

CURRICULUM VITAE

PERSONAL INFORMATION

Name: Gonzalo Navarro

Nationality: Argentina (1969)

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Degree: PhD. in Computer Science

Position: Full Professor, Dept. of Computer Science, University of Chile

Areas of interest: Design and Analysis of Algorithms, Text and Graph Databases, Compression.

CURRENT RESEARCH PROJECTS

(2018-2028) Associate researcher, *Millennium Institute for Foundational Research on Data (IMFD)*, ANID, Chile.

(2014-2025) Key researcher, *Center for Biotechnology and Bioengineering (CeBiB)*, ANID, Chile.

(2023-2026) Main Researcher in the Fondecyt Project 1-230755, *Compact Data Structures for Graph Databases*.

RECENT INVITED TALKS AND TUTORIALS

(2025) Keynote at *ACDA*, Canada. “Adaptive Dynamic Bitvectors”.

(2023) Joint keynote at *ICDT* and *EDBT*, Greece. “Compact Data Structures meet Databases”.

(2022) Keynote at *AofA*, USA. “Worst-Case Optimality in Database Multijoins”.

(2022) Keynote at *DCC*, USA. “On the Compressibility of Highly Repetitive Sequences”.

(2019) Keynote at *SPIRE*, Spain. “Repetitiveness and Indexability”.

(2016) Tutorial “Compact Data Structures”, at *LATIN*, Mexico.

(2015) Keynote at *CLEI*, Peru. “Compact Data Structures”.

(2014) Keynote at *SPIRE*, Brazil. “Doing SP & IR on Repetitive Collections”.

(2014) Keynote at *LATIN*, Uruguay. “Encoding Data Structures”.

(2012) Tutorial “Space-Efficient Data Structures II”, at *SPIRE*, Colombia.

(2012) Keynote at *IWOCA*, India. “Indexing Highly Repetitive Collections”.

(2012) Joint keynote at *CPM* and *SWAT*, Finland. “Wavelet Trees for All”.

(2011) Tutorial “Space-Efficient Data Structures”, at *SPIRE*, Italy.

(2010) Keynote at *SPIRE*, Mexico. “Compact data structures for IR: The time has come”.

EDITORIAL BOARDS AND CONFERENCE COMMITTEES

Editor in Chief: *ACM Journal of Experimental Algorithmics* (2016-2023).

Editorial Boards: *ACM Transactions on Algorithms* (2022-), *Information Systems* (2012-2018), *Information Retrieval* (2004-2019).

Member of the Steering Committee: *SEA* (2022-2024), *ESA* (2022-2024), *LATIN* (2008-2013), *SISAP* (2008-2014), and *SPIRE* (2002, 2006-2008, 2018-2020).

Program Committee Co-Chair: *ACDA 2027, ALENEX 2023, ESA B 2022, CPM 2018, SPIRE 2018, LATIN 2016, SISAP 2012, SISAP 2008, IFIP TCS 2006, SIGIR 2005 Posters, SPIRE 2005, SPIRE 2001.*

Special Session Chair: *DCC 2018, 2016, 2014*, on Compressed Data Structures.

Area Editor: *Encyclopedia of Algorithms*, 2nd edition (2015) and 1st edition (2006), Springer.

Guest editor of special issues: *Information and Computation 2020, Algorithmica 2018* ($\times 2$), *Information Systems 2014, ACM SIGSPATIAL 2010, Journal of Discrete Algorithms 2008.*

Workshop organization: Dagstuhl Seminars 2024, 2019, 2016, and 2013 (Germany), Shonan Meeting 2017 (Japan).

PUBLICATIONS

Books: Author, *Compact Data Structures*, Cambridge University Press, 2016. Co-author, *Flexible Pattern Matching in Strings*, Cambridge University Press, 2002.

Proceedings edited: Co-editor of 13 international conference proceedings.

Book chapters: Co-author of 29 international book chapters.

Special issues: Co-editor of 7 special issues in international journals.

Journal papers: 217 papers in international journals.

Conference papers: 300 papers in international conferences.

Impact: Over 32,000 citations in Google Scholar, h -number 84. The most highly cited author in Computer Science in Chile, and 940 worldwide according to *Guide2Research*. Among the 500 most prolific authors in DBLP.

STUDENT ADVISOR

Current: 3 PhD, 4 MSc, and 5 Engineering students.

Past: 10 Postdocs, 23 PhDs, 21 MScs and 31 Engineers.

SOME DISTINCTIONS

(2025) Best Paper Award in the *32nd International Symposium on String Processing and Information Retrieval (SPIRE)*.

(2024) Listed in Stanford's World Top 2% most cited scientists in 2023 and in their whole career.

(2022) ACM Fellow, distinction given by the Association for Computing Machinery to at most 1% of its members for achieving a significant impact on the computing field.

(2017) Alberto Apostolico Best Paper Award in the *28th Annual Symposium on Combinatorial Pattern Matching (CPM)*.

(2016-2017, 2019-2022) Advisor member in Google Research Award Latin America projects, in association with 3 MSc and PhD students.

(2016) Elsevier's Highly Cited Paper Award to four 2013 papers among the 5 highest cited ones in Elsevier journals. One included in the *Virtual Special Issue "40th Anniversary of Theoretical Computer Science – Top Cited Articles: 1975-2014"*.

(2012-) Best Student Paper Awards in *CPM 2025, SPIRE 2012 & 2021, and DCC 2013, 2016, 2018 & 2019.*

(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).

(2003-2012) Advisor of 5 MSc theses awarded in the CLEI-UNESCO Contest of Latin American Computer Science MSc Theses.