Curriculum Vitae

Personal Information

- **Name:** Gonzalo Navarro
- **Nationality:** Argentina
- **Year of birth:** 1969
- **Address:** Beauchef 851 - Santiago - Chile
- **Phone:** +56-2-9784952
- **Civil status:** Married
- **E-mail:** `gnavarro@dcc.uchile.cl`
- **Web page:** `http://www.dcc.uchile.cl/gnavarro`

- **Degree:** PhD. in Computer Science
- **Position:** Full Professor, Dept. of Computer Science, Universidad de Chile
- **Areas of interest:** Design and Analysis of Algorithms, Text Databases, Graph Databases, Compression.

Studies

Formal Studies

- (1995-1998) PhD. in Computer Science, Faculty of Physics and Mathematical Sciences, Universidad de Chile
  Score: 7.0 (range 1.0 – 7.0)
  Thesis: "Approximate Text Searching"
  Advisor: Prof. Ricardo Baeza-Yates (Universidad de Chile).

- (1994-1995) MSc. in Computer Science,
  Faculty of Physics and Mathematical Sciences, Universidad de Chile
  Score: 6.99 (range 1.0 – 7.0)
  Thesis: "A Language for Queries on Structure and Contents of Textual Databases"
  Advisor: Prof. Ricardo Baeza-Yates (Universidad de Chile).

- (1986-1993) Licenciate in Informatics (5 years plus thesis), Faculty of Exact Sciences, Universidad Nacional de La Plata (UNLP, Argentina)
  Score: 9.76 (range 1 – 10)
  Thesis: "MediaCore: A Multimedia Interface Composition Toolkit"
  Advisor: Prof. Jorge Sanz (IBM Argentina and Almaden Research Center).

- (1989-1992) Licenciate in Informatics (5 years plus thesis), Latin American School of Informatics (ESLAI, Argentina)
  Score: 9.83 (range 1 – 10)
  Thesis: "A Study on Control Structures"
  Advisor: Prof. Jorge Aguirre (ESLAI and Universidad de Buenos Aires, Argentina).

Scholarships

- (1999) Scholarship given by Fundación Andes (Chile), to make a Post-Doctorate in Helsinki and Paris during the 2nd semester of 1999 (9 projects selected out of 32). Also funded by the Academy of Finland and ECOS/Conicyt Project 99/035.
- (1994) Scholarship given by Universidad de Chile, to take the 2nd semester of the MSc. in Computer Science.
- (1991) Research assistanship given by IBM Argentina, to research in Multimedia and Hypermedia, subject of my Licenciate Thesis at Universidad Nacional de La Plata (UNLP, Argentina).
- (1989-1992) Scholarship given by the Latin American School of Informatics (ESLAI, Argentina) to take the de Lic. in Informatics. Obtained by a curriculum analysis and a selective admission exam (2nd. place among 300 applicants).

Distinctions

- (1996) First prize in the III CLEI-UNESCO Contest of Latin American Computer Science MSc. Theses (developed during 1995).
- (1992) Best score at the Faculty of Exact Sciences, Universidad Nacional de La Plata (UNLP), Argentina (9.76).

Research

Research Stays

- (1999-2000) Postdoctoral stay, University of Helsinki, Finland, and Institut Gaspard Monge (IGM), Université de Marne-la-Vallée, France. Areas: flexible string matching and compression. Inviting professors: Esko Ukkonen (Univ. Helsinki) and Maxime Crochemore (IGM).
- (1996-) Short invited research stays at several research centers: Universitat Politécnica de Catalunya (Spain), Universidade Federal de Minas Gerais (Brazil), Universidad de Valladolid (Spain), Universidad Michoacana (Mexico), Université de Marne-la-Vallée (France), University of Joensuu (Finland), Universidad Nacional de San Luis (UNSL, Argentina), University of Helsinki (Finland), University of Tampere (Finland), Kyushu University (Japan), Universidade da Coruña (Spain), Universidade Técnica de Lisboa (Portugal), University of Waterloo (Waterloo, Canada), Universitá di Verona (Italy), and Dalhousie University (Canada).

Research Projects

- (2026-2029) Main Researcher in the Fondecyt Project 1-260080, *Space/Time Efficient Solutions to Extend Graph Databases*.
- (2023-2026) Main Researcher in the Fondecyt Project 1-230755, *Compact Data Structures for Graph Databases*.
- (2020-2023) Main Researcher in the Fondecyt Project 1-200038, *Practical Indexes for Very Large Repetitive Text Collections*.
- (2018-2028) Associate researcher in the *Millennium Institute for Foundational Research on Data (IMFD)*, from the Millennium Scientific Initiative. Research director since 2021.
- (2017-2020) Main Researcher in the Fondecyt Project 1-170048, *Compressed Data Structures for Highly Repetitive Datasets*.
- (2016-2017, 2019-2022) Advisor member in *Google Research Award Latin America* projects, in association with the students Joshimar Córdova (2016, MSc), Patricio Huepe (2017, MSc), and Dustin Cobas (2019-2022, PhD).
- (2016-2019) Responsible for the University of Chile in the project *Bioinformatics and Information Retrieval Data Structures Analysis and Design (BIRDS)*, with funding from the European Union (RISE projects) and formed by 7 universities.
- (2014-2026) Key researcher of the *Basal Center for Biotecnology and Bioengineering (CeBiB)*, with basal funding from Concicyt, Chile.
- (2014-2017) Main Researcher in the Fondecyt Project 1-140796, *Fundamental Data Structures for Managing Large Datasets*.
- (2013-2017) Associate researcher in Millenium Nucleus *Information and Coordination in Networks*, Mideplan, Chile.
- (2011-2014) Main Researcher in the Fondecyt Project 1-110066, *Compact Data Structures for Information Retrieval*.
- (2010) Responsible of the Chilean side of the project "Development of a data integration platform for pathway-analysis that incorporates compressed data structures and approximate pattern matching on biological sequences" of cooperation between the University of Chile and the Katholieke Universiteit Leuven, Belgium.
- (2009-2012) Researcher in Fondecyt Project 1-090037 (Miguel Reyes, head), *The Monoaminergic "Receptophore". Similarities among the Active Sites of Monoaminergic Target Proteins, based on their Crystal Structures: Implications for the Development of Selective and Non-Selective Ligands*.
- (2008-2012) Key researcher in Millenium Institute *Cellular Dynamics and Biotechnology*, Mideplan, Chile.

- (2008-2011) Main Researcher in the Fondecyt Project 1-080019, *Memory-Hierarchy-Aware Data Structures*.
- (2006-2009) Main researcher in project *Compact Data Structures*, funded by Yahoo! Research Latin America. Since 2008 the project depends directly on Yahoo! Research.
- (2003-2009) Director of the research project *Advanced Database Technologies* at Universidad Nacional de San Luis, Argentina.
- (2002-2008) Researcher (alternate director since 2004 and director since 2006) in Millennium Nucleus *Center for Web Research*, Project P01-029-F (2002-2004) and P04-067-F (2005-2007), Mideplan, Chile. See `http://www.cwr.cl`.
- (2005-2008) Main Researcher in the Fondecyt Project 1-050493, *Compressed Text Databases*.
- (2003-2006) Researcher in project *Advanced Tools for the Implementation of Digital Libraries* funded by CICYT (Spain), with Universidade da Coruña and Universidad de Valladolid, Spain.
- (2001-2005) Coordinator of Project CYTED VII.19 RIBIDI (Iberoamerican), *Information Retrieval and Digital Libraries*, where 20 institutions from 7 countries participated. See `http://www.dcc.uchile.cl/gnavarro/ribidi` (in Spanish).
- (2002-2005) Main researcher in the Fondecyt Project 1-020831, *Fast, Flexible and Economical Text Searching*.
- (2002) Director of the research project *Databases and Model Theory* at Universidad Nacional de San Luis, Argentina.
- (1999-2002) Researcher in ECOS/Conicyt (Chile/France) Project 99/035 (Maxime Crochemore and Ricardo Baeza-Yates, heads), *Pattern Matching and Applications*.
- (1997-2002) Researcher in SIAM (Brazil) Project (Nivio Ziviani, head), *Information Systems for Mobile Environments*.
- (2000-2002) Main researcher in the Fondecyt Project 1-000929, *Searching for Similar Objects*.
- (1999-2002) Researcher in Fondecyt (Chile) Project 1-990627 (Ricardo Baeza-Yates, head), *Design and Analysis of Sequential and Parallel Algorithms and their Applications*.
- (1997-2000) Researcher in Project CYTED VII.3 AMYRI (Iberoamerican, Ricardo Baeza-Yates, head), *Environment for Information Manipulation and Retrieval*.
- (1996-1999) Researcher in Fondef (Chile) Project 96-1064 (Eduardo Vera, head), *Infocommunication in High Bandwidth Networks*.
- (1995-1998) Researcher in Fondecyt (Chile) Project 1-950622 (Ricardo Baeza-Yates, head), *Data Structures: Design, Analysis and Applications*.
- (1996-1997) Researcher in Fondecyt (Chile) Project 1-960881 (Patricio Poblete, head), *Exact and Similarity Searching: Algorithms, Analysis Techniques and Visualization*.

- (1993-1995) Researcher in Fondecyt (Chile) Project 1-93-0765 (Ricardo Baeza-Yates, head), *Textual Databases: Algorithms, Interfaces and Applications*.
- (1994) MSc. student in Fondecyt (Chile) Project 1-940271 (Patricio Poblete, head), *Analysis and Visualization of Data Structures*.
- (1991-1993) Resident Researcher at the Computer Research and Advanced Applications Group (CRAAG/GICAA), a research group of IBM Argentina specialized in image processing, parallelism and multimedia, headed by Jorge Sanz (IBM Argentina and University of Illinois at Urbana-Champaign, USA).

Distinctions

- (2026) ISCB Fellow, the distinction given by the International Society for Computational Biology for exceptional achievements in computational biology and bioinformatics. In particular, "his foundational contributions to sequence search and compressed indexing have quietly powered some of modern bioinformatics' most important tools".
- (2026) Imre Simon Test-of-Time Award in the *17th Latin American Theoretical Informatics Symposium*, for the article "Position-Restricted Substring Searching" of 2006, with Veli Mäkinen.
- (2025) Best Paper Award in the *32nd International Symposium on String Processing and Information Retrieval (SPIRE)*, for the paper "Smallest suffixient sets as a repetitiveness measure", with Giuseppe Romana and Cristian Urbina.
- (2025) Runner-up in the Wilkes Award 2025 for the best papers published in 2024 in *The Computer Journal*, for the paper with the student Luiz Fernando Afra Brito.
- (2025) Best Student Paper Award in the *36th Annual Symposium on Combinatorial Pattern Matching (CPM)*, for the paper with my student Alejandro Pacheco.
- (2024) Listed in the ranking Stanford's list World Top 2% of most cited scientists in 2023 and in their whole career.
- (2024) ACM SIGMOD Best Demo Honorable Mention for the demo "MillenniumDB: A multi-modal, multi-model graph database engine".
- (2023–2026) ACM Distinguished Speaker.
- (2022) ACM Fellow, the distinction given by the Association for Computing Machinery to at most 1% of its members for achieving a significant impact on the computing field. In particular, "for theoretical and practical contributions to the fields of text searching and compact data structures".
- (2022) Presentation text in *Technical Perspective* of the *Communications of the ACM* 65(6):90, "The Compression Power of the BWT".
- (2021) Best Student Paper Award in the *28th International Symposium on String Processing and Information Retrieval (SPIRE)*, for the paper with my student Cristian Urbina.

- (2019-2021) *Google Research Award Latin America*, with my student Dustin Cobas.
- (2019) Capocelli Prize in the *29th Data Compression Conference (DCC)*, for the article with students Jarno Alanko and Louisa Seelbach.
- (2018) ACM Distinguished Member, a distinction given by the Association for Computing Machinery to at most 10% of its members for achieving a significant impact on the computing field.
- (2018) Capocelli Prize in the *28th Data Compression Conference (DCC)*, for the article with my student Adrián Gómez-Brandón.
- (2017) *Google Research Award Latin America*, with my student Patricio Huepe.
- (2017) Alberto Apostolico Best Paper Award in the *28th Annual Symposium on Combinatorial Pattern Matching (CPM)*, for the article "Path queries on functions", with Travis Gagie and Meng He.
- (2016) Article "On compressing and indexing repetitive sequences", with Sebastian Kreft, included in the Virtual Special Issue "40th Anniversary of Theoretical Computer Science – Top Cited Articles: 1975-2014", which collects the most cited articles of each year.
- (2016) *Highest Cited Paper Award* de Elsevier, for the articles "On compressing and indexing repetitive sequences" and "Colored range queries and document retrieval", which are among the 5 most cited 2013 papers in *Theoretical Computer Science* in the 2 following years. Similar award for the article "DACs: Bringing direct access to variable-length codes", among the 5 most cited in *Information Processing and Management*, and "Improved Compressed Indexes for Full-Text Document Retrieval", among the 5 most cited in *Journal of Discrete Algorithms*.
- (2016) *Google Research Award Latin America*, with my student Joshimar Córdova.
- (2016) Capocelli Prize in the *26th Data Compression Conference (DCC)*, for the article with my student Héctor Ferrada.
- (2013) Capocelli Prize in the *23rd Data Compression Conference (DCC)*, for the article with my student Roberto Konow.
- (2012) Best Student Paper Award in the *19th International Symposium on String Processing and Information Retrieval (SPIRE)*, for the paper with my student Cecilia Hernández.
- (2008) Award Scopus Chile 2008 in Computer Science, Mathematics and Engineering , awarded by Elsevier to researchers with high scientific productivity, with the support of Conicyt (Chile).
- (1997) Coauthor of "Large Text Searching Allowing Errors" (Márcio Araújo, Gonzalo Navarro, and Nivio Ziviani), awarded the best software tool at *SBES'97* (Brazilian Symposium on Software Engineering) and 4th prize at the 4th CLEI-UNESCO Contest of Latin American Computer Science MSc. Theses. The student is Márcio Araújo and the advisor is Nivio Ziviani.

Invited Talks and Tutorials

- (2025) Keynote talk at the *SIAM Conference on Applied and Computational Discrete Algorithms (ACDA)*, Montreal, Canada. Title: "Adaptive Dynamic Bitvectors".
- (2024) Mini-course of 6 hours at the *Universitá di Verona*, Italy. Title: "Compressed Text Indexes".
- (2023) Invited talk at the *Data Storage Technologies Forum* of Huawei, Saint Petersburg, Russia (remote participation). Title: "Compact Data Structures".
- (2023) Joint keynote talk at the *26th International Conference on Database Theory (ICDT)* and the *26th International Conference on Extending Database Technology (EDBT)*, Ioannina, Greece. Title: "Compact Data Structures meet Databases".
- (2022) Invited talk in the *Workshop on the 20 years after the FM-index*, part of the *Lipari School Computational on Complex and Social Systems*, Lipari, Italy. Title: "The Ring: Worst-Case Optimal Graph Joins in Compressed Space".
- (2022) Keynote talk at the *33rd International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA)*, Philadephia, PA. Title: "Achieving Worst-Case-Optimal Multijoins on Databases through Geometric Data Structures".
- (2022) Keynote talk at the *32nd Data Compression Conference (DCC)*, Snowbird, AZ. Title: "On the Compressibility of Highly Repetitive Sequences".
- (2022) Invited talk at the *Workshop on Compression + Computation*, online. Title: "The Ring: Worst-Case Optimal Graph Joins in Compressed Space".
- (2021) Invited talk at the *Stanford Compression Workshop*, online. Title: "Repetitiveness and Indexability".
- (2019) Keynote talk at the *26th International Conference on String Processing and Information Retrieval (SPIRE)*, Segovia, Spain. Title: "Repetitiveness and Indexability".
- (2016) Tutorial "Compact Data Structures", in the *12th Latin American Theoretical Informatics Symposium (LATIN)*, Ensenada, Mexico.
- (2015) Keynote talk at the *XLI Latin American Conference on Informatics (CLEI)*, Arequipa, Peru. Title: "Compact Data Structures".
- (2014) Keynote talk at the *21st International Symposium on String Processing and Information Retrieval (SPIRE)*, Ouro Preto, Brazil. Title: "Doing SP & IR on Repetitive Collections".
- (2014) Keynote talk at the *11th Latin American Theoretical Informatics Symposium (LATIN)*, Montevideo, Uruguay. Title: "Encoding Data Structures".
- (2012) Tutorial "Space-Efficient Data Structures II", with Francisco Claude, at the *19th International Conference on String Processing and Information Retrieval (SPIRE)*, Cartagena, Colombia.

- (2012) Keynote talk at the *23rd International Workshop on Combinatorial Algorithms (IWOCA)*, Tamil Nadu, India. Title: "Indexing Highly Repetitive Collections".
- (2012) Joint keynote talk at the *23rd Annual Symposium on Combinatorial Pattern Matching (CPM)* and the *13th Scandinavian Symposium and Workshops on Algorithm Theory (SWAT)*, Helsinki, Finland. Title: "Wavelet Trees for All".
- (2011) Tutorial "Space-Efficient Data Structures", with Francisco Claude, at the *18th International Conference on String Processing and Information Retrieval (SPIRE)*, Pisa, Italy.
- (2011) Tutorial "The Miracle of Self-Indexing", in the *1st Research Workshop and Thematic School* of RedTIC, CONACyT, Puebla, Mexico. Videoconference.
- (2010) Keynote talk at the *17th International Symposium on String Processing and Information Retrieval (SPIRE)*, Los Cabos, Mexico. Title: "Compact Data Structures for IR: The Time Has Come".
- (2010) Tutorial "Self-Indexing XML" invited at the *IV Alberto Mendelzon Workshop on Foundations of Data Management (AMW)*, Buenos Aires, Argentina.
- (2009) Keynote talk at the *Prague Stringology Conference (PSC)*, Prague, Czech Republic. Title: "Combining Text Compression and String Matching: The Miracle of Self-Indexing".
- (2009) Keynote talk at the *2nd International Workshop on Similarity Search and Applications (SISAP)*, Prague, Czech Republic. Title: "Analyzing Metric Space Indexes: What For?".
- (2009) Keynote talk at the *14th International Conference on Implementation and Application of Automata (CIAA)*, Sydney, Australia. Title: "Implementation and application of automata in string processing".
- (2008) Keynote talk at the *Third Workshop on Compression, Text, and Algorithms*, satellite event of *SPIRE 2008*. Title: "Indexing LZ77: The Next Step in Self-Indexing".
- (2008) Invited survey talk at *Dagstuhl Seminar on Structure-Based Compression of Complex and Massive Data*, Germany. Title: "Practical Search on Compressed Text".
- (2007) Tutorial "Compact Data Structures", invited at the *Mexican Computing Meeting (ENC)*, Morelia, Mexico.
- (2006) Invited talk at the *Bertinoro Meeting on Space-Conscious Algorithms*, Bertinoro, Italy. Title: "Dynamic Compressed Sequences and Applications". Event constituted by invited talks.
- (2006) Invited talk at the Workshop *The Web as a Database*, Santiago, Chile, organized by the Center for Web Research and Yahoo! Research Center Latin America. Title: "Succinct Data Structures". Event constituted by invited talks.

- (2005) Keynote talk at the *12th International Symposium on String Processing and Information Retrieval (SPIRE 2005)*, Buenos Aires, Argentina (invited by the Steering Committee). Title: "When music meets geometry: on algorithmic aspects of music retrieval".
- (2003) Keynote talk at the *Mexican International Conference on Computer Science*, Tlaxcala, Mexico. Title: "Current challenges in textual databases".
- (2001) Keynote talk at the *Chilean Computing Week*, Punta Arenas, Chile. Title: "Towards the new textual database: small, fast and flexible".
- (1992-) Invited talks in several research centers: Dalhousie University (Canada), Stanford University (USA), Universidad Nacional de La Plata (UNLP, Argentina), Universidad Austral de Chile (Valdivia, Chile), Universidade Federal de Minas Gerais (UFMG, Belo Horizonte, Brazil), Universidad de Valladolid (Spain), Universidad Michoacana (Morelia, Mexico), Center for Research in Mathematics (CIMAT, Guanajuato, Mexico), Gaspard Monge Institute (IGM, Université de Marne-la-Vallée, France), Laboratory of Research in Informatics (LRI, Université de Paris Sud, France), University of Helsinki (Finland), University of Joensuu (Finland), University of Tampere (Finland), Helsinki University of Technology (Finland), Laboratory of Algorithmic Informatics : Fundamentals and Applications (LIAFA, Université de Paris 7, Paris, France), Kyushu University (Fukuoka, Japan), Universidade da Coruña (A Coruña, Spain), Universidad Nacional de San Luis (UNSL, Argentina), Universidad Católica de Chile, Universidad de Playa Ancha (Valparaíso, Chile), Universidad de Concepción (Concepción, Chile), Yahoo! Research Center Barcelona (Spain), Universidade Técnica de Lisboa (Portugal), University of Waterloo (Canada), and Universidad de Chile.

Editorial Boards and Steering Committees

- (2025) Chair of the Search Committee for the new Editor in Chief of *ACM Transactions on Algorithms*.
- (2022-) Member of the Editorial Board of *ACM Transactions on Algorithms*.
- (2022-2024) Member at large of the Steering Committee of the *International Symposium on Experimental Algorithms (SEA)*.
- (2022-2024) Member of the Steering Committee of the *European Symposium on Algorithms (ESA)*.
- (2016-2023) Editor in Chief of *ACM Journal of Experimental Algorithmics*.
- (2012-) Member of the Editorial Advisory Board of *Information Systems*.
- (2009-2016) Member of the Editorial Board of *ACM Journal of Experimental Algorithmics*.
- (2008-2013) Member of the Steering Committee of the *Latin American Theoretical Informatics (LATIN)*.
- (2008-2014) Co-founder and member of the Steering Committee of the *International Conference on Similarity Search and Applications (SISAP)*, with Edgar Chávez. See `www.sisap.org`.

- (2004-2019) Member of the Editorial Board of *Information Retrieval*.
- (2002,2006-2008,2019-2021) Member of the Steering Committee of *International Symposium on String Processing and Information Retrieval (SPIRE)*.

Program Committee Chair and Guest Editor

- (2027) PC Co-chair of the *6th SIAM Conference on Applied and Computational Discrete Algorithms (ACDA)*.
- (2026) Associate Chair of the *19th ACM International Conference on Web Search and Data Mining (WSDM)*.
- (2023) PC Chair of the *25th Workshop on Algorithm Engineering and Experiments (ALENEX)*, Florence, Italy.
- (2022) PC Chair of the *22nd Annual European Symposium on Algorithms (ESA B)*, Berlin/Postdam, Germany.
- (2020) Guest editor (with Travis Gagie) of a Special Issue in *Information and Computation* dedicated to "Computation over Compressed Data".
- (2018) PC Co-chair of the *25th International Symposium on String Processing and Information Retrieval (SPIRE)*, Lima, Peru.
- (2018) PC Co-chair of the *29th Annual Symposium on Combinatorial Pattern Matching (CPM)*, Qingdao, China.
- (2018) Special Session Chair of the *28th Data Compression Conference (DCC)*, Snowbird, Utah. Subject: "Computation over Compressed Data".
- (2018) Guest editor (with Travis Gagie) of a Special Issue in *Algorithmica* dedicated to selected papers from recent *DCC* and *SPIRE* conferences. Springer.
- (2018) Guest editor (with Evangelos Kranakis) of a Special Issue in *Algorithmica* dedicated to selected papers from *LATIN 2016*. Springer.
- (2016) Special Session Chair of the *26th Data Compression Conference (DCC)*, Snowbird, Utah. Subject: "Compressed Data Structures".
- (2016) PC Co-chair of the *12th Latin American Theoretical Informatics Symposium (LATIN)*, Ensenada, Mexico.
- (2015) Area Editor of *Encyclopedia of Algorithms*, 2nd edition, Springer. Ming-Yang Kao, editor.
- (2014) Guest editor (with Vladimir Pestov) of a Special Issue in *Information Systems* dedicated to selected papers from *SISAP 2012*. Elsevier.
- (2014) Special Session Chair of the *24th Data Compression Conference (DCC)*, Snowbird, Utah. Subject: "Compressed Data Structures".

- (2012) PC Co-chair of the *5th International Workshop on Similarity Search and Applications (SISAP)*, Toronto, Canada.
- (2010) Guest editor (with Edgar Chávez) of a Special ISsue of *ACM SIGSPATIAL* dedicated to *Metric Space Searching*. ACM Press.
- (2008) Guest editor (with Edgar Chávez) of a Special Issue of the *Journal of Discrete Algorithms* dedicated to selected papers from *SISAP 2008*. Elsevier.
- (2008) PC Co-chair of the *1st International Workshop on Similarity Search and Applications (SISAP)*, Cancun, Mexico.
- (2007) PC Chair of track *Scalable Pattern Recognition* within the *8th Mexican International Conference on Computer Science (ENC 2007)*, Puebla, Mexico.
- (2006) Area Editor of *Encyclopedia of Algorithms*, Springer. Ming-Yang Kao, editor.
- (2006) PC Co-chair of *4th IFIP International Conference on Theoretical Computer Science (IFIP TCS)*, track TC1 of the *19th World Computer Congress (WCC 2006)*, Santiago, Chile.
- (2005) Posters PC Co-chair of *28th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, Salvador, Brazil.
- (2005) PC Co-chair of the *12th International Symposium on String Processing and Information Retrieval (SPIRE)*, Buenos Aires, Argentina.
- (2004) PC Chair of *XXIV International Conference of the Chilean Computer Science Society (SCCC)*, Arica, Chile.
- (2001) PC Chair of *8th International Symposium on String Processing and Information Retrieval (SPIRE)*, Laguna de San Rafael, Chile.

Organization of and Attendance to International Seminars

- (2025) Attendance to the *Dagstuhl Seminar 25191, "Adaptive and Scalable Data Structures"*, Saarbrücken, Germany.
- (2024) Co-organizer of the *Dagstuhl Seminar 24472, "Regular Expressions: Matching and Indexing"*, Saarbrücken, Germany.
- (2024) Attendance to the *Shonan Meeting 187, "Theoretical Foundations of Nonvolatile Memory"*, Tokyo, Japan.
- (2019) Co-organizer of the *Dagstuhl Seminar 19241, "25 Years of the Burrows-Wheeler Transform"*, Saarbrücken, Germany.
- (2017) Co-organizer of the *Shonan Meeting 126, "Computation over over Compressed Structured Data"*, Tokyo, Japan.
- (2016) Co-organizer of the *Dagstuhl Seminar 16431, "Computation over Compressed Structured Data"*, Saarbrücken, Germany.

- (2013) Co-organizer of the *Dagstuhl Seminar 13232, "Indexes and Computation over Compressed Structured Data"*, Saarbrücken, Germany.
- (2013) Attendance to the *Shonan Meeting 029, "Compact Data Structures for Big Data"*, Tokyo, Japan.
- (2012) Workshops Chair of SPIRE 2012, Cartagena de Indias, Colombia.
- (2012) Organization of the *7th Workshop on Compression, Text, and Algorithms*, satellite of SPIRE 2012, Cartagena, Colombia.
- (2011) Organization of the *6th Workshop on Compression, Text, and Algorithms*, satellite of SPIRE 2011, Pisa, Italy.
- (2010) Organization of the *5th Workshop on Compression, Text, and Algorithms*, satellite of SPIRE 2010, Los Cabos, Mexico.
- (2010) Attendance to the *Dagstuhl Seminar 10261, "Algorithm Engineering"*, Saarbrücken, Germany.
- (2008) Attendance to the *Dagstuhl Seminar 08261, "Structure-Based Compression of Complex Massive Data"*, Saarbrücken, Germany.
- (2007) Organization of the *2nd Workshop on Compression, Text, and Algorithms*, internal to the DCC, with 50% of international participation.
- (2005) Creation and organization of the *1st Workshop on Compression, Text, and Algorithms*, internal to the DCC, including international invited talks.

Refereeing and Program Committees

- (1996-) Program Committee member of the *7th, 9th, 10th, 13th–24th, 27th–29th, and 32nd–33rd International Symposium on String Processing and Information Retrieval (SPIRE)* 2000, 2002, 2003, 2006–2017, 2020–2022, and 2025; *International Database Engineering and Applications Symposium (IDEAS)* 2002 and 2003; *13th, 14th, 18th, 21st, 24th–26th, 28th, 30th, and 33rd–35th Combinatorial Pattern Matching (CPM)* 2002, 2003, 2007, 2010, 2013–2015, 2017, 2019, and 2022–2025; *26th, 27th, 31th, 34th–36th, and 38th-39th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval* 2002, 2003, 2007, 2010–2012, and 2014–2015; *3rd and 5th Conference of Fun With Algorithms* 2004 and 2010; *7th and 14th-17th Latin American Theoretical Informatics (LATIN)* 2006 and 2020-2026; *5th International Workshop on Efficient and Experimental Algorithms (WEA)* 2006; *15th, 23rd and 24th ACM Conference on Information and Knowledge Management (CIKM)* 2006, 2014 and 2015 (Seniors PC); *9th, 15th, 22nd and 29th Workshop on Algorithm Engineering and Experiments (ALENEX)* 2007, 2013, 2020 and 2027; *16th and 17th International World Wide Web Conference (WWW)*, Search Track, 2007 and 2008; *18th, 19th, 26th and 29th International Workshop on Combinatorial Algorithms (IWOCA)* 2007, 2008, 2015 and 2018; *24th IEEE International Conference on Data Engineering (ICDE)* 2008; *18th to 33rd Data Compression Conference (DCC)* 2008–2023; *2nd to 4th and 6th to 9th International Workshop on Similarity Search*

and Applications (SISAP) 2009–2011 and 2013–2016; *38th International Colloquium on Automata, Languages and Programming (ICALP), track A* 2011; *5th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)* 2011; *5th International Conference on Language and Automata Theory and Applications (LATA)* 2011; *17th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)* 2011; *20th, 26th, and 29th Annual European Symposium on Algorithms (ESA)* 2012 (track B), 2018 (track B), 2021 (track A), and 2026 (track E); *18th Annual International Computing and Combinatorics Conference (COCOON)* 2012; *31st International Symposium on Theoretical Aspects of Computer Science (STACS)* 2014; *14th Algorithms and Data Structures Symposium (WADS)* 2015; *15th Scandinavian Workshop on Algorithm Theory (SWAT)* 2016; *16th and 19th–21st International Symposium on Experimental Algorithms (SEA)* 2017 and 2020–2022; *12th International Conference and Workshops on Algorithms and Computation (WALCOM)* 2018; *23rd Workshop on Algorithms in Bioinformatics (WABI)* 2023; *35th ACM-SIAM Symposium on Discrete Algorithms (SODA)* 2024; *49th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR)* (Seniors PC Member) 2025; *SIAM Symposium on Simplicity in Algorithms (SOSA)* 2026; *46th Symposium on Principles of Database Systems (PODS)* 2027; and several other national and regional ones.

- (1998-) Reviewer for journals (around 15-20 per year): *Journal of Computational Biology (JCB)*, *Journal of Discrete Algorithms (JDA)*, *Journal of Automata, Complexity and Languages (JACL)*, *Information Processing Letters (IPL)*, *Journal of Algorithms*, *Acta Informatica*, *ACM Transactions on Database Systems (TODS)*, *ACM Transactions on Information Systems (TOIS)*, *ACM Computing Surveys*, *Discrete and Applied Mathematics (DAM)*, *Fundamenta Informaticae (FI)*, *Theoretical Computer Science (TCS)*, *Pattern Recognition Letters (PRL)*, *Bioinformatics*, *IEEE Transactions on Multimedia*, *Transactions on Data and Knowledge Engineering (TKDE)*, *Information Sciences*, *Information Retrieval*, *IEEE Systems, Man and Cybernetics*, *IEEE Transactions on Information Theory*, *Pattern Recognition (PR)*, *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, *International Journal on Foundations of Computer Science (IJFCS)*, *ACM Journal of Experimental Algorithmics (JEA)*, *Algorithmica*, *ACM Transactions on Algorithms (TALG)*, *Information Systems*, *The International Journal on Very Large Data Bases (VLDBJ)*, *Information and Computation (I&C)*, *Journal of Computer Systems Science & Engineering (JCSSE)*, *IEEE Computer Graphics and Applications (CGA)*, *Mathematics in Computer Science (MCA)*, *Algorithms*, *SIAM Journal on Computing*, *IET Image Processing*, *Journal of Computational Geometry (JoCG)*, *IEEE Transactions on Computational Biology and Bioinformatics (TBB)*, *Journal of the ACM (JACM)*, *Communications of the ACM (CACM)*, *Networks*, *Journal of Supercomputing*, *Knowledge and Information Systems (KAIS)*, and other minor ones.

Publications

A list of publications sorted by category and year follows (abbreviations of conferences at the end of the curriculum). To give an idea of their impact, I give some statistics valid at August 2022.

- In the *Web of Science Core Collection (WoS)*, there are over 4,400 citations to my WoS papers (excluding self-citations), and over 27,000 in *Google Scholar* (GS, `http://scholar.google.com`). My two most cited articles have 1,160 and 625 citations in WoS (3,453 and 1,757 in GS). My WoS papers received on average 30.9 citations from WoS.
- My h-number (maximum value such that a researcher has h papers cited at least h times) is 38 within WoS and 76 in GS. This puts me in position 574 worldwide in Computer Science, according to Guide2Research (`http://www.guide2research.com/scientists`), and first in Chile (`https://research.com/scientists-rankings/computer-science/cl`).
- I am among the 300 most prolific authors in DBLP (`dblp.org/statistics/prolific6.html`).

Books

1. Gonzalo Navarro. *Compact Data Structures*. Cambridge University Press, 2016. 570 pages. ISBN 978-1-107-15238-0. (See site in `www.dcc.uchile.cl/gnavarro/CDSbook`.) A Japanese version of this book appeared in 2024.
2. Gonzalo Navarro and Mathieu Raffinot. *Flexible Pattern Matching in Strings.* (Practical on-line search algorithms for texts and biological sequences.) Cambridge University Press, 2002. 280 pages. ISBN 0-521-81307-7. (See site and reviews at `www.dcc.uchile.cl/gnavarro/FPMbook`.) A Chinese version of this book appeared in 2007, as well as the softcover version of the original edition.

Conference Proceedings and Edited Books

1. Paolo Ferragina, Travis Gagie, and Gonzalo Navarro (editors). *The Expanding World of Compressed Data: A Festschrift for Giovanni Manzini's 60th Birthday*, 2025. Schloss Dagstuhl - Leibniz Center for Informatics, OASIcs Series vol. 131. ISBN 978-3-95977-390-4.
2. Gonzalo Navarro and Julian Shun (editors). *Proceedings of the 25th Symposium on Algorithm Engineering and Experiments (ALENEX)*, Florence, Italy, January 2023. SIAM.
3. Shiri Chechik, Gonzalo Navarro, Eva Rotenberg, and Grzegorz Herman (editors). *Proceedings of the 30th Annual European Symposium on Algorithms (ESA 2022)*, Postdam, Germany, September 2022. LIPIcs Series, volume 244.
4. Travis Gagie, Alistair Moffat, Gonzalo Navarro, and Ernesto Cuadros (editors). *Proceedings of the 25th International Symposium on String Processing and Information Retrieval (SPIRE 2018)*, Lima, Peru, October 2018. Springer-Verlag LNCS Series, volume 11147.
5. Gonzalo Navarro, David Sankoff, and Binhai Zhu (editors). *Proceedings of the 29th Annual Symposium on Combinatorial Pattern Matching (CPM 2018)*, Qingdao, China, July 2018. LIPIcs Series, volume 105.
6. Evangelos Kranakis, Gonzalo Navarro, and Edgar Chávez (editors). *Proceedings of the 12th Latin American Symposium on Theoretical Informatics (LATIN 2016)*, Ensenada, Mexico, April 2016. Springer-Verlag LNCS Series, volume 9644.

7. Gonzalo Navarro and Vladimir Pestov (editors). *Proceedings of the 5th International Conference on Similarity Search and Applications (SISAP 2012)*, Toronto, Canada, August 2012. Springer-Verlag LNCS Series, volume 7404.

8. Edgar Chávez and Gonzalo Navarro (editors). *Proceedings of the 1st International Workshop on Similarity Search and Applications (SISAP 2008)*, Cancún, Mexico, April 2008. IEEE Computer Society Press. ISBN 978-0-7695-3454-1.

9. Martin Farach-Colton, Jesus Favela, Genoveva Vargas, Vibhu Mittal, and Gonzalo Navarro (editors). *Proceedings of the 8th Mexican International Conference on Computer Science (ENC 2007)*, Morelia, Mexico, September 2007. IEEE Computer Society Press.

10. Gonzalo Navarro, Leopoldo Bertossi, and Yoshiharu Kohayakawa (editors). *Proceedings of the 4th IFIP International Conference on Theoretical Computer Science (TCS 2006)*, Santiago, Chile, August 2006. Springer.

11. Mariano Consens and Gonzalo Navarro (editors). *Proceedings of the 12th International Symposium on String Processing and Information Retrieval (SPIRE 2005)*, Buenos Aires, Argentina, November 2005. Springer Lecture Notes in Computer Science, volume 3772.

12. Gonzalo Navarro (editor). *Proceedings of the XXIV International Conference of the Chilean Computer Science Society (SCCC 2004)*, Arica, Chile, November 2004. IEEE Computer Society Press.

13. Gonzalo Navarro (editor). *Proceedings of the 8th International Symposium on String Processing and Information Retrieval (SPIRE 2001)*, Laguna de San Rafael, Chile, October 2001. IEEE Computer Society Press.

Chapters in Books with International Publisher

1. Diego Arroyuelo and Gonzalo Navarro. BWT Indexes for Optimal Joins in Graph Databases. In *The Expanding World of Compressed Data: A Festschrift for Giovanni Manzini's 60th Birthday*, article 14, 2025, Dagstuhl OASIcs Series vol. 131. ISBN 978-3-95977-390-4.

2. Jarno N. Alanko, Philip Bille, Inge Li Gortz, Gonzalo Navarro, and Simon J. Puglisi. Compact Data Structures for Collections of Sets. In *From Strings to Graphs, and Back Again: A Festschrift for Roberto Grossi's 60th Birthday*, article 6, 2025, Dagstuhl Series OASIcs vol. 132. ISBN 978-3-95977-391-1.

3. Nathaniel K. Brown, Travis Gagie, Giovanni Manzini, Gonzalo Navarro, and Marinella Sciortino. Faster Run-Length Compressed Suffix Arrays. In *From Strings to Graphs, and Back Again: A Festschrift for Roberto Grossi's 60th Birthday*, article 10, 2025, Dagstuhl Series OASIcs vol. 132. ISBN 978-3-95977-391-1.

4. Travis Gagie and Gonzalo Navarro. Compressed Indexes for Repetitive Textual Datasets. In *Encyclopedia of Big Data Technologies*, 2019, Springer. ISBN 978-3-319-77524-1.

5. Nieves Brisaboa, Ana Cerdeira, and Gonzalo Navarro, Managing Compressed Structured Text. In *Encyclopedia of Database Systems*, 2nd edition, 2018. Springer. ISBN 978-1-4614-8266-6.

6. Roberto Konow and Gonzalo Navarro. Text Index Compression. In *Encyclopedia of Database Systems*, 2nd edition, 2018. Springer. ISBN 978-1-4614-8266-6.

7. Gonzalo Navarro and Kunihiko Sadakane. Compressed Tree Representations. In M. Kao (editor), *Encyclopedia of Algorithms*, 2nd edition, pages 397–401, 2016. Springer. ISBN 978-3-642-27848-8.

8. Gonzalo Navarro. Approximate String Matching. In M. Kao (editor), *Encyclopedia of Algorithms*, 2nd edition, pages 102–106, 2016. Springer. ISBN 978-3-642-27848-8.

9. Gonzalo Navarro. Approximate Regular Expression Matching. In M. Kao (editor), *Encyclopedia of Algorithms*, 2nd edition, pages 99–102, 2016. Springer. ISBN 978-3-642-27848-8.

10. Veli Mäkinen and Gonzalo Navarro. Compressed Text Indexing. In M. Kao (editor), *Encyclopedia of Algorithms*, pages 394–397, 2016. Springer. ISBN 978-3-642-27848-8.

11. Ricardo Baeza-Yates, Gonzalo Navarro, and Nivio Ziviani. Documents: Languages and Properties. In Ricardo Baeza-Yates and Berthier Ribeiro-Neto, *Modern Information Retrieval* (2nd edition), chapter 6, pages 203–254. Addison-Wesley, 2011.

12. Ricardo Baeza-Yates and Gonzalo Navarro. Queries: Languages and Properties. In Ricardo Baeza-Yates and Berthier Ribeiro-Neto, *Modern Information Retrieval* (2nd edition), chapter 7, pages 255–280. Addison-Wesley, 2011.

13. Ricardo Baeza-Yates and Gonzalo Navarro. Indexing and Searching. In Ricardo Baeza-Yates and Berthier Ribeiro-Neto, *Modern Information Retrieval* (2nd edition), chapter 9, pages 337–398. Addison-Wesley, 2011.

14. Francisco Claude and Gonzalo Navarro. Extended Compact Web Graph Representations. In Tapio Elomaa, Heikki Mannila, and Pekka Orponen (editors) *Algorithms and Applications (Ukkonen Festschrift)*, pages 77–91, 2010. Springer, LNCS 6060.

15. Gonzalo Navarro. Text Index Compression. In Ling Liu and M. Tamer Özsu (editors) *Encyclopedia of Database Systems*, pages 3051–3055, 2009. Springer. ISBN 978-0-387-49616-0.

16. Gonzalo Navarro. Managing Compressed Structured Text. In Ling Liu and M. Tamer Özsu (editors) *Encyclopedia of Database Systems*, pages 1679–1684, 2009. Springer. ISBN 978-0-387-49616-0.

17. Gonzalo Navarro. Approximate Regular Expression Matching. In M. Kao (editor), *Encyclopedia of Algorithms*, pages 46–48, 2008. Springer. ISBN 978-0-387-30162-4.

18. Veli Mäkinen and Gonzalo Navarro. Compressed Text Indexing. In M. Kao (editor), *Encyclopedia of Algorithms*, pages 176–178, 2008. Springer. ISBN 978-0-387-30162-4.

19. Gonzalo Navarro. Sequential Approximate String Matching In M. Kao (editor), *Encyclopedia of Algorithms*, pages 818–820, 2008. Springer. ISBN 978-0-387-30162-4.

20. Gonzalo Navarro. Text Databases. In L. Rivero, J. Doorn, and V. Ferraggine (editors), *Encyclopedia of Database Technologies and Applications*, pages 688–694, 2005. Idea Group Inc., Pennsylvania, USA. ISBN 1-59140-560-2.

21. Edgar Chávez and Gonzalo Navarro. Metric Databases. In L. Rivero, J. Doorn, and V. Ferraggine (editors), *Encyclopedia of Database Technologies and Applications*, pages 367–372, 2005. Idea Group Inc., Pennsylvania, USA. ISBN 1-59140-560-2.

22. Ricardo Baeza-Yates and Gonzalo Navarro. Modeling Text Databases. In R. Baeza-Yates, J. Glaz, H. Gzyl, J. Hüsler, and J.L. Palacios (editors), *Recent Advances in Applied Probability*, pages 1–25, 2004. Springer.

23. Lucian Ilie, Gonzalo Navarro and Sheng Yu. On NFA Reductions. In J. Karhumaki, H. Maurer, G. Paun, G. Rozenberg (editors), *Theory is Forever (Salomaa Festschrift)*. Lecture Notes in Computer Science 3113, Springer-Verlag, Berlin, Heidelberg, 2004, pages 112–124.

24. Ricardo Baeza-Yates and Gonzalo Navarro. Text Searching: Theory and Practice. In C. Martin-Vide, V. Mitrana and G. Paun (editors), *Formal Languages and Applications*. Springer, Berlin, 2004, pages 565–597. ISBN 3-540-20907-7.

25. Ricardo Baeza-Yates, Benjamin Bustos, Edgar Chávez, Norma Herrera and Gonzalo Navarro. Clustering in Metric Spaces with Applications to Information Retrieval. In W. Wu, H. Xiong and S. Shekhar (editors), *Clustering and Information Retrieval*. Kluwer Academic Publishers, 2003, pages 1–34. ISBN 1-4020-7682-7.

26. Kimmo Fredriksson, Gonzalo Navarro and Esko Ukkonen. Faster than FFT: Rotation Invariant Combinatorial Template Matching. In S. Pandalai (editor), *Recent Research Developments in Pattern Recognition*, vol. II. Transworld Research Network, 2002, pages 75–112. ISBN 81-7895-050-2.

27. Ricardo Baeza-Yates, Alistair Moffat and Gonzalo Navarro. Searching Large Text Collections. In J. Abello, P. Pardalos and M. Resende (editors), *Handbook of Massive Data Sets*, Kluwer Academic Publishers, 2002, pages 195–244. ISBN 1-4020-0489-3.

28. Ricardo Baeza-Yates and Gonzalo Navarro. Query Languages. In *Modern Information Retrieval*, Addison-Wesley, 1999, pages 99–116. ISBN 0-201-39829-X.

29. Ricardo Baeza-Yates and Gonzalo Navarro. Indexing and Searching. In *Modern Information Retrieval*, Addison-Wesley, 1999, pages 191–227. ISBN 0-201-39829-X.

Journal Special Issue Editor

1. Virgilio Almeida, Gonzalo Navarro, and Sergio Rajsbaum, editors. Latin America Regional Special Section. *Communications of the ACM* 63(11):42–107, 2020.

2. Travis Gagie and Gonzalo Navarro, editores. Special Issue on Computation over Compressed Data. *Information and Computation* 273, 2020.

3. Travis Gagie and Gonzalo Navarro, editors. Special Issue on Compact Data Structures. *Algorithmica* 80(7), 2018.

4. Evangelos Kranakis and Gonzalo Navarro, editors. Special Issue on Selected Papers from *LATIN 2016*, *Algorithmica* 80(3), 2018.

5. Gonzalo Navarro and Vladimir Pestov, editors. Special Issue on Selected Papers from *SISAP 2012*. *Information Systems* 45:35–68, 2014.

6. Edgar Chávez and Gonzalo Navarro, editors. Letters on Similarity Search in Metric Spaces. *ACM SIGSPATIAL Special* 2(2):1–39, 2010.

7. Edgar Chávez and Gonzalo Navarro, editors. Special Issue on Selected Papers from *SISAP 2008*. *Journal of Discrete Algorithms* 7(1):1–77, 2009.

International Journals

1. Zsuzsanna Lipták, Francesco Masillo, and Gonzalo Navarro. A Textbook Solution for Dynamic Strings. *Theoretical Computer Science* 1066:article 115746, 2026.

2. Diego Arroyuelo, Fabrizio Barisione, Antonio Fariña, Adrián Gómez-Brandón, and Gonzalo Navarro. New Compressed Indices for Multijoins on Graph Databases. *Information Systems* 137:article 102647, 2026.

3. Diego Arroyuelo, Daniela Campos, Adrián Gómez-Brandón, Yuval Linker, Gonzalo Navarro, Carlos Rojas, and Domagoj Vrgoc. CompactLTJ: Space & Time Efficient Leapfrog Triejoin on Graph Databases. *The VLDB Journal* 34:article 67, 2025.

4. Dustin Cobas, Travis Gagie, and Gonzalo Navarro. Fast and Small Subsampled R-indexes. *ACM Transactions on Algorithms* 21(1):article 7, 2025.

5. Gonzalo Navarro. Practical Adaptive Dynamic Bitvectors. *Software Practice and Experience* 55(9):1539–1559, 2025.

6. Gonzalo Navarro. (Worst-Case) Optimal Adaptive Dynamic Bitvectors. *Theory of Computing Systems* 69:article 30, 2025.

7. Adrián Gómez-Brandón, Gonzalo Navarro, José Paramá, Nieves Brisaboa, and Travis Gagie. Stronger Compact Representations of Object Trajectories. *Geo-spatial Information Science* 28(2):685–721, 2025.

8. Gonzalo Navarro and Cristian Urbina. Repetitiveness Measures Based on String Morphisms. *Theoretical Computer Science* 1043:article 115259, 2025.

9. Gonzalo Navarro, Francisco Olivares, and Cristian Urbina. Generalized Straight-Line Programs. *Acta Informatica* 62:article 14, 2025.

10. Martita Muñoz, José Fuentes-Sepúlveda, Cecilia Hernández, Gonzalo Navarro, Diego Seco, and Fernando Silva-Coira. Clustering-based Compression for Raster Time Series. *The Computer Journal* 68(1):32–46, 2025.

11. José Fuentes-Sepúlveda, Diego Gatica, Gonzalo Navarro, M. Andrea Rodríguez, and Diego Seco. Space-Efficient Data Structures for the Inference of Subsumption and Disjointness Relations. *Software Practice and Experience* 55(2):195–219, 2025.

12. Gonzalo Navarro. Computing MEMs and Relatives on Repetitive Text Collections. *ACM Transactions on Algorithms* 21(1):article 12, 2025.

13. Diego Arroyuelo, Adrián Gómez-Brandón, and Gonzalo Navarro. Evaluating Regular Path Queries on Compressed Adjacency Matrices. *The VLDB Journal* 34:article 2, 2025.

14. Luiz Fernando Afra Brito, Marcelo Keese Albertini, Bruno Augusto Nassif Traven colo, and Gonzalo Navarro. Dynamic Compact Data Structure for Temporal Reachability with Unsorted Contact Insertions. *The Computer Journal* 67(10):2984–2994, 2024.

15. Diego Arroyuelo, Aidan Hogan, Gonzalo Navarro, Juan Reutter, and Domagoj Vrgoc. Tackling Challenges in Implementing Large-Scale Graph Databases. *Communications of the ACM* 67(8):40–44, 2024.

16. Diego Arroyuelo, Adrián Gómez-Brandón, Aidan Hogan, Gonzalo Navarro, Juan Reutter, Javiel Rojas-Ledesma, and Adrián Soto. The Ring: Worst-Case Optimal Joins in Graph Databases using (Almost) No Extra Space. *ACM Transactions on Database Systems* 49(2):article 5, 2024.

17. Tomasz Kociumaka, Gonzalo Navarro, and Francisco Olivares. Near-Optimal Search Time in δ-Optimal Space, and Vice Versa. *Algorithmica* 86:1031–1056, 2024.

18. Diego Arroyuelo, Adrián Gómez-Brandón, Aidan Hogan, Gonzalo Navarro, and Javiel Rojas-Ledesma. Optimizing RPQs over a Compact Graph Representation. *The VLDB Journal* 33:349–374, 2024.

19. Nieves Brisaboa, Travis Gagie, Adrián Gómez-Brandón, and Gonzalo Navarro. Two-Dimensional Block Trees. *The Computer Journal* 67(1):391–406, 2024.

20. Domagoj Vrgoc, Carlos Rojas, Renzo Angles, Marcelo Arenas, Diego Arroyuelo, Carlos Buil-Aranda, Aidan Hogan, Gonzalo Navarro, Cristian Riveros, and Juan Romero. MillenniumDB: An Open-Source Graph Database System. *Data Intelligence* 5(3):560–610, 2023.

21. Diego Díaz-Domínguez and Gonzalo Navarro. Efficient Construction of the BWT for Repetitive Text using String Compression. *Information and Computation* 294:article 105088, 2023.

22. José Fuentes-Sepúlveda, Diego Gatica, Gonzalo Navarro, Andrea Rodríguez, and Diego Seco. Compact Representations of Spatial Hierarchical Structures with Support for Topological Queries. *Information and Computation* 292:article 105029, 2023.

23. Tomasz Kociumaka, Gonzalo Navarro, and Nicola Prezza. Toward a Definitive Compressibility Measure for Repetitive Sequences. *IEEE Transactions on Information Theory* 69(4):2074–2092, 2023.

24. Nieves Brisaboa, Ana Cerdeira-Pena, Guillermo de Bernardo, Antonio Fariña, and Gonzalo Navarro. Space/time-Efficient RDF Stores based on Circular Suffix Sorting. *The Journal of Supercomputing* 79:5643–5683, 2023.

25. Guillermo de Bernardo, Travis Gagie, Susana Ladra, Gonzalo Navarro, and Diego Seco. Faster Compressed Quadtrees. *Journal of Computer and System Sciences* 131:86–104, 2023.

26. José Fuentes-Sepúlveda, Gonzalo Navarro, and Diego Seco. Navigating Planar Topologies in Near-Optimal Space and Time. *Computational Geometry Theory and Applications* 109:101922, 2023.

27. Gonzalo Navarro. The Compression Power of the BWT. *Communications of the ACM* 65(6):90, 2022.

28. Daniel Nunes, Felipe Louza, Simon Gog, Mauricio Ayala-Rincón, and Gonzalo Navarro. Grammar Compression by Induced Suffix Sorting. *ACM Journal of Experimental Algorithmics* 27:article 1.1, 2022.

29. Karen Y. Oróstica, Juan Saez Hidalgo, Pamela R. de Santiago, Solange Rivas, Sebastian Contreras, Gonzalo Navarro, Juan A. Asenjo, Álvaro Olivera-Nappa, and Ricardo Armisen. Total Mutational Load and Clinical Features as Predictors of the Metastatic Status in Lung Adenocarcinoma and Squamous Cell Carcinoma Patients. *Journal of Translational Medicine* 20:373, 2022.

30. Manuel Cáceres and Gonzalo Navarro. Faster Repetition-Aware Compressed Suffix Trees based on Block Trees. *Information and Computation* 285B, article 104749, 2022.

31. Miguel E. Coimbra, Joana Hrotkó, Alexandre P. Francisco, Luís M. S. Russo, Guillermo de Bernardo, Susana Ladra, and Gonzalo Navarro. A Practical Succinct Dynamic Graph Representation. *Information and Computation* 285B, article 104862, 2022.

32. Diego Arroyuelo, Gonzalo Navarro, Juan L. Reutter, and Javiel Rojas-Ledesma. Optimal Joins using Compressed Quadtrees. *ACM Transactions on Database Systems* 47(2):article 8, 2022.

33. Alexandre P. Francisco, Travis Gagie, Dominik Köppl, Susana Ladra, and Gonzalo Navarro. Graph Compression for Adjacency-Matrix Multiplication. *SN Computer Science* 3:article 193, 2022.

34. Antonio Fariña, Travis Gagie, Szymon Grabowski, Giovanni Manzini, Gonzalo Navarro, and Alberto Ordóñez. Efficient and Compact Representations of Some Non-Canonical Prefix-Free Codes. *Theoretical Computer Science* 907:11–25, 2022.

35. Diego Arroyuelo, Rodrigo Cánovas, Johannes Fischer, Dominik Köppl, Marvin Löbel, Gonzalo Navarro, and Rajeev Raman. Engineering Practical Lempel-Ziv Tries. *ACM Journal of Experimental Algorithmics*, 26(1):article 14, 2021.

36. Nieves Brisaboa, Travis Gagie, Adrián Gómez-Brandón, Gonzalo Navarro, and José Paramá. An Index for Moving Objects with Constant-Time Access to their Compressed Trajectories. *International Journal of Geographical Information Science* 35(7):1392–1424, 2021.

37. Djamal Belazzougui, Travis Gagie, Ian Munro, Gonzalo Navarro, and Yakov Nekrich. Range Majorities and Minorities in Arrays. *Algorithmica* 83:1707–1733, 2021.

38. Gonzalo Navarro. Indexing Highly Repetitive String Collections, Part I: Repetitiveness Measures. *ACM Computing Surveys* 54(2):article 29, 2021.

39. Gonzalo Navarro. Indexing Highly Repetitive String Collections, Part II: Compressed Indexes. *ACM Computing Surveys* 54(2):article 26, 2021.

40. Gonzalo Navarro, Carlos Ochoa, and Nicola Prezza. On the Approximation Ratio of Ordered Parsings. IEEE Transactions on Information Theory 67(2):1008–1026, 2021.

41. Francisco Claude, Gonzalo Navarro, and Alejandro Pacheco. Grammar-Compressed Indexes with Logarithmic Search Time. *Journal of Computer and System Sciences* 118:53–74, 2021.

42. Djamal Belazzougui, Manuel Cáceres, Travis Gagie, Paweł Gawrychowski, Juha Kärkkäinen, Gonzalo Navarro, Alberto Ordóñez, Simon J. Puglisi, and Yasuo Tabei. Block Trees. *Journal of Computer and System Sciences* 117:1–22, 2021.

43. Felipe Glaria, Cecilia Hernandez, Susana Ladra, Gonzalo Navarro, and Lilian Salinas. Compact Structure for Sparse Undirected Graphs based on a Clique Graph Partition. *Information Sciences* 544:485–499, 2021.

44. Anders Roy Christiansen, Mikko Berggren Ettienne, Tomasz Kociumaka, Gonzalo Navarro, and Nicola Prezza. Optimal-Time Dictionary-Compressed Indexes. *ACM Transactions on Algorithms* 17(1):article 8, 2020.

45. Daniel Valenzuela, Dmitry Kosolobov, Gonzalo Navarro, and Simon J. Puglisi. Lempel-Ziv-like Parsing in Small Space. Algorithmica 82(11):3195–3215, 2020.

46. Gonzalo Navarro and Javiel Rojas. Predecessor Search. *ACM Computing Surveys* 53(5):article 105, 2020.

47. Travis Gagie, Meng He, Gonzalo Navarro, and Carlos Ochoa. Tree Path Majority Data Structures. *Theoretical Computer Science* 833:107–119, 2020.

48. Travis Gagie, Meng He, and Gonzalo Navarro. Compressed Dynamic Range Majority and Minority Data Structures. *Algorithmica* 82(7):2063–2086, 2020.

49. Leo Ferres, José Fuentes-Sepúlveda, Travis Gagie, Meng He, and Gonzalo Navarro. Fast and Compact Planar Embeddings. *Computational Geometry Theory and Applications* 89, article 101630, 2020.

50. Ian Munro, Gonzalo Navarro, Rahul Shah, and Sharma Thankachan. Ranked Document Selection. *Theoretical Computer Science* 812:149–159, 2020.

51. José Fuentes-Sepúlveda, Gonzalo Navarro, and Yakov Nekrich. Parallel Computation of the Burrows Wheeler Transform in Compact Space. *Theoretical Computer Science* 812:123–136, 2020.

52. Ian Munro, Gonzalo Navarro, and Yakov Nekrich. Fast Compressed Self-Indexes with Deterministic Linear-Time Construction. *Algorithmica* 82(2):316–337, 2020.

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138. Márcio Araújo, Gonzalo Navarro and Nivio Ziviani. Large Text Searching Allowing Errors. *Proc. WSP'97*, Carleton University Press, pages 2–20. This work won the prize to the best software tool in SBES'97 (Brazilian Symposium of Software Engineering) and the 4th prize in the IV CLEI-UNESCO Contest of Latin Americal MSc. Thesis.

139. Edleno de Moura, Gonzalo Navarro and Nivio Ziviani. Indexing Compressed Text. *Proc. WSP'97*, Carleton University Press, pages 95–111.

140. João Paulo Kitajima, Gonzalo Navarro, Berthier Ribeiro and Nivio Ziviani. Distributed Generation of Suffix Arrays: a Quicksort-Based Approach. *Proc. WSP'97*, Carleton University Press, pages 53–69.

141. Gonzalo Navarro. An Optimal Index for PAT Arrays. *Proc. WSP'96*, Carleton University Press, pages 214–227.

142. Ricardo Baeza-Yates and Gonzalo Navarro. A Fast Heuristic for Approximate String Matching. *Proc. WSP'96*, Carleton University Press, pages 47–63.

143. Ricardo Baeza-Yates, Ricard Gavaldá and Gonzalo Navarro. Bounding the Expected Length of Longest Common Subsequences and Forests. Invited paper. *Proc. WSP'96*, Carleton University Press, pages 1–15.

144. Gonzalo Navarro, Eduardo Barbosa, Chris Perleberg, Ricardo Baeza-Yates and Nivio Ziviani. Optimized Indirect Binary Search and Text Retrieval (Preliminary Version). *Proc. WSP'95*, pages 53–67.

145. Gonzalo Navarro and Jorge Sanz. MediaCore: a Multimedia Interface Composition Toolkit. *Proc. SCCC'94* pages 191–201.

Theses

1. Gonzalo Navarro. Approximate Text Searching. PhD thesis, Technical Report TR/DCC-98-14, DCC, Dec 1998. Abstract in *European Annals of Theoretical Computer Science (EATCS) Bulletin* 67, pages 278–282, Feb 1999.

2. Gonzalo Navarro. A Language for Queries on Structure and Content of Textual Databases. MSc. thesis, DCC, Apr 1995. Spanish abstract in R. Cardoso (editor), *Proc. CLEI'96*, volume 2, pages 1125-1144. First prize at III CLEI-UNESCO Contest of Latin American MSc. Computer Science Theses.

3. Gonzalo Navarro. MediaCore: a Multimedia Interface Composition Toolkit. Licenciate thesis, UNLP, 1993.

4. Gonzalo Navarro. Un Estudio sobre Estructuras de Control. Licenciate thesis, ESLAI, 1992. In Spanish.

Extension Activities and Academic Administration

Professional Societies

- Member of ACM.
- Member of IEEE Computer Society (until 2011).
- Member of the Chilean Computer Science Society (SCCC).

Project Coordinations and Academic Consulting

- (2024-2025) Evaluator of applications for Fondecyt, Chile.
- (2024) Evaluator of applications for the European Science Foundation.
- (2023-2026) Evaluator of applications to the 10th–12th Heidelberg Laureate Forum (ACM).
- (2020-2023) Project evaluator for the Natural Sciences and Engineering Research Council of Canada (NSERC).
- (2019) External evaluator of PEDECIBA researchers, Uruguay.
- (2019) External evaluator for the National Science Center, Poland.
- (2018) Member of a promotion committee at the Charles University of Prague, Czech Republic.
- (2017-2018) External evaluator of promotions at Universidad Técnica Federico Santa María, Chile.
- (2017) Member of a promotion committee at the University of Haifa, Israel.
- (2015-2020) Member of the promotion committee at the Facultad de Ingeniería y Ciencias, Universidad Diego Portales.
- (2014) External project evaluator for the Danish Council for Independent Research.
- (2013) External evaluator of researchers for the National Research Foundation of South Africa.
- (2012-2015) External project evaluator for the German-Israeli Foundation for Scientific Research and Development and for the Israeli Science Foundation.
- (2011) External project evaluator for Innova Chile – CORFO.
- (2010-2012) Member of the High Council of Scientific and Technological Development of Fondecyt Program, Conicyt, Chile.
- (2008-) External project evaluator for the Czech Science Fundation and the Academy of Sciences of the Czech Republic.
- (2006) Evaluator of projects for the Fund for Academic Innovation (MECESUP, Ministry of Education), Chile.
- (2006-2007) External project evaluator for City University of Hong Kong, and for the Research Grants Council of Hong Kong, China.
- (2005-2006) External project evaluator for CONICYT (Chilean national funding agency).
- (2004-2008) Alternate director of Millennium Nucleus *Center for Web Research*, Director since 2006. Project P01-029-F (2004) and P04-067-F (2005-2007), Mideplan, Chile. See `http://www.cwr.cl`.

- (2004-2006) Visiting Professor at Universidad Nacional de San Luis, Argentina.
- (2004-2016) Evaluator for Argentinian scientific funding organisms: FONCyT (Fund for Scientific and Technological Research, Ministry of Education, Science and Technology), and National Agency for Science and Technology.
- (2003) Evaluator of projects for the Competitive Fund of the Program for Improvement of Quality and Equity of High Education (MECESUP, Ministry of Education), Chile.
- (2002-2005) Coordinator of the Research Project VII.19 "RIBIDI: Information Retrieval and Digital Libraries", of the CYTED Program (Ibero America).
- (2001-2004) Member of Study Group Engineering 1, to advise CONICYT (Chilen national funding agency) to evaluate projects and reports in the area.

Administration

All within the Department of Computer Science, or the Faculty of Physical and Mathematical Sciences, University of Chile.

- (2024-) Member of the Faculty Local Institutional Autoevaluation Committee.
- (2016-2017,2023-2024) Head of the Department Committee for the Accreditation of the PhD in Computer Science program.
- (2016-) Head of the PhD Program.
- (2014-2017) Member of the Faculty Academic Appointments Committee.
- (2014-2016) Head of Departamental Evaluation Committee.
- (2014) Head of the Department Committee for the Accreditation of the Engineering in Computer Science career.
- (2011-2014) Member of the Faculty Academic Evaluation Committee.
- (2009-) Research Coordinator.
- (2009-) Member of the Department Council.
- (2009-) Member of the Postgraduate Committee.
- (2009-2011) Member of the Faculty Appeals Committee.
- (2009-2010) Member of the Departamental Evaluation Committee.
- (2007-2008) Head of Department.
- (2005-2006) Head of Departamental Evaluation Committee.
- (2005-2006) Alternate Head of Department.
- (2004) Member of Departamental Evaluation Committee.

- (2003-2006) Teaching Coordinator.
- (2003-2006) Member of Postgraduate Committee.
- (2002-2006) Member of Departamental Council.
- (2000-2006) Member of Teaching Committee.
- (1999-2002) Graduation Coordinator.
- (1995-1999) Library Coordinator.

Divulgation

- Interview "First graduate in the PhD in Computer Science program", in magazine *Bits de Ciencia*, number 27, pages 79–83, 2025. https://www.dcc.uchile.cl/difusion/revista/27
- Interview in *El Espacio de la Escritura*, podcast of Urdimbre, "The research projects as live processes". November 2024. https://www.youtube.com/watch?v=RnAlh90n0d0&ab_channel=FundamentosdelosDatos
- "The PhD in Computer Science at the University of Chile", magazine *Bits de Ciencia*, number 25, pages 56–58, second semester 2023. https://www.dcc.uchile.cl/difusion/revista/25
- Interviewed as "Featured ACM Member" in *People of the ACM*, August 22, 2023. https://www.acm.org/articles/people-of-acm/2023/gonzalo-navarro/.
- Interviewed in the program "Explorers from the Atom to the Cosmos", transmitted by channel *24 Horas* since November 2, 2022.
- "Alfred V. Aho and Jeffrey D. Ullman, ACM Turing Award 2020", magazine *Bits de Ciencia*, number 22, pages 9–14, first semester 2022. https://www.dcc.uchile.cl/difusion/revista/22
- "Compact data structures: compress (well) and conquer", magazine *Palabra Pública*, november 9, 2021, http://palabrapublica.uchile.cl/2021/11/09/.
- "The scientific conferences in the pandemia age", magazine *Bits de Ciencia*, number 20, pages 44–47, second semester of 2020. https://www.dcc.uchile.cl/difusion/revista/20
- Co-editor of the Latin America Regional Special Section, in the Communications of the ACM, CACM 63(11), 2020.
- Interview, as a recipient of a Google Award Latin America, in Radio Pauta, 100.5 FM, november 26, 2019, 17:00 to 17:30. Together with Bárbara Poblete.
- "Bioinformatics: The threat and the promise of the data deluge", divulgation talk to the students of last year of high school of Liceo 1, September 2016, and to the students of 7th grade of basic school to last year of high school of Colegio Montague de Peñalolén, April 2017..
- "The data deluge and repetitivity: Our best enemy", magazine *Bits de Ciencia*, number 13, pages 8–15, first semester of 2016. https://www.dcc.uchile.cl/difusion/revista/13

- "Bioinformatics: The threat and the promise of the data deluge", divulgation conference in the Chilean Academy of Science, August 2016.
- One-minute spots about research on bioinformatics, appeared in the information TV channel "TVN 24 Horas" during August 2016.
- "Information Theory", magazine *Bits of Science*, number 9, pages 28–33, November 2013. https://www.dcc.uchile.cl/difusion/revista/9
- Interviewed in magazine *Bits of Science*, number 5, pages 40–42 and 78–81, April 2011. https://www.dcc.uchile.cl/difusion/revista/5
- "Compact Data Structures", magazine *Bits of Science*, number 3, pages 2–8, November 2009. https://www.dcc.uchile.cl/difusion/revista/3
- Diverse divulgation articles in column *Bits, Science, and Society*, of Terra.cl, since July 2009.
- Interview to Ricardo Baeza-Yates, magazine *Bits of Science*, number 2, pages 30–31, April 2009. https://www.dcc.uchile.cl/difusion/revista/2
- Co-creator and member of the Editorial Board of the magazine *Bits of Science*, published by the DCC. Participation with an article in the first issue, August 2008.
- "Searching the Web", chapter 4 (pages 51–62) in the book *How the Web Works*, published by the Center for Web Research, Santiago, Chile, 2008. Also, participation as a panelist, as director of the Center and the DCC, in the public presentation of the book, University of Chile, August 2008. The event was mentioned in several press releases and radio stations.
- Interview, as Head of Department, in *El Mercurio* (one of the main Chilean newspapers), March 24, 2008, page A14 (science and technology), about the position of the Department on the OOXML standard proposal.
- Opinion article "Data Standards and OOXML: today's vote", as Head of the DCC and on its behalf, in *La Nación* (nationwide newspaper), March 19, 2008, page 13.
- Interview, as Head of the Center for Web Research, in Radio University of Chile, 102.5 FM, March 18, 2008, 7:30 to 8:00 PM. With Claudio Gutierrez.
- Interview, with other 3 Faculty professors with a high number of ISI publications, in *Revista FCFM* (magazine of the Faculty of Physical and Mathematical Sciences, University of Chile), number 41, Summer 2008, "Passion for Research", pages 22–25.
- Short interview, as Head of Department, in La Tercera (one of the main Chilean newspapers), January 12, 2007, page 7 of section "University Life". In Spanish.
- Interview, as Head of the Center for Web Research, in Radio University of Chile, 102.5 FM, November 15, 2006, 7:00 to 7:30 PM.
- Interview, as Head of the Center for Web Research, in *Bioplanet* magazine (Chile), year 6, number 42, September 2006. "Center for Web Research: The Science of Finding it All". pages 15–17. With Ricardo Baeza-Yates. In Spanish.

- Interview, as Teaching Coordinator of the Department, in the newspaper *Publimetro* (Chile), August 17 2006, section Admission 2006, page 6. In Spanish.

Distinctions

- (2009) Included in the book "70 Stories of success in Innovation and Science", published by the Ministry of Economy and several government research funding agencies, Chile, 2009. Chapter "Explorers of the virtual universe", pages 62–63.

Teaching

Theses Advisor

- Currently advising 3 PhD students, 4 MSc students, and 5 undergrad students at Universidad de Chile.
- (1997-) Advisor of 10 postdocs, 23 PhDs (17 co-advised), 21 MScs (9 co-advised), and 34 Engineers (15 co-advised), at Universidad de Chile, Universidad de A Coruña (Spain), Universidad de Valladolid (Spain), Universidade Federal de Minas Gerais (Belo Horizonte, Brazil), Universidade de Brasília (Brasil), Universidad de La Habana (Cuba), Universidad de San Luis (Argentina), INAOEP (Mexico), and Universidad de Concepción (Chile).
- (1999-) External referee of 22 PhD. dissertations: Center for Research in Mathematics (1999, CIMAT, Guanajuato, Mexico), Polytechnic University of Catalunya (2003, Barcelona, Spain), Melbourne University (2003 and 2008, Australia), Universität Konstanz (2006, Germany), INRIA (2006, Sophia Antipolis, Francia), Universidade Técnica de Lisboa (2007, Portugal), Charles University in Prague (2010, Czech Republic), Universitá di Milani (2011, Italy), Universitá di Pisa (2012, 2017, and 2021, Italy), Universidade da Coruña (2014, Spain), Universidad de Concepción (2015 and 2016, Chile), University of Helsinki (2015, Finlandia), Universidad de Buenos Aires (2016, Argentina), Universitá di Udine (2017, Italy), PEDECIBA, Universidad de la República (2021, Uruguay), Universidad Católica de Chile (2023 and 2025, Chile), Universität Wien (2025, Austria), and Universität Postdam (2025, Germany). External referee of 5 MSc. theses, at RMIT (Australia), PEDECIBA (Uruguay), Universidad Católica de Chile (Chile), and Universidade Federal de Uberlandia (Brazil). Backup referee of two PhD. dissertations at RMIT (Australia). Participation in 7 PhD and 12 MSc committees at DCC. External referee for a habilitation process at Charles University Prague (2007, Czech Republic) and at Masaryk University (2011, Czech Republic).
- (2005-) Organization of *Algorithmic Wednesdays!*, a periodic meeting with my supervised students to discuss ideas related with their research subjects. It is also useful to discuss ideas related to their research, to let them practice their presentations to conferences, to have invited talks, and so on. The meetings are open and occasionally we have other atendees. The group of students under my supervision is also called *Algorithmic Wednesdays Group*. See `http://www.dcc.uchile.cl/gnavarro/algoritmos` (in Spanish).

Some of the MScs are now young professors at the University of Chile (Benjamin Bustos, PhD in Konstanz, Germany) and University of Magallanes (Chile, Roberto Uribe). The same

happens with most of the PhDs: Universidad de A Coruña (Spain, Antonio Fariña, Susana Ladra and Ana Cerdeira), Universidad de Valladolid (Spain, Joaquín Adiego), Universidade Federal do Amazonas (Brazil, Edleno de Moura), Universidad del Bío-Bío (Gilberto Gutiérrez), Universidad de Concepción (Cecilia Hernández), Universidad Michoacana (Mexico, Karina Figueroa), Universidad Técnica Federico Santa Mar´ía (Diego Arroyuelo), Universidad Andrés Bello (Carlos Gómez), Universidad de Talca (Rodrigo Paredes), and Universidad Nacional de San Luis (Argentina, Nora Reyes).

Distinctions

- (2013-2021) Advisor (and coauthor) of five students that obtained the best student paper award in conferences: Cecilia Hernández (SPIRE 2012), Roberto Konow (DCC 2013), Héctor Ferrada (DCC 2016), Adrián Gómez-Brandón (DCC 2018), and Cristian Urbina (SPIRE 2021).
- (2016-2017) Google Research Awards to fund the MSc theses of Joshimar Córdova (2016) and Patricio Huepe (2017), and the PhD thesis of Dustin Cobas (2019).
- (2008) Best teaching award at the DCC.
- (2003-2012) Advisor of six MSc. theses awarded in the CLEI-UNESCO Contest of Latin American Computer Science MSc. Theses: Rodrigo Paredes (2nd prize, 2003), Nora Reyes (5th prize, 2003), Benjamin Bustos (7th prize, 2003), Roberto Uribe (2nd prize, 2006), Sebastián Kreft (1st prize, 2011), and Manuel Cáceres (3rd prize, 2020). Also, advisor of the PhD thesis that obtained the first prize in the Doctoral Consortium of the Mexican Computing Meeting (ENC) 2006 (Karina Figueroa), and the one that obtained the 1st Prize to the Best Doctoral Thesis in the field of Information Retrieval, awarded by the Spanish Society of Information Retrieval, SERI (Susana Ladra).

Teaching Material

- (2018) Textbook (150 pages) for the course Design and Analysis of Algorithms, Department of Computer Science, University of Chile (DCC). See `http://www.dcc.uchile.cl/gnavarro/apunte2.html` (in Spanish).
- (2006) Textbook (175 pages) for the course Fundamentals of Computer Science, Department of Computer Science, University of Chile (DCC). See `http://www.dcc.uchile.cl/gnavarro/apunte.html` (in Spanish).
- (2000) Notes for the course Information Retrieval, DCC.
- (1996) Exercise Guide for the course Fundamentals of Computer Science, DCC.

Created or Reformulated Courses

- (2007) Creation of the course "Compact Data Structures", for the PhD program in Computer Science, DCC.

- (2003-2006) Head of the process for redesigning the undergraduate career in Computer Science, Dept. of Computer Science, University of Chile (DCC), as part of the global reform of the careers in the School of Engineering.
- (2005) Adaptation of the course Design and Analysis of Algorithms, of the undergraduate and MSc career, DCC.
- (2002) Complete redesign, with Claudio Gutiérrez, of the course Databases, of the undergraduate and MSc career, DCC.
- (2001) Creation of the courses "Fast and Flexible Text Searching" and "Searching in Metric Spaces", for the PhD program in Computer Science, DCC.
- (1999) Restructuring of the course Fundamentals of Computer Science, of the undergraduate and MSc career, DCC.
- (1996-1998) Redesign of the homeworks of the course Design and Analysis of Algorithms, DCC. The homeworks became all different and the students were guided to publish the best ones in the national Computer Science conference.
- (1993) Cooperation in the redesign of the course Data Structures, of the undergraduate Computer Science career, Universidad Nacional de La Plata, Argentina.

Regular Courses

- (2002-2004) Professor of "Databases", for undergraduates and MSc. students at Dept. of Computer Science, Universidad de Chile (DCC).
- (2001-2005) Professor of PhD course "Fast and Flexible Text Searching", at the Dept. of Computer Science, Universidad de Chile (DCC).
- (2001-2003) Professor of PhD course "Searching in metric spaces", at the Dept. of Computer Science, Universidad de Chile (DCC).
- (2000-2001) Professor of "Information Retrieval", for undergraduates and MSc. students at Dept. of Computer Science, Universidad de Chile (DCC).
- (2000-2001) Professor of "Algorithms and Data Structures", for undergraduates and MSc. students at Dept. of Computer Science, Universidad de Chile (DCC).
- (1996-1998,2005-) Professor of "Design and Analysis of Algorithms", for undergraduates and MSc. students at DCC.
- (1996-) Professor of "Fundamentals of Computer Science", for undergraduates and MSc. students at DCC.
- (1995) Professor of "Computer Science I", undergraduate course at DCC.
- (1988-95) Teaching assistant in several undergraduate courses: "Algorithms" (1994-95, DCC), "Compilers" (1994, DCC), "Data Structures" (1993, Universidad Nacional de La Plata, Argentina), "Algebra I" (1988, UNLP).

Intensive Courses

- (2024) Minicourse "Indexing with the BWT", at the University of Verona, Italy.
- (2015) Tutorial "Compact Data Structures", in the *X Summer School on Discrete Mathematics*, Valparaíso, Chile.
- (2009) Talk "Compressed Self-Indexes for Text", at JCC 2009 as part of the Workshop "Emergent Topics on the Web" organized by Yahoo! Research Chile.
- (2008) Talk "Sequential Text Searching" given at Universidad Nacional de San Luis, Argentina, and Universidad de Pinar del Río, Cuba, as a part of the course "Algorithmic Foundations of the Web", funded by AECI.
- (2008) Ibero American head of the project *Education for the New Millennium: Algorithmic Foundations of the Net*, funded by the Spanish Agency for International Cooperation (AECI), with the goal of giving intensive courses in Latin American universities.
- (2007) Intensive course of 15 hours about "Compact data structures", given at Universidad Nacional de San Luis, Argentina.
- (2007) Tutorial "Compact Data Structures", given at the Mexican Computing Meeting (ENC), 8 hours.
- (2007) Talk "Compression of Web Graphs", at DCC as part of the Workshop "Emergent Topics on the Web" organized by the Center for Web Research.
- (2006) Talk "New Techniques for Text Compression", at DCC as part of the Workshop "Emergent Topics on the Web" organized by the Center for Web Research.
- (2005) Talk "Efficient Searchable Natural Language Adaptive Compression", at DCC as part of the "Workshop on Web Information Retrieval" organized by the Center for Web Research.
- (2005) Talk "Implementation of Search Engines I: Indexes and Compression", at DCC as part of the Workshop "Emergent Topics on the Web" organized by the Center for Web Research.
- (2000) Intensive course of 15 hours about "Information retrieval: algorithms, data structures and applications to the Web", given at the School of Informatics Sciences (ECI), Buenos Aires, Argentina.
- (1998) Intensive course of 45 hours, "Advanced Algorithms" given for the MSc. in Computer Science at Universidad Mayor de San Simón (UMSS, Cochabamba, Bolivia).
- (1997) Talk "Indices for Approximate Text Searching" given at *VI Ibero American Informatics Week*, Santa Cruz de la Sierra, Bolivia, as a part of an Information Retrieval course.
- (1997) Talk "Text Searching" given at *VI Ibero American Informatics Week*, Santa Cruz de la Sierra, Bolivia, as a part of an Information Retrieval course.
- (1983-85) Courses of informatics in several private institutions.

Developments

- (2013) Data cleaning services for the elections roll, for the Civil and Identifications Registry (Chile), processing data from termination of convictions and death records.
- (2007) Development, with Karina Figueroa and Edgar Chávez (Universidad Michoacana, Mexico), of an open-source library for metric space searching, associated to *SISAP* conference. It can be downloaded from `http://www.sisap.org`.
- (2006) Development, with Paolo Ferragina (Università di Pisa, Italy) and students, of the *PizzaChili* site (`http://pizzachili.dcc.uchile.cl`, `http://pizzachili.di.unipi.it`), with implementations and testbeds for compressed text indexes.
- (2005 and 2007) Approximate search services to match Mideplan (Chile) addresses against clients of electric companies, country-wide.
- (2005) Approximate search services to match publications using paper titles and institutions, for *Conicyt* (Chile).
- (2004) Development of an approximate multipattern string search system, used by the company *WordTracker* (UK), `www.wordtracker.com`.
- (2003-2004) Development of an approximate search system over structured text for *Reuna* (Chile), used for *Buscademia* (`http://www.uportal.cl/buscademia`), a site giving information on University careers. Project leader.
- (2002) Approximate search services to match company names, for *DICOM* (Chile).
- (2001-2002) Development of formulas and programs to estimate the number of cashier servers needed to guarantee maximum waiting times for *Banco del Estado* (Chile).
- (2000-) Development and maintenance of an approximate multipattern name search system, used by the company *Matchsimile* (Brazil), `www.matchsimile.com`.
- (2000) Development, as part of my postdoctoral stay, of an online pattern matching software (*nrgrep*). The software is free and can be accessed from my Web page. It has been accepted by the Free Software Foundation to make up an important part of the new release of *Gnu Grep*.
- (1999) Development, as part of my postdoctoral stay, of an online algorithm for searching PROSITE patterns in proteins. This algorithm has been patented in France by the CNRS in August 2000 under the number B00011093.
- (1995-1998) Development of diverse indexing systems for plain and structured text databases, using inverted indexes. These systems have been used by several companies such as *Hypernet* (Chile), *Mercantil* (Chile), *TodoBR* (Brazil) and *TodoCL* (Chile), and are used in sites such as `www.reuna.cl`, `www.mercantil.com`, `www.todobr.com.br` and `www.todocl.cl`.
- (1995-1998) Development, as part of my PhD. thesis, of a prototype for online approximate text searching. The software is free and can be accessed from my Web page.

- (1996) Collaboration in the development of a software for semidefinite programming, in Maple, at Universitat Politécnica de Catalunya (UPC, Spain).
- (1994) Development, as part of my MSc. thesis, of a prototype to index and query textual databases with hierarchical structure.
- (1992-1994) Hired (since 1993, employee) by IBM Argentina for the development of advanced applications on optical recognition, storage, querying and interfaces related to images and databases.
- (1983-1994) Several commercial systems and consulting services.
- (1993) Development, as part of my Lic. thesis at Universidad Nacional de La Plata (UNLP, Argentina), of a prototype to compose multimedia interfaces on AIX, including a script language to describe the multimedia interfaces, audio and image servers, etc. This included participation in the development of optical character recognition software for the companies *Telefónica* and *Telecom* (Argentina), as well as manuscript orders for *Avon* (Argentina).
- (1995-) Development of an index for textual databases based on partial inverted indices.
- (1986-1993) Development of several systems as part of the courses at Latin American School of Informatics (ESLAI, Argentina) and Universidad Nacional de La Plata (UNLP, Argentina).
- (1991) Multimedia presentations over OS/2, using high level composition tools and audio and video hardware.

Languages

English: fluent (TOEFL 1998: 650, range 310–677).

Portuguese, Italian and French: able to read technical texts.

References

- Prof. Ricardo Baeza Yates, Universidad de Chile, rbaeza@dcc.uchile.cl
- Prof. Nivio Ziviani, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil, nivio@dcc.ufmg.br
- Prof. Esko Ukkonen, University of Helsinki, Finland, ukkonen@cs.helsinki.fi
- Prof. Gene Myers, Celera Genomics, Washington DC, USA, gene.myers@celera.com
- Prof. Maxime Crochemore, Gaspard Monge Institute, Université de Marne-la-Vallée, France, mac@univ-mlv.fr
- Prof. Paolo Ferragina, Universitá di Pisa, Italia, ferragin@di.unipi.it.
- Prof. Amihood Amir, Bar-Ilan University, Israel, amir@macs.biu.ac.il.

Abbreviations

ALENEX: Workshop on Algorithm Engineering and Experiments
ALENEX'01: 3rd ALENEX, Washington DC
ALENEX'03: 5th ALENEX, Baltimore, Maryland
ALENEX'06: 8th ALENEX, Miami, Florida
ALENEX'07: 9th ALENEX, New Orleans, Louisiana
ALENEX'10: 12th ALENEX, Austin, Texas
ALENEX'15: 17th ALENEX, San Diego, California
ALENEX'21: 23rd ALENEX, Alexandria, Virginia
BIBE: IEEE Conference on Bioinformatics and Bioengineering
BIBE'10: 10th BIBE, Philadelphia, USA
CBMI: European Workshop on Content-Based Multimedia Indexing
CBMI'99: CBMI 1999, Tolouse, France
CCCG: Canadian Conference on Computational Geometry
CCCG'12: 24th CCCG, Charlottetown, Prince Edward Island, Canada
CCCG'13: 25th CCCG, Waterloo, Ontario, Canada
CCP: International Conference on Data Compression, Communications and Processing
CCP'11: 1st CCP, Palinuro, Italy
CIAA: International Conference on Implementation and Application of Automata
CIAA'09: 14th CIAA, Sydney, Australia
CIKM: ACM International Conference on Information and Knowledge Management
CIKM'97: 6th CIKM, Las Vegas, Nevada
CIKM'06: 15th CIKM, Arlington, Virginia
CIKM'11: 20th CIKM, Glasgow, Scotland
CIKM'19: 28th CIKM, Beijing, China
CONIELECOMP: International Conference on Electronics, Communications, and Computers
CONIELECOMP'05: 15th CONIELECOMP, Puebla, Mexico
CPM: Annual Symposium on Combinatorial Pattern Matching
CPM'96: 7th CPM, Laguna Beach, USA
CPM'97: 8th CPM, Aarhus, Denmark
CPM'98: 9th CPM, New Jersey, USA
CPM'99: 10th CPM, Warwick, UK
CPM'00: 11th CPM, Montreal, Canada
CPM'01: 12th CPM, Jerusalem, Israel
CPM'02: 13th CPM, Fukuoka, Japan
CPM'03: 14th CPM, Morelia, Mexico
CPM'04: 15th CPM, Istanbul, Turkey
CPM'05: 16th CPM, Jeju Island, Korea
CPM'06: 17th CPM, Barcelona, Spain
CPM'07: 18th CPM, London, Canada
CPM'08: 19th CPM, Pisa, Italy
CPM'10: 21st CPM, New York, USA
CPM'11: 22nd CPM, Palermo, Italy
CPM'12: 23rd CPM, Helsinki, Finland
CPM'13: 24th CPM, Karlsruhe, Germany
CPM'14: 25th CPM, Moscow, Russia
CPM'15: 26th CPM, Ischia Island, Italy
CPM'17: 28th CPM, Warsaw, Poland
CPM'19: 30th CPM, Pisa, Italy
CPM'20: 31st CPM, Copenhagen, Denmark
CPM'21: 32nd CPM, Wroclaw, Poland

CPM'22: 33rd CPM, Prague, Czech Republic
CPM'23: 34th CPM, Marne-la-Valée, France
CPM'24: 35th CPM, Fukuoka, Japan
CPM'24: 36th CPM, Milan, Italy
DCC: Data Compression Conference
DCC'01: 11th DCC, Snowbird, USA
DCC'04: 14th DCC, Snowbird, USA
DCC'08: 18th DCC, Snowbird, USA
DCC'10: 20th DCC, Snowbird, USA
DCC'12: 22nd DCC, Snowbird, USA
DCC'13: 23rd DCC, Snowbird, USA
DCC'14: 24th DCC, Snowbird, USA
DCC'15: 25th DCC, Snowbird, USA
DCC'16: 26th DCC, Snowbird, USA
DCC'17: 27th DCC, Snowbird, USA
DCC'18: 28th DCC, Snowbird, USA
DCC'19: 29th DCC, Snowbird, USA
DCC'20: 30th DCC, Snowbird, USA
DCC'21: 31st DCC, Snowbird, USA
DCC'22: 32nd DCC, Snowbird, USA
DCC'24: 34th DCC, Snowbird, USA
ECDL: European Conference on Research and Advanced Technology for Digital Libraries
ECDL'05: 9th ECDL, Vienna, Austria
ECDL'09: 13th ECDL, Corfu, Greece
ECIR: European Conference on Information Retrieval Research
ECIR'03: 25th ECIR, Pisa, Italy
ESA: Annual European Symposium on Algorithms
ESA'95: 3rd ESA, Corfu, Greece
ESA'10: 18th ESA, Liverpool, UK
ESA'11: 19th ESA, Saarbrücken, Germany
ESA'12: 20th ESA, Ljubljana, Slovenia
ESA'13: 21st ESA, Sophia-Antipolis, France
ESA'14: 22nd ESA, Wroclaw, Poland
ESA'24: 32nd ESA, Egham, United Kingdom
EuroPar: International Conference on Parallel and Distributed Computing
EuroPar'03: 9th Europar, Klagenfurt, Austria
FSTTCS: Annual Conference on Foundations of Software Technology and Theoretical Computer Science
FSTTCS'14: 34th FSTTCS, New Delhi, India
FUN: Conference on Fun with Algorithms
FUN'04: 3rd FUN, Isola d'Elba, Italy
FUN'10: 5th FUN, Ischia Island, Italy
GIS: ACM International Symposium on Advances in Geographic Information Systems
GIS'05: 13th ACM GIS, Bremen, Germany
GRADES-NDA: Joint Workshop on Graph Data Management Experiences & Systems (GRADES) and Network Data Analytics (NDA)
GRADES-NDA'24: 7th GRADES-NDA, Santiago, Chile
GRADES-NDA'26: 9th GRADES-NDA, Bengaluru, India
ICCS: International Conference on Computational Science
ICCS'06: 6th ICCS, Reading, UK
ICDE: International Workshop on Data Engineering
ICDE'08: 24th ICDE, Cancun, Mexico
ICDE'10: 26th ICDE, Long Beach, California, USA

ICDE'22: 38th ICDE, Kuala Lumpur, Malasia
ICDT: International Conference on Database Theory
ICDT'20: 23rd ICDT, Copenhagen, Denmark
IFIP TCS: IFIP International Conference on Theoretical Computer Science
IFIP TCS'00: 1st IFIP TCS, Sendai, Japan
IFIP TCS'06: 4th IFIP TCS, Santiago, Chile
ISAAC: International Symposium on Algorithms and Computation
ISAAC'03: 14th ISAAC, Kyoto, Japan
ISAAC'04: 15th ISAAC, Hong Kong, China
ISAAC'05: 16th ISAAC, Hainan, China
ISAAC'10: 21st ISAAC, Jeju Island, Korea
ISAAC'11: 22nd ISAAC, Yokohama, Japan
ISAAC'13: 24th ISAAC, Hong Kong, China
ISAAC'14: 25th ISAAC, Jeonju, Korea
ISAAC'17: 28th ISAAC, Phuket, Tahiland
ISAAC'18: 29th ISAAC, Jiaoxi, Taiwan
IWOCA: International Workshop on Combinatorial Algorithms
IWOCA'07: 18th IWOCA, Newcastle, Australia
IWOCA'12: 23rd IWOCA, Madurai, India
LATIN: International Symposium of Latin American Theoretical Informatics
LATIN'95: 2nd LATIN, Valparaíso, Chile
LATIN'98: 3rd LATIN, Campinas, Brazil
LATIN'02: 5th LATIN, Cancun, Mexico
LATIN'04: 6th LATIN, Buenos Aires, Argentina
LATIN'06: 7th LATIN, Valdivia, Chile
LATIN'08: 8th LATIN, Buzios, Brazil
LATIN'10: 9th LATIN, Oaxaca, Mexico
LATIN'18: 13th LATIN, Montevideo, Uruguay
LATIN'20: 14th LATIN, São Paulo, Brazil
LATIN'22: 15th LATIN, Guanajuato, Mexico
LATIN'24: 16th LATIN, Puerto Varas, Chile
LATIN'24: 17th LATIN, Florianopolis, Brazil
MFCS: International Symposium on Mathematical Foundations of Computer Science
MFCS'09: 34th MFCS, Vysoké Tatry, Slovakia
MICAI: Mexican Internacional Conference on Artificial Intelligence
MICAI'05: 4th MICAI, Monterrey, Mexico
PSC: Prague Stringology Conference
PSC'03: 8th PSC, Prague, Czech Republic
PSC'05: 10th PSC, Prague, Czech Republic
PSC'06: 11th PSC, Prague, Czech Republic
PSC'09: 14th PSC, Prague, Czech Republic
PSI: International Conference on Perspectives of System Informatics
PSI'06: 6th PSI, Novosibirsk, Russia
RAID: International Workshop on the Recent Advances in Intrusion Detection
RAID'00: 3rd RAID, Tolouse, France
RECOMB: International Conference on Computational Molecular Biology
RECOMB'01: 5th RECOMB, Montreal, Canada
RECOMB'09: 13th RECOMB, Tucson, Arizona, USA
RIAO: RIAO International Conference
RIAO'10: 9th RIAO, Paris, France
SBBD: Brazilian Symposium on Databases
SBBD 2001: XVI SBBD, Rio de Janeiro, Brazil

SCCC: International Conference of the Chilean Computer Science Society
SCCC'94: XIV SCCC, Concepción, Chile\vspace*-1mm
SCCC'98: XVIII SCCC, Antofagasta, Chile
SCCC'01: XXI SCCC, Punta Arenas, Chile
SCCC'02: XXII SCCC, Copiapó, Chile
SCCC'03: XXIII SCCC, Talca, Chile
SCCC'04: XXIV SCCC, Arica, Chile
SCCC'12: XXXII SCCC, Valparaíso, Chile
SEA: International Symposium on Experimental Algorithms
SEA'10: 9th SEA, Ischia Island, Italy
SEA'11: 10th SEA, Colimpari Chania, Greece
SEA'12: 11th SEA, Bordeaux, France
SEA'14: 13th SEA, Copenhagen, Denmark
SEA'16: 15th SEA, Saint Petersburg, Russia
SEA'24: 13rd SEA, Vienna, Austria
SeCoGIS: International Workshop on Semantic and Conceptual Issues in GIS
SeCoGIS'09: 3rd SeCoGIS, Gramado, Brazil
SeCoGIS'10: 4th SeCoGIS, Vancouver, Canada
SIGIR: Annual International ACM SIGIR Conference on Research and Development in Information Retrieval
SIGIR'95: 18th SIGIR, Seattle, Washington, USA
SIGIR'98: 21th SIGIR, Melbourne, Australia
SIGIR'00: 23rd SIGIR, Athens, Greece
SIGIR'05: 28th SIGIR, Salvador, Brazil
SIGIR'07: 30th SIGIR, Amsterdam, The Netherlands
SIGIR'08: 31st SIGIR, Singapore
SIGIR'13: 36th SIGIR, Dublin, Ireland
SIGMOD: ACM International Conference on Management of Data
SIGMOD'21: 47th SIGMOD, Xi'an, Shaanxi, China
SIGMOD'24: 50th SIGMOD, Santiago, Chile
SISAP: International Workshop on Similarity Search and Applications
SISAP'09: 2nd SISAP, Prague, Czech Republic
SISAP'11: 4th SISAP, Lipari, Italy
SISAP'14: 7th SISAP, Los Cabos, Mexico
SISAP'15: 8th SISAP, Glasgow, Scotland
SNA-KDD: ACM Workshop on Social Network Mining and Analysis
SNA-KDD'11: 5th SNA-KDD, San Diego, USA
SODA: Annual ACM-SIAM Symposium on Discrete Algorithms
SODA'10: 21st SODA, Austin, USA
SODA'12: 23rd SODA, Kyoto, Japan
SODA'13: 24th SODA, New Orleans, USA
SODA'17: 28th SODA, Barcelona, Spain
SODA'18: 29th SODA, New Orleans, USA
SODA'25: 36th SODA, New Orleans, USA
SOFSEM: International Conference on Current Trends in Theory and Practice of Computer Science
SOFSEM'10: 36th SOFSEM, Spindleruv Mlyn, Czech Republ
SPIRE: International Symposium on String Processing and Information Retrieval
SPIRE'98: 5th SPIRE, Santa Cruz de la Sierra, Bolivia
SPIRE'99: 6th SPIRE, Cancun, Mexico
SPIRE'00: 7th SPIRE, A Coruña, Spain
SPIRE'01: 8th SPIRE, Laguna de San Rafael, Chile
SPIRE'02: 9th SPIRE, Lisboa, Portugal
SPIRE'03: 10th SPIRE, Manaos, Brazil

SPIRE'04: 11th SPIRE, Padova, Italy
SPIRE'05: 12th SPIRE, Buenos Aires, Argentina
SPIRE'06: 13th SPIRE, Glasgow, Scotland, UK
SPIRE'07: 14th SPIRE, Santiago, Chile
SPIRE'08: 15th SPIRE, Melbourne, Australia
SPIRE'09: 16th SPIRE, Saariselkä, Finland
SPIRE'10: 17th SPIRE, Los Cabos, Mexico
SPIRE'11: 18th SPIRE, Pisa, Italy
SPIRE'12: 19th SPIRE, Cartagena, Colombia
SPIRE'13: 20th SPIRE, Jerusalem, Israel
SPIRE'14: 21st SPIRE, Ouro Preto, Brazil
SPIRE'15: 22nd SPIRE, London, UK
SPIRE'16: 23rd SPIRE, Beppu, Japan
SPIRE'17: 24th SPIRE, Palermo, Italy
SPIRE'19: 26th SPIRE, Segovia, Spain
SPIRE'20: 27th SPIRE, Orlando, Florida, US
SPIRE'21: 28th SPIRE, Lille, France
SPIRE'22: 29th SPIRE, Concepción, Chile
SPIRE'23: 30th SPIRE, Pisa, Italy
SPIRE'24: 31st SPIRE, Puerto Vallarta, Mexico
STACS: International Symposium on Theoretical Aspects of Computer Science
STACS'03: 20th STACS, Berlin, Germany
STACS'09: 26th STACS, Freiburg, Germany
SWAT: Scandinavian Symposium on Algorithmic Theory
SWAT'12: 13th SWAT, Helsinki, Finland
SWAT'14: 15th SWAT, Copenhagen, Denmark
VECPAR: International Meeting on Vector and Parallel Processing
VECPAR'98: 3rd VECPAR, Porto, Portugal
WADS: International Workshop on Algorithms and Data Structures
WADS'97: 5th WADS, Halifax, Nova Scotia, Canada
WADS'13: 12th WADS, London, Ontario, Canada
WADS'17: 16th WADS, St. John's, Newfoundland, Canada
WAE: Workshop on Algorithm Engineering
WAE'99: 3rd WAE, London, UK
WAE'01: 5th WAE, Aarhus, Denmark
WEA: Workshop on Efficient and Experimental Algorithms
WEA'04: 3rd WEA, Angra dos Reis, Brazil
WEA'05: 4th WEA, Santorini, Greece
WEA'06: 5th WEA, Menorca, Spain
WSP: South American Workshop on String Processing
WSP'95: 2nd WSP, Valparaíso, Chile
WSP'96: 3rd WSP, Recife, Brazil
WSP'97: 4th WSP, Valparaíso, Chile
WWW: International World Wide Web Conference
WWW'07: 16th WWW, Banff, Alberta, Canada
WWW'25: 34th WWW, Sydney, Australia