. Sarigiannis Charalampos. Network and Performance Analysis of a Multi-site Web Search Engine, Master Program in Information, Communication and Audiovisual Media Technologies, Universitat Pompeu Fabra, September 2008.
8. Cristina Monter Oliver. The intention behind Web queries: methodology for the creation of a use taxonomy. Master in Digital Content Management, University of Barcelona, September 2008.
9. Poblete, Bárbara. A Query Mining Tool for the Design of the Content and Structure of Web Sites, M.Sc. in Computer Science, Univ. of Chile, Chile, November 2004. Won the second place award to the best M.Sc. thesis in Latinamerica in 2005.
10. Acuña, Vicente. C-rewriting and Classification by Context, M.Sc. in Computer Science, Univ. of Chile, Chile, November 2004. Co-supervised with Alejandro Maass.
11. Cuquejo, Virna. Data Structures and Algorithms to Search Similar Objects in Metric Spaces, M.Sc. in Computer Science, Univ. of Chile, Chile, November 2000. Co-supervised with Gonzalo Navarro.
12. Alonso, Omar. A Model for Document Visualization in WWW, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1999.
13. Mecoli, Claudio. DomainView: A User Interface Metaphor based on Domains, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1999.
14. Beck, Héctor. The Problem of Minimum Cost Spanning 2-Tree and Isolated Failure Immune Networks, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1998.
15. Barros, Alejandro. Change of Milenium: A Methodological Approach, M.Sc. in Computer Science, Univ. of Chile, Chile, May 1998.
16. Scheihing, Rodrigo. Study of some Combinatorial Problems in Strings, M.Sc. in Computer Science, Univ. of Chile, Chile, August 1996.
17. Hochsztain, Esther. A Database Approach via graph views in Persistent C++, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1995. Co-supervised with Hermann Steffen (Univ. de la República, Uruguay).
18. Valmadre, Gastón. Visual Debugging and Program Animation, M.Sc. in Computer Science, Univ. of Chile, Chile, October 1995.
19. Navarro, Gonzalo. A Query Language for Structure and Contents of Text Databases, M.Sc. Computer Science, Univ. of Chile, April 1995. Won the award to the best M.Sc. thesis in Latinamerica in 1996.
20. Araya, Gladys. Evaluation of Tools for GUI Construction, M.Sc. Computer Science, Univ. of Chile, 1994. Co-supervised with Juan Alvarez.

21. Soza, Héctor. Analysis of Linear Hashing, M.Sc. Computer Science, Univ. of Chile, 1993. Won the award to the best M.Sc. thesis in Latinamerica in 1994.
22. Fuentes, Luis. A System for Animation of Text Algorithms, M.Sc. Computer Science, Univ. of Chile, 1992.
23. Marín, Mauricio. Design of a Specialized System for Event Driven Molecular Dynamics, M.Sc. Computer Science, Univ. of Chile, 1992. Co-supervised with Patricio Cordero.

14.3 Final Engineering Projects

All of them except the first one were in Spanish:

1. Escriba, Guillem. Balancing the Scales: A Framework for Bias Detection and Mitigation in ML Classification, Univ. Pompeu Fabra, September 2024.
2. Villar, Osvaldo. Mining and Personalization of a Website for Ringtones, Computer Engineering degree, Univ. of Chile, December 2007.
3. Galleguillos, Carolina. Information Extraction from the Web: Identification of Specific Content in a Non Structured Text, Computer Engineering degree, Univ. of Chile, August 2005.
4. Loira, Nicolás. Design and Implementation of a Combinatorial Algorithm to Find Patterns in Electrophoresis Images, Computer Engineering degree, Univ. of Chile, August 2005.
5. Salinger, Alejandro. A Simple Alphabet Independent Compressed Index, Computer Engineering degree, Univ. of Chile, 2005. Co-advisor (Advisor: Gonzalo Navarro).
6. Herskovic, Valeria. A Visual Query Language for XQuery, Computer Engineering degree, Univ. of Chile, April 2005.
7. Barrera, Cristián. Web Visualization of XML Documents using Fisheye Trees, Computer Engineering degree, Univ. of Chile, April 2005.
8. Paredes, Carla. Tool for Advertising in Search Engines based in Query Analysis, Computer Engineering degree, Univ. of Chile, April 2005.
9. Graves, Alvaro. Data Mining for Web Sites Oriented to Services, Computer Engineering degree, Univ. of Chile, January 2005.
10. Davis, Emilio. A New Web Search Model with Static Ranking, Computer Engineering degree, Univ. of Chile, August 2003.
11. Collado, Miguel Angel. Management of a Control Software Project, Computer Engineering degree, Univ. of Chile, December 2002.
12. Benoit, Nicole. Study of the relation between protein palindromy and their structure and function, Biotechnology and Chemistry Engineering degree, Univ. of Chile, Oct 2002.

13. Muñoz, Francisca. Development of an Hybrid Data Structure for Searching in Metric Spaces, Computer Engineering degree, Univ. of Chile, 2002. Co-advisor (Advisor: Gonzalo Navarro).
14. Ortega, Manuel. Implementation of a XML Query Language based in Proximal Nodes, Computer Engineering degree, Univ. of Chile, 2002. Co-advisor (Advisor: Gonzalo Navarro).
15. Saint-Jean, Felipe. Mining the Web with Applications to a Search Engine, Computer Engineering degree, Univ. of Chile, May 2002.
16. Castillo, Carlos. Characterizing the Chilean Web and Extensions to a Web Search Engine, Computer Engineering degree, Univ. of Chile, October 2000.
17. Vásquez, Mauricio. Integration of a Search Engine to a Web Application, Computer Engineering degree, Univ. of Chile, November 1998.
18. Quezada, Gastón. Design and Implementation of a C Preprocessor for Program Animation, Computer Engineering degree, Univ. of Chile, November 1995.
19. De Saint-Pierre, Didier. Design and Implementation of a Workflow applied to Electrical Distribution of Energy, Computer Engineering degree, Univ. of Chile, 1994.
20. Aguilar, Waldo. Animation of Dynamic Data Structures, Computer Engineering degree, Univ. of Chile, 1992.

15 Editorial Boards

I am editor of the following journals: Information Systems (Elsevier, Netherlands) since 2002, Computing (Springer, Germany) since 2013, Journal of Web Engineering (USA) since 2002, Theoretical Informatics and Applications - RAIRO (France) since 1998. Grammars (Netherlands) since 2004, Journal of the SBC (Brazil) since 2002, First Monday (USA) since 2001, and El Profesional de la Información (Spain) since 2003.

I was the first Editor-in-Chief of the CLEI Electronic Journal at www.clei.cl from 1998 to 2005. I also was member of the editorial boards of ACM Transactions on Information Systems (ACM, USA) from 2002 to 2014, Information Processing & Management (Elsevier, Netherlands) from 2005 to 2011 (since 2007 as Associated Editor), VLDB Journal (Springer, Germany) from 2001 to 2007, Computer Science Review (Elsevier, Netherlands) from 2013 to 2014, Information Technology for Development (Netherlands), International Journal of Web Information Systems (UK), Journal of Digital Management (India-South Korea) from 2003 to 2005, Computación y Sistemas (México), Novática (Spain), Revista de la SCCC (Chile) and Revista Colombiana de Informática (Colombia).

16 Selected Videos of Keynotes and Seminars

Here we give a sample of videos in the last 10 years:

- “Responsible AI” (in Spanish). 50th Latin American Congress, Bahia Blanca, Argentina, Aug 2024. YouTube: <https://www.youtube.com/watch?v=VwF4GRPaZBA>. More than **1,100** views.

- “The Shades of AI and its Challenges” (in Spanish), Congress of the Future, Santiago, Chile, Jan 2024. YouTube: <https://www.youtube.com/watch?v=ms3MmgP7Fhw>. More than **700** views.
- “Responsible AI: Challenges & Recommendations”, Digital Humanism Seminar, Vienna, Austria, Jun 2023. YouTube: <https://www.youtube.com/watch?v=UbgxJyGNsSs>. Almost **900** views.
- “The Dangers of Generative AI and Its Impact in Higher Education” (in Spanish), Master Class, Universidad de Chile, May 2023. YouTube: <https://www.youtube.com/watch?v=a2TTj1thdYA>. More than **5,100** views.
- “Ethics in AI: A Challenging Task”, Keynote at ECIR 2021, Lucca, Italy, Mar 2021. YouTube: <https://www.youtube.com/watch?v=tTvrec7VMZI>. More than **350** views.
- “Bias on Search and Recommender Systems”, Keynote at RecSys 2020, Rio de Janeiro, Brasil, Jun 2020. YouTube: https://www.youtube.com/watch?v=8zetbdx4_08&t=60s. More than **2,500** views.
- Bias in the Web, Gödel Annual Seminar, Wien, Austria, Jun 2017. YouTube: <https://www.youtube.com/watch?v=CguWbbQeruM>. More than **350** views.
- “Data Monopoly: A New Power?” (in Spanish), Congress of the Future, Santiago, Chile, Jan 2016. YouTube: <https://www.youtube.com/watch?v=fFlkOKUa2M0>. More than **600** views.
- “Does Big Data Empowers the Web?” (in Spanish), TEDx Barcelona, July 2015. YouTube: <https://www.youtube.com/watch?v=JvO1P8yGVqA> (more than **11,000** views).

17 Service at Conferences

- Member of the steering committees of ACM CIKM (since 2014), ICWSM (since 2014), SPIRE since 1998 (co-founder), AMW since 2006 (co-founder), OAIR since 2011, ESSIR since 2009, and LA-WEB since 2003 (founder). I was part of the steering committee of ACM WSDM from 2008 to 2017 (co-founder) and LATIN from April 1995 to March 2006.
- Invited speaker or tutorial lecturer at many conferences including ACM SIGIR, WWW, ACM WSDM, VLDB, ACM CIKM, ACM Recsys, SDM, ACM Hypertext, ACM Web Science, ECDL, ICDE, ECIR, ECML/PKDD, ESWC, UMAP, ICWE, EDBT, ISSI, SPIRE, CIAC, CLEF, NLDB, SAMT, SSDBM, SISAP, ICTIR, DSAI, ICWI, WISE, CRWIG, Simultools, SRDS, IDA, LA-WEB, etc.; as well as in many workshops.
- Conference co-chair of IEEE BigData 2024, Washington DC, USA, Dec 2024; Conference co-chair of SPIRE 2024, Puerto Vallarta, Mexico, Sep 2024; Conference co-chair of ACM KDD 2024, Barcelona, Spain, Aug 2024; Co-chair of the ACM Fairness, Accountability and Transparency Conference (FAccT), Rio de Janeiro, Brazil, Jun 2024; Conference co-chair of DESIRES 2022, San Jose, USA, Aug 2022. Conference co-chair of ACM Web Science 2022, Barcelona, Spain, Jun 2022. Co-chair of The Web Conference 2019 (formerly WWW), San Francisco, USA, May 2019; Conference co-chair of IEEE Big Data 2017, Boston, USA, Dec 2017; Co-organizing chair of ESSIR 2017, Barcelona,

- Spain, Sep 2017; Conference co-chair of IEEE ICDM 2016, Barcelona, Spain, Dec 2016; Conference chair of ACM SIGIR 2015, Santiago, Chile, Aug 2015; Conference chair of LA-WEB 2014, Ouro Preto, Brazil, Oct 2014; Conference chair of AMW 2014, Cartagena de Indias, Colombia, Jun 2014; Conference chair of LA-WEB 2012, Cartagena de Indias, Colombia, Oct 2012; Conference chair of ECIR 2012, Barcelona, Spain, Apr 2012; Co-organizing chair of ESSIR 2009, Padova, Italy, Sep 2009; Conference chair of ACM WSDM 2009, Barcelona, Spain, Feb 2009; Conference chair of LA-WEB 2008, Vila Velha, Brazil, Oct 2008; Conference chair of SPIRE 2007 and LA-WEB 2007 (collocated) Santiago, Chile, Oct 2007; Conference co-chair of ACM SIGIR 2015 in Bahia, Brazil, Aug 2005; Conference chair of the first Latin American Web conference (LA-WEB 2003) in Santiago, Chile, Nov 2003; Conference co-chair of IEEE PROMSMmNet'97, Santiago, Chile, Nov 1997; Conference co-chair of LATIN'95, Viña del Mar, Chile, Apr 1995; Conference chair of the 2nd South American Workshop on String Processing, Viña del Mar, Chile, Apr 1995; and Conference chair of the XI International Conference of the Chilean Computer Science Society, Santiago, Chile, Oct 1991.
- Panels Co-chair for The Web Conference 2021 (Ljubjana, Slovenia, May 2021); Applied Research co-chair for CIKM 2020 (Galway, Ireland, Oct 2020); Tutorials co-chair for ASONAM 2018 (Barcelona, Spain, Sep 2018); Tutorials co-chair for WWW 2015 (Florence, Italy, May 2015); Workshops co-chair for WWW 2014 (Seoul, South Korea, Apr 2014); Program committee co-chair for WWW 2013 (Rio de Janeiro, Brazil, May 2013); Industry and EU projects tracks co-chair for WWW 2012 (Lyon, France, April 2012); Program committee co-chair for SIGIR 2011 (Beijing, China, Jul 2011); Program committee co-chair for ICWSM 2011 (Barcelona, Spain, Jul 2011); Tutorial chair for WWW 2010 (Raleigh, USA, Apr 2010); Program committee chair for ACM Web Intelligence & Internet Agent Technology (Milano, Italy, September 2009); Industrial track PC co-chair for KDD 2009 (Paris, France, June 2009); Ibero-American track co-chair for WWW 2009 (Madrid, April 2009); Workshops co-chair for WWW 2008 (Beijing, China, Apr 2008); Program committee vice-chair for ICDM 2008 (Pisa, Italy, December 2008); Program committee co-chair for CIKM 2007 (Lisbon, Portugal, November 2007); Program committee co-chair for the Mexican Computer Science Conference (ENC 2004, Colima, Mexico, September 2004); Program committee co-chair for the First Latin-American Web Conference (LA-WEB, Santiago, Chile, November 2003); Program committee co-chair for the Combinatorial Pattern Matching (CPM, Morelia, Mexico, June 2003); Program committee chair for the Americas of the ACM Conference in Information Retrieval (SIGIR, Tampere, Finland, Aug 2002); Program committee co-chair of IFIP TCS'2002 (Montreal, Canada, Aug 2002); Program committee chair of the XXI Int. Conf. of the Chilean Computer Science Society (Punta Arenas, Chile, Nov 2001); Program committee chair of the XVII Int. Conf. of the Chilean Computer Science Society and the Fourth South American Workshop on String Processing (Valparaíso, Chile, Nov 1997); Program co-chair of LATIN'95, Viña del Mar, April, 1995. Program committee chair of the XIII Int. Conf. of the Chilean Computer Science Society (La Serena, October 1993), and the 1st South American Workshop on String Processing (Belo Horizonte, Brazil, September 1993).
 - Founder and organizer of the Future of Web Search workshop: Barcelona (2006), Bertinoro (2007), Andorra (2008) and Ibiza (2009), which continued as the Future of the Social Web workshop (Barcelona, 2011).
 - Co-organizer of the first two XML Retrieval workshops at SIGIR in 2000 and 2002. Co-organizer of the first workshop of Content Analysis in the Web 2.0 at WWW 2009. Co-organizer of the Temporal

Web workshops at WWW since 2011. Co-organizer of the first CrowdSearch workshop at WWW 2012.

- Program Committee member of: WSDM 2021 (senior member, Jerusalem, Israel, Mar 2021); ECAI 2020 (senior member, Santiago de Compostela, Spain, Sep 2020); TheWebConf 2020 (senior member, Taipei, Taiwan, Apr 2020); SIGIR 2019 (senior member, Paris, France, Jul 2019); SIRIP 2019 (member, Paris, France, Jul 2019); WebSci 2019 (senior member, Boston, USA, Jun 2019); WSDM 2019 (senior member, Melbourne, Australia, Feb 2019); SPIRE 2018 (Lima, Peru, Oct 2018); KDD 2018 (senior member, London, UK, Aug 2018); SIGIR 2018 (senior member, Ann Arbor, USA, Jul 2018); WWW 2018 (senior member, Lyon, France, Apr 2018); WSDM 2018 (senior member, Marina del Rey, USA, Feb 2018); SIGKDD Doctoral Dissertation Awards Committee (2017); SIGIR 2017 (senior member, Tokyo, Japan, Aug 2017); WebSci 2017 (senior member, Troy, USA, Jun 2017); ICWSM 2017 (senior member, Montreal, Canada, May 2017); WSDM 2017 (senior member, Cambridge, UK, Feb 2017); ICWSM 2016 (senior member, Cologne, Germany, May 2016); WSDM 2016 (senior member, San Francisco, USA, Feb 2016); KDD 2015 (Sydney, Australia, Aug 2015); WWW 2015 (track co-chair, Florence, Italy, May 2015); ICWSM 2012 (senior member, Oxford, UK, May 2015); WSDM 2015 (senior member, Shanghai, China, Feb 2015); SPIRE 2014 (Ouro Preto, Brazil, Oct 2014); KDD 2014 (New York, USA, Aug 2014); ICWSM 2014 (senior member, Ann Arbor, USA, Jun 2014); LATIN 2014 (Montevideo, Uruguay, May 2014); SPIRE 2013 (Israel, Oct 2013); ICWSM 2013 (senior member, Cambridge, USA, Jul 2013); CICLING 2013 (Samos, Greece, Mar 2013); EDBT 2013 (Genoa, Italy, Mar 2013); ICDM 2012 (Brussels, Belgium, Dec 2012); CIKM 2012 (Maui, USA, Nov 2012); SPIRE 2012 (Cartagena, Colombia, Oct 2012); ICWSM 2012 (senior member, Dublin, Ireland, Jun 2012); WAW 2012 (Halifax, Canada, Jun 2012); ICWSM 2012 (senior member, Dublin, Ireland, Jun 2012); CERI 2012 (Valencia, Spain, Jun 2012) LATIN 2012 (Arequipa, Perú, Apr 2012); WWW 2012 (senior member, Lyon, France, Apr 2012); WSDM 2012 (senior member, Seattle, USA, Feb 2012); CICLING 2012 (Delhi, India, Feb 2012); SPIRE 2011 (Pisa, Italy, Oct 2011); VLDS 2011 (Seattle, USA, Sep 2011); KDD 2011 (industrial track, San Diego, USA, Aug 2011); EDBT 2011 (Saint Petersburg, Russia, May 2011); ECIR 2011 (Dublin, Ireland, Apr 2011); EDBT 2011 (Uppsala, Sweden, Mar 2011); WSDM 2011 (senior member, Hong Kong, China, Feb 2011); PDP 2011 (Ayia Napa, Cyprus, Feb 2011); ICDM 2010 (Sydney, Australia, Dec 2010); EHealth 2010 (Casablanca, Morocco, Dec 2010); JCC 2010 (Antofagasta, Chile, Nov 2010); SBBD 2010 (Belo Horizonte, Brazil, Nov 2010); SPIRE 2010 (Los Cabos, Mexico, Oct 2010); KDD 2010 (senior member, Washington DC, USA, Jul 2010); LSDR-IR 2010 (Geneva, Switzerland, Jul 2010); SIGIR 2010 (Geneva, Switzerland, Jul 2010); FUN 2010 (Ischia, Italy, Jun 2010); CERI 2010 (Madrid, Spain, Jun 2010); AMW 2010 (Buenos Aires, Argentina, May 2010); IRFC-2010 (Vienna, Austria, May 2010); WWW 2010 (Raleigh, USA, Apr 2010); LATIN 2010 (Oaxaca, Mexico, Apr 2010); ECIR 2010 (Milton Keynes, UK, Mar 2010); PDP 2010 (Pisa, Italy, Feb 2010); ICDM 2009 (Miami, USA, Dec 2009); CIKM 2009 (Hong Kong, China, Nov 2009); DAMIEN 2009 (Riga, Latvia, Sep 2009); VLDB 2009 (Lyon, France, Aug 2009); SPIRE 2009 (Saariselkä, Finland, Aug 2009); SIGIR 2009 (Boston, USA, Jul 2009); LSDS-IR 2009 (Boston, USA, Jul 2009); CPM 2009 (Lille, France, Jun 2009); AMW 2009 (Arequipa, Perú, May 2009); EDBT 2009 (Saint Petersburg, Russia, May 2009); WWW 2009 (Madrid, Spain, Apr 2009); SIAM SDM 2009 (Sparks, USA, Apr 2009); ECIR 2009 (Toulouse, France, Apr 2009); ER 2008 (Demos, Barcelona, Spain, Sep 2008); TCS 2008 (Milano, Italy, Sep 2008); ECML/PKDD 2008 (Antwerp, Belgium, Sep 2008); CharLA 2008 (Buenos

Aires, Argentina, Sep 2008); WebKDD 2008 (Las Vegas, USA, Aug 2008); PersDB 2008 (Auckland, NZ, Aug 2008); SIGIR 2008 (Singapore, Jul 2008); AWIC 2008 (Cape Town, South Africa, Jul 2008); ACM Hypertext 2008 (Senior member, Pittsburgh, USA, Jun 2008); CPM 2008 (Pisa, Italy, Jun 2008); ECIR 2008 (Glasgow, Scotland, Apr 2008); ACM SAC 2008 (Fortaleza, Brazil, Mar 2008); ACM WSDM 2008 (Stanford, USA, Feb 2008); WebKDD/SNAKDD 2007 (San Jose, Aug 2007); SIGIR 2007 (Amsterdam, Netherlands, Jul 2007); LSDS-IR 2007 (Amsterdam, Netherlands, Aug 2007); PODS 2007 (Beijing, China, Jun 2007); WEA 2007 (Rome, Italy, Jun 2007); AWIC 2007 (Fontainebleau, France, Jun 2007); Infoscale 2007 (Suzhou, China, Jun 2007); WWW 2007 (Banff, Canada, May 2007); ECIR 2007 (Rome, Italy, Apr 2007); MMOIR 2007 (Hyderabad, India, Jan 2007); CIKM 2006 (Arlington, USA, Nov 2006); SPIRE 2006 (Glasgow, Scotland, Oct 2006); LA-WEB 2006 (Puebla, Mexico, Oct 2006); HLT-EMNLP 2005 (Vancouver, Canada, Oct 2006); ECDL 2006 (Alicante, Spain, Oct 2006); UKDU 2006 (Berlin, Germany, Sep 2006); VLDB 2006 (Seoul, South Korea, Sep 2006); SIGIR 2006 (Seattle, USA, Aug 2006); AMCIS 2006 (Acapulco, Mexico, Aug 2006); WebKDD 2006 (Philadelphia, USA, Aug 2006); CPM 2006 (Barcelona, Spain, Jun 2006); WWW 2006 (Edinburgh, UK, May 2006); ICEIS 2006 (Paphos, Cyprus, May 2006); ACM SAC 2006 (Dijon, France, Apr 2006); ECIR 2006 (London, UK, Apr 2006); EDBT & DataX 2006 (Munich, Germany, Mar 2006); ALENEX 2006 (Miami, USA, Jan 2006); COMAD 2005b (Hyderabad, India, Dec 2005); SCCC 2005 (Valdivia, Chile, Nov 2005); AIRS 2005 (Jeju Island, South Korea, Oct 2005); ECDL 2005 (Vienna, Austria, Sep 2005); XSym 2005 (Trondheim, Norway, Aug 2005); SBC-BSB 2005 (Brazil, Jul 2005); ICEIS 2005 (Miami, USA, May 2005); ECIR 2005 (Santiago de Compostela, Spain, Mar 2005); ACSC 2005 (Newcastle, Australia, Jan 2005); LA-WEB 2004 (Ribeirao Preto, Brazil, Nov 2004); AIRS 2004 (Beijing, China, Oct 2004); SPIRE 2004 (Padova, Italy, Oct 2004); ECDL 2004 (Bath, UK, Sep 2004); WebDB 2004 (Paris, France, Jun 2004); 3rd Web Dynamics workshop (New York, USA, May 2004); AWIC 2004 (Cancun, Mexico, May 2004); ICEIS 2004 (Porto, Portugal, Apr 2004); ECIR 2004 (Sunderland, England, Apr 2004); Workshop on Database Technologies for Handling XML information on the Web (Heraklion, Greece, Mar 2004); SPIRE 2003 & SBBD'2003 (Manaus, Brazil, Oct 2003); ECDL 2003 (Trondheim, Norway, Aug 2003); CIA 2003 (Helsinki, Finland, Aug 2003); SIGIR 2003 (Toronto, USA, Jul 2003); WWW 2003 (Budapest, Hungary, May 2003); 1st Atlantic Conference on Web Mining Conference (Madrid, Spain, May 2003); PAKDD 2003 Workshop on Knitting Web Linkages (Seoul, South Korea, May 2003) ICEIS 2003 (Angers, France, Apr 2003); HIS 2002 (Santiago, Chile, Dec 2002); Information and Knowledge Sharing - IKS (St. Thomas, US Virgin Islands, Nov 2002); Spanish Workshop on Digital Libraries (El Escorial, Spain, Nov 2002); ECDL 2002 (Rome, Italy, Sep 2002); SPIRE 2002 (Lisbon, Portugal, Sep 2002); ICALP 2002 (Málaga, Spain, Jul 2002); ICEIS 2002 (Ciudad Real, Spain, Apr 2002); SIAM IWAP 2002 (Caracas, Venezuela, Jan 2002); 2nd Int. Conf. on Web Information Systems (Kyoto, Japan, Dec 2001); 6th On-line World Conference on Soft Computing in Industrial Applications (WSC6), 2001; SIGIR 2001 (New Orleans, USA, Sept 2001); VLDB 2001 (Rome, Italy, Sept 2001); CIA 2001 (Modena, Italy, Sept 2001); ALCOM 2001 (San José, Costa Rica, May 2001); ICDE 2001 (Heidelberg, Germany, Apr 2001); WIIW (Rio de Janeiro, Brazil, Apr 2001); CICLing 2001 (Mexico City, Mexico, Jan 2001); FQAS 2000 (Warsaw, Poland, Oct 2000); SBBD 2000 (Joao Pessoa, Brazil, Oct 2000); SPIRE 2000 (A Coruña, Spain, Sept 2000); IFIP TCS2000 (Tokyo, Japan, Aug 2000); ACM SIGIR 2000 (Athens, Greece, Jul 2000); EDBT 2000 (Konstanz, Germany, Mar 2000); ICIS'99 (Charlotte, USA, Dec 1999); SPIRE'99 (Cancun, Mexico, Sept 1999);

ISCA PDCS'99 (Fort Lauderdale, USA, Aug 1999); ACM SIGIR'99 (San Francisco, USA, 1999); ACM SIGMOD'99 (Philadelphia, USA, 1999); ACM CIKM'98 (Baltimore, USA, Nov 1998); 6th Ibero-American Congress on Higher CS Education (Quito, Ecuador, Oct. 1998); SPIRE'98 (Sta. Cruz, Bolivia, Sept 1988); ACM SIGIR'98 (Melbourne, Australia, Aug 98); COCOON'98 (Taiwan, Aug 98); VLDB'98 (New York, USA, Aug 1998); Combinatorial Pattern Matching, CPM'98 (Rutgers, USA, Jul 1998); 4th IFIP 2.6 Working Conference on Visual Database Systems (L'Aquila, Italy, May 1998); TINA'97 (Santiago, Chile, Nov 1997); VLDB'97 (Aachen, Germany, Sept 1997); 26th JAIIO (Buenos Aires, Argentina, Aug 1997); Combinatorial Pattern Matching, CPM'97 (Aarhus, Denmark, Jun 1997); 1st Int. Symp. on Autonomous Decentralized Systems, ISADS'97 (Berlin, Germany, Apr 1997); IFIP WG 9.4 Information Technology for Competitiveness Conference (Florianopolis, Brazil, Jun 1997); XVI Int. Conf. of the Chilean Computer Science Society (Valdivia, Chile, Nov 1996); 3rd Workshop on Protocols for Multimedia Systems, PROMS'96 (Madrid, Oct 1996); 4th European Symposium on Algorithms, ESA'96 (Barcelona, Sep 1996); 5th Ibero-American Congress on Higher CS Education (México City, Sep. 1996); Third South American Workshop on String Processing, WSP'96 (Recife, Aug 1997); 25th JAIIO (Buenos Aires, Aug 1996); IFIP WG 3.4 IT in Management Conference (Melbourne, Australia, Jul 1996); 5th Scandinavian Workshop on Algorithm Theory, SWAT'96 (Reykjavik, Jul 1996); XXII Latin-American Conf. on Informatics, PANEL'96 (Bogota, Jun 1996); Workshop on Algorithms and Data Structures, WADS'95 (Kingston, Aug 1995); Second South American Workshop on String Processing, WSP'95 (Valparaíso, Apr 1995); VLDB'94 (Santiago, Sept 1994) (also in charge of the tutorial program); 21nd SEMISH (Caxambu, Brazil, Aug 1994); 23rd JAIIO (Buenos Aires, Argentina, Sept 1994); XX Latin-American Conference (Mexico City, Sept 1994); III Ibero-American Congress on Higher CS Education (Concepción, Chile, Nov. 1994); LATIN'92 (Sao Paulo, Brazil, Apr 1992); and XVIII Latin-American Conference on Informatics (Las Palmas de Gran Canaria, Spain, Aug 1992).

- Invited speaker in many professional events related to the Web, search technology, and innovation in several countries: Brazil, Chile, Finland, Italy, Mexico, Netherlands, Spain, Switzerland, United Kingdom, and USA, among others.

18 Seminars

Invited speaker at many institutions all around the world, in many of them more than once. For sake of conciseness we do not give dates, nor cities, only countries and institutions (without the frequency).

- Argentina: Univ. de Buenos Aires, UNICEN, Univ. Nac. de La Plata, Univ. Nac. de San Luis, Univ. Nac. del Sur, Univ. Nac. de Rosario, Univ. Nac. de Santa Fe;
- Armenia: FAST Foundation;
- Australia: Univ. of Sydney, Univ. of Queensland, Univ. of Melbourne, CSIRO (Sydney & Canberra), Griffith University, Queensland Univ. of Technology, RMIT, Yahoo 7;
- Austria: TU Wien, Central European Univ., Institute for Human Sciences (IWM), Complex Systems Hub;
- Azerbaijan: Ada University;

- Bolivia: Univ. Mayor de San Andrés, Univ. Mayor de San Simón, Univ. Privada de Sta. Cruz, Univ. Nur;
- Brazil: Fed. Univ. of Minas Gerais, Brazilian Physics Research Center, Univ. de Campinas, Univ. de Sao Paulo, Fed. Univ. of Pernambuco, Fed. Univ. of Mato Grosso do Sul, Univ. Fed. de Rio Grande do Sul, Catholic Univ. at Rio de Janeiro and at Porto Alegre, Univ. Fed. de Bahia, Univ. Fed. de Ouro Preto;
- Canada: Univ. of Waterloo, Univ. of Western Ontario, Univ. of Toronto, Univ. of British Columbia, Carleton University, Dalhousie University, Univ. of Alberta;
- Chile: Catholic Univ. at Santiago, Univ. Técnica Federico Santa María, Univ. Católica del Norte, Univ. de Tarápaca, Univ. de La Frontera, Univ. del Bío-Bío, Univ. de Magallanes, Univ. de La Serena, Univ. Austral, Univ. de Concepción, Univ. de Talca;
- Czech Republic: Czech Academy of Sciences, Charles University;
- China: Tsinghua University, Zhejiang University;
- Colombia: Univ. de Los Andes, Univ. Autónoma de Bucaramanga, Univ. EAFIT, Univ. Industrial of Santander, Univ. Jorge Tadeo Lozano;
- Costa Rica: Inst. Tecnológico de Costa Rica, Univ. de Costa Rica;
- Cuba: CENIAI, Univ. de La Habana;
- Denmark: Univ. of Aarhus;
- Ecuador: National Polytechnic Univ., Catholic Univ.;
- El Salvador: Univ. Tecnológica del Salvador, Univ. Gerardo Barrios;
- Estonia: Univ. of Tartu;
- Ethiopia: Addis Ababa University, Addis Ababa Science & Technology University;
- France: INRIA-Rocquencourt, Univ. of Paris (Jussieu, Orsay, Nord), Univ. Marné la Vallée, Univ. of Nancy, Univ. Joseph Fourier;
- Finland: Univ. of Helsinki;
- Germany: European Consortium Research Center, Dagstuhl Research Center, Technical Univ. of Berlin, Magdeburg Univ., Darmstadt Univ., Leipzig Univ., Frankfurt Univ., Hannover Univ., Karlsruhe University, Kaiserslautern University, Heidelberg University;
- Greece: Aristotle University;
- India: IIT Bombay, IIT Madras, IMSc Chennai, IIT Delhi, IISc Bangalore, National Institute of Advanced Studies, Sitare University, NMIMS Indore, SAGE Indore, Model Institute of Engineering and Technology, Muffakaham Jah College of Engineering and Technology, University of Engineering and Management at Jaipur, RAIT ACM, Nirma University, VVCE;

- Italy: Fibonacci Institute, Univ. of Rome, Univ. of Venice, Univ. of Padova, Univ. of Pisa, Politecnico di Milano, Univ. Milano Bicocca, Univ. of Siena, Univ. of Bologna, Univ. of Trento, Gran Sasso Science Institute, Bocconi Univ., Univ. di la Sapienza;
- Japan: NTT Labs., Univ. of Tokyo, Tokyo Institute of Technology, IEE Nagoya;
- Malaysia: Multimedia University, Univ. Malaysia Sarawak;
- México: Univ. Nacional Autónoma, Instituto Politécnico, Tecnológico de Monterrey, CINVESTAV, CICESE, Univ. de Zacatecas, Univ. de Querétaro, CIMAT, Univ. Michoacana, Univ. de Puebla;
- New Zealand: Univ. of Canterbury, Massey University;
- Nigeria: Ladoke Akintola University of Technology (online);
- North Cyprus: Middle East Technical University;
- Norway: Norwegian University of Science and Technology, Bergen University;
- Netherlands: Univ. of Twente, Leiden University;
- Paraguay: Univ. Nacional, Univ. Católica de Nuestra Señora de la Asunción, Univ. Comunera;
- Pakistan: Univ. of Management and Technology, GCU ACM Student Chapter;
- Perú: Univ. de Lima, Univ. Antenor Orrego, ESAN, SISE, RCP, Univ. de San Agustín, DATAPRO, Univ. Nac. del Altiplano, UTEC;
- Portugal: INESC, Univ. de Porto;
- Puerto Rico: Univ. of Puerto Rico at Mayaguez;
- Qatar: Qatar Foundation Research Institute;
- Russian Federation: Yandex; Polytechnic State Univ. of Saint Petersburg, Vorozhnev Univ;
- Singapore: National University, Singapore Management University;
- South Korea: National University at Seoul, ETRI, ICU-KAIST;
- Spain: Polytechnic Univ. of Catalunya, Univ. de Valladolid, Fundesco/ATI, Univ. Pompeu Fabra, Centro de Recerca Matemática, Univ. of Granada, Univ. Rey Juan Carlos I, Univ. Carlos III, Univ. of Islas Baleares, Univ. of Santiago de Compostela, Univ. of A Coruña, Univ. Autónoma de Barcelona, Univ. de Barcelona, Univ. de Jaén, Univ. of Alcalá, Polytechnic Univ. of Madrid, Polytechnic Univ. of Valencia, Univ. Rovira i Virgili, Univ. Autónoma de Madrid, UNED, Univ. Jaume I, Inst. of Artificial Intelligence, Polytechnic Univ. of Las Palmas, Univ. Deusto, Univ. of Basque Country, Cantabria Univ., Univ. of Oviedo, Univ. of Alicante;
- Sweden: KTH, Univ. of Lund, Chalmers Univ.;
- Switzerland: Swiss Institute of Technology (ETH), Swiss Federal Polytechnic (EPFL), IDlap;

- Taiwan: Academia Sinica;
- Trinidad and Tobago: Univ. of West Indies;
- Arab United Emirates: Pilani Dubai (online);
- United Kingdom: Oxford Univ., Glasgow Univ., Queen Mary Univ., Open Univ., Microsoft Research (Cambridge), Birmingham Univ., Aston Univ., Bristol Univ., Wolverhampton Univ., Loughborough Univ., Liverpool Univ.;
- United States: Stanford Univ., Carnegie Mellon Univ., Univ. of Washington, Univ. of Texas at Austin, Indiana Univ., National Institute of Health, Univ. of Arizona, Texas Instruments Labs., IBM T.J. Watson & Almaden Research Centers, Rensselaer Pol. Ins., Oracle, Hewlett-Packard Labs., NASA Ames Research Center, Stanford Linear Accelerator Center, Google, Microsoft Research, Facebook, Yahoo!, Mozilla, EBay, Univ. of Washington, SAP Research, Univ. of Utah, A9.com (an Amazon.com subsidiary), NYU Poly, FXPal, eBay, George Mason Univ., Univ. of Houston, Northeastern Univ., Northwestern Univ., Univ. of California at San Diego, Santa Barbara, Riverside, Davis & Merced, ISI at USA, UMass at Boston, Duke University, Univ. of Iowa, Sonoma State University, ACM Chapters of Bay Area, Chicago, Northeast Ohio, Potomac & Sacramento;
- Uruguay: Univ. de la República;
- Venezuela: Univ. Simón Bolívar, Univ. de Los Andes, IBM Scientific Center, and Univ. Central.

19 Languages

- Spanish: native.
- English: fluent.
- Portuguese: good (spoken and written).
- Catalan: good (reading and listening).
- French, Italian: good at reading, fair at listening and speaking.

20 Other Relevant Information

- I have been referee for the following journals: Communications of the ACM, Journal of the ACM, IEEE Trans. on Computers, IEEE Trans. on Data and Knowledge Engineering, IEEE Trans. on Circuits and Systems, Journal of Algorithms, BIT/Nordic Journal of Computing, Algorithmica, ACM Computing Surveys, ACM Trans. on Database Systems, VLDB Journal, ACM Trans. on Information Systems, Information Systems, SIAM Journal on Discrete Mathematics, SIAM Journal on Computing, Computational Geometry: Theory and Applications, Information Retrieval Journal, World Wide Web Journal, Journal on Discrete Algorithms, Information and Processing Management, Journal on Combinatorial Theory (A), Information and Computation, Information Processing Letters, VLDB

Journal, Artificial Intelligence, Random Structures & Algorithms, Theoretical Computer Science, Software-Practice and Experience, Combinatorics, Probability & Computing, Parallel Computing, Journal of Information Science, Int. J. of Computer Mathematics, Journal of Automata, Languages & Combinatorics, Acta Informatica, and The Computer Journal. I am also a reviewer for Mathematical Reviews, Butterworths, and Information and Software Technology.

- Panelist for the Intelligent Information Systems Program of the National Science Foundation, USA, 2018 & 2020.
- I have evaluated grant proposals for the National Science Foundation (USA), NSERC (Canada), ISF (Israel), CONICYT (Chile), CNPq (Brazil), GACR (Czech Republic), RGCP (Hong Kong), RCN (Norway), CONICET (Argentina), CONICYT (Uruguay), MEC CICYT (Spain) and Chilean/European Community projects.
- I have also evaluated proposal for public biddings in Chile and research projects for Catalonia, the Community of Madrid and several Chilean universities, as well as curricula proposed to the Higher Education Council of Chile and the Council of Chilean Universities.
- Participation as external reviewer for Ph.D. theses at Univ. Paris 7, Univ. Marné la Vallée, Univ. of Grenoble (France), Univ. of Hannover, Univ. de Karlsruhe (Germany), Univ. of Amsterdam, Univ. of Twente (Netherlands), NTNU (Norway), CMU, Georgia Institute of Technology (United States), Univ. of Melbourne (Australia), University of Lisbon (Portugal), Univ. di Roma (Italy), Univ. Politécnica de Madrid, Univ. Politécnica de Catalunya, Univ. de Valladolid, Univ. de A Coruña (Spain) and Univ. Fed. de Rio Grande do Sul (Brazil).
- I have been external evaluator for hiring or promotion cases in Argentina, Australia, Brazil, Chile, France, Germany, Israel, Norway, Spain, Taiwan, UK and USA; as well as reviewer for book proposals of several publishers.
- Several dissemination papers in Chilean magazines and monthly column in Informática (Chilean magazine) from 1993 to 2004. Editor of the Latin American news column in the Bulletin of the EATCS (1994-97).
- I have written several short science fiction stories, some of them published in Fanzines in Chile and Italy.
- Interviews for TV, radio, or newspapers in Argentina, Bolivia, Chile, Colombia, Costa Rica, El Salvador, Guatemala, India, Mexico, Spain, Uruguay, United Kingdom (CBC), and USA, among others. The most watched interview is on AI and Internet by Aquae Foundation, 2016 (in Spanish), that has been watched more than 5 thousand times (<https://www.youtube.com/watch?v=1ZzOgY5aOV4>). A more recent also on AI was in CNN Chile, July 2024, with more than 400 views (<https://www.youtube.com/watch?v=gDSMnFkQUmg>).
- During the pandemic I co-hosted a weekly YouTube program in Chile to analyze Covid data that lasted months in 2020 and 2021, with some episodes with over 20 thousand views. I have also participated in dozens of podcast, most of them related to responsible AI. Later I co-hosted another YouTube weekly program on Data & AI in Chile that also lasted months in 2022.

- I love geography, traveling, good food and wine, science fiction, and chess. I like to practice tennis and football (soccer).