

Publications of Jorge Pérez by year

Year 2011

1. Marcelo Arenas, Jorge Pérez, Juan Reutter. Data Exchange Beyond Complete Data. In Maurizio Lenzerini, Thomas Schwentick (ed.), *Proc. 30th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, pp. 83-94, Jun 2011. Athens, Greece. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. ISBN 978-1-4503-0660-7. Best paper award.
2. Marcelo Arenas, Jorge Pérez. Querying Semantic Web Data with SPARQL. In Maurizio Lenzerini, Thomas Schwentick (ed.), *Proc. 30th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, pp. 305-316, Jun 2011. Athens, Greece. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. ISBN 978-1-4503-0660-7. Invited paper.
3. Claudio Gutierrez, Carlos Hurtado, Alberto Mendelzon, Jorge Pérez. Foundations of Semantic Web Databases. *Journal of Computer and System Sciences (JCSS)* 77:520-541, 2011. Elsevier Science, Amsterdam, The Netherlands. ISSN 0022-0000.
4. Marcelo Arenas, Claudio Gutierrez, Jorge Pérez. Some Remarks on the Paper "semQA: SPARQL with Idempotent Disjunction". *IEEE Transactions on Knowledge and Data Engineering (TKDE)* 23(4):638-639, 2011. IEEE Press, Piscataway, NJ, USA. ISSN 1041-4347. correspondence paper.

Year 2012

1. Marcelo Arenas, Sebastián Conca, Jorge Pérez. Counting Beyond a Yottabyte, or how SPARQL 1.1 Property Paths will Prevent Adoption of the Standard. In Michael Rabinovich, Steffen Staab (ed.), *Proc. 21st International World Wide Web Conference (WWW)*, pp. 629-638, Apr 2012. Lyon, France. ACM Press, New York, NY, USA. ISBN 978-1-4503-1323-0. Best paper award.
2. Andrés Letelier, Jorge Pérez, Reinhard Pichler, Sebastian Skritek. Static Analysis and Optimization of Semantic Web Queries. In *Proc. 31st ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, pp. 89-100, May 2012. Scottsdale, AZ, USA. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series.
3. Pablo Barceló, Jorge Pérez, Juan Reutter. Relative Expressiveness of Nested Regular Expressions. In *Proc. 6th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. 180-195, Jun 2012. Ouro Preto, Brazil. CEUR Publications. CEUR Workshop Proceedings.
4. Jorge Pérez, Reinhard Pichler, Emanuel Sallinger, Vadim Savenkov. Union and Intersection of Schema Mappings. In *Proc. 6th Alberto Mendelzon International Workshop on Founda-*

tions of Data Management (AMW), pp. 129-141, Jun 2012. Ouro Preto, Brazil. CEUR Publications. CEUR Workshop Proceedings.

5. Andrés Letelier, Jorge Pérez, Reinhard Pichler, Sebastian Skritek. SPAM: A SPARQL Analysis and Manipulation Tool. In *Proc. 38th International Conference on Very Large Databases (VLDB)*, pp. 1958-1961, Aug 2012. Istanbul, Turkey. Published in PVLDB (Proceedings of the VLDB conference) 5(12), as "System Description".
6. Marcelo Arenas, Jorge Pérez. Federation and Navigation in SPARQL 1.1. In *Reasoning Web. Semantic Technologies for Advanced Query Answering*, pp. 78-111, Sep 2012. Springer-Verlag, Berlin/Heidelberg, Germany. ISBN 978-3-642-33158-9. Lecture Notes in Computer Science vol. 7487.
7. Marcelo Arenas, Jorge Pérez, Cristian Riveros, Juan Reutter. Query Language-based Inverses of Schema Mappings: Semantics, Computation, and Closure Properties. *The VLDB Journal (VLDBJ)* 21(6):823-842, 2012. Springer, New York, NY, USA. ISSN 1066-8888.
8. Marcelo Arenas, Claudio Gutierrez, Daniel P. Miranker, Jorge Pérez, Juan Sequeda. Querying Semantic Web Data on the Web. *SIGMOD Record* 41(4):6-17, Dec 2012. ACM Press, New York, NY, USA. ISSN 0163-5808.

Year 2013

1. Pablo Barceló, Jorge Pérez, Juan Reutter. Schema Mappings and Data Exchange for Graph Databases. In Wang-Chiew Tan (ed.), *Proc. 16th International Conference on Database Theory (ICDT)*, Mar 2013. Genoa, Italia. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. ISBN 978-1-4503-1598-2.
2. Marcelo Arenas, Jorge Pérez, Juan Reutter, Cristian Riveros. The Language of Plain SOtgs: Composition, Inversion and Structural Properties. *Journal of Computer and System Sciences (JCSS)* 79(6):763-784, Sep 2013. Elsevier Science, Amsterdam, The Netherlands. ISSN 0022-0000.
3. Philip A. Bernstein, Marie Jacob, Jorge Pérez, Guillem Rull, James Terwilliger. Incremental Mapping Compilation in an Object-to-Relational Mapping System. In *Proc. SIGMOD International Conference on Management of Data (SIGMOD)*, pp. 1269-1280, Jun 2013. New York, NY, USA. ACM Press, New York, NY, USA. ISBN 978-1-4503-2037-5.
4. Marcelo Arenas, Jorge Pérez, Emanuel Sallinger. Towards General Representability in Knowledge Exchange. In Loreto Bravo, Mauricio Lenzerini (ed.), *Proc. 7th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. 1-7, May 2013. Puebla, Mexico. CEUR Publications. CEUR Workshop Proceedings.
5. Marcelo Arenas, Jorge Pérez, Juan Reutter. Data Exchange Beyond Complete Data. *Journal of the ACM (JACM)* 60(4):28:1-28:59, Aug 2013. ACM Press, New York, NY, USA. ISSN 0004-5411.

6. Andrés Letelier, Jorge Pérez, Reinhard Pichler, Sebastian Skritek. Static Analysis and Optimization of Semantic Web Queries. *Transactions on Database Systems (TODS)* 38(4):article 25, Dec 2013. ACM Press, New York, NY, USA. ISSN 0362-5915. Invited as one of the best papers from PODS 2012.
7. Jorge Pérez. The Inverse of a Schema Mapping. In *Data Exchange, Integration, and Streams*, pp. 69-95, Oct 2013. IBFI Schloss Dagstuhl, Wadern, Germany. ISBN 978-3-939897-61-3. Dagstuhl Follow-Ups vol. 5.

Year 2014

1. Michael Johnson, Jorge Pérez, James F. Terwilliger. What Can Programming Languages Say About Data Exchange?. In *Proc. 17th International Conference on Extending Database Technology (EDBT)*, pp. 223-228, Mar 2014. Athens, Greece. OpenProceedings. ISBN 978-3-89318065-3.
2. Marcelo Arenas, Gabriel Dieguez, Jorge Pérez. Expressiveness and Complexity of Bidirectional Constraints for Data Exchange. In Georg Gottlob, Jorge Pérez (ed.), *Proc. 8th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. article 15, Jun 2014. Cartagena, Colombia. CEUR Publications. CEUR Workshop Proceedings.
3. Javier Fernández, Claudio Gutierrez, Miguel Martínez-Prieto, Jorge Pérez. Towards In-Memory RDFS Entailment. In Georg Gottlob, Jorge Pérez (ed.), *Proc. 8th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. article 13, Jun 2014. Cartagena, Colombia. CEUR Publications. CEUR Workshop Proceedings.
4. Georg Gottlob, Jorge Pérez, ed. *Proceedings of the 8th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, Jun 2014. Cartagena, Colombia. CEUR Publications. CEUR Workshop Proceedings.

Year 2015

1. Marcelo Arenas, Gabriel Dieguez, Jorge Pérez. Bidirectional Constraints for Exchanging Data: Beyond Monotone Queries. In *Proc. 24th International Joint Conferences on Artificial Intelligence (IJCAI)*, pp. 2698-2705, Jul 2015. Buenos Aires, Argentina. ISBN 978-1-57735-738-4.
2. Nicolás Lehmann, Jorge Pérez. Implementing Graph Query Languages over Compressed Data Structures: A Progress Report. In Andrea Cali, Maria-Esther Vidal (ed.), *Proc. 9th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. article 19, May 2015. Lima, Peru. CEUR Publications. CEUR Workshop Proceedings.
3. Olaf Hartig, Jorge Pérez. LDQL: A Query Language for the Web of Linked Data. In *Proc. 14th International Semantic Web Conference (ISWC)*, pp. 73-91, Oct 2015. Bethlehem, PA, USA.

Year 2016

1. Olaf Hartig, Jorge Pérez. LDQL: A Query Language for the Web of Linked Data. *Journal of Web Semantics (JWS)* 41:9-29, Dec 2016. Elsevier Science, Amsterdam, The Netherlands. ISSN 1570-8268.
2. Robinson Castro, Nicolás Lehmann, Jorge Pérez, Bernardo Subercaseaux. Wavelet Trees for Competitive Programming. *Olympiads in Informatics (IOI)* 10:19-37, 2016. Vilnius University, Universiteto g. 3, Vilnius 01513, Lithuania. ISSN 1822-7732.

Year 2017

1. Olaf Hartig, Jorge Pérez. An Initial Analysis of Facebook’s GraphQL Language. In *Proc. 11th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. paper 11, Jun 2017. Montevideo, Uruguay. CEUR Publications. CEUR Workshop Proceedings.
2. Constanza Fierro, Claudio Fuentes, Jorge Pérez, Mauricio Quezada. 200K+ Crowdsourced Political Arguments for a New Chilean Constitution. In *Proc. 4th Argument Mining (ArgMining)*, pp. 1-10, Sep 2017. Copenhagen, Denmark.
3. Olaf Hartig, Ian Letter, Jorge Pérez. A Formal Framework for Comparing Linked Data Fragments. In *Proc. 16th International Semantic Web Conference (ISWC)*, pp. 364-382, Oct 2017. Vienna, Austria. ISBN 978-3-319-68203-7. Best Paper Award ISWC 2017.

Year 2018

1. Olaf Hartig, Jorge Pérez. Semantics and Complexity of GraphQL. In *Proc. 27th International World Wide Web Conference (WWW)*, pp. 1155-1164, Apr 2018. Lyon, France. ACM Press, New York, NY, USA.
2. Olaf Hartig, Ian Letter, Jorge Pérez. A Model of Distributed Query Computation in Client-Server Scenarios on the Semantic Web. In *Proc. 27th International Joint Conferences on Artificial Intelligence (IJCAI)*, pp. 5259-5263, 2018.
3. Francisco Plana, Jorge Pérez. QuickCent: A Fast and Frugal Heuristic for Centrality Estimation on Networks. In *Proc. 17th International Conference on Web Intelligence (WI)*, pp. 238-245, Dec 2018. Santiago, Chile. IEEE Computer Society Press, Los Alamitos, CA, USA. ISBN 978-1-5386-7325-6.

Year 2019

1. Jorge Pérez, Javier Marinkovic, Pablo Barceló. On the Turing Completeness of Modern Neural Network Architectures. In *Proc. 7th International Conference on Learning Representations (ICLR)*, 2019. New Orleans, USA.

2. Ayme Arango, Jorge Pérez, Bárbara Poblete. Hate Speech Detection is not as Easy as you May Think: A Closer Look at Model Validation. In *Proc. 42th Annual International ACM Conference on Research and Development in Information Retrieval (SIGIR)*, pp. 45-54, Jul 2019. Paris, France. ACM Press, New York, NY, USA.
3. Pablo Barceló, Nelson Higuera, Jorge Pérez, Bernardo Subercaseaux. Expressiveness of Matrix and Tensor Query Languages in terms of ML Operators. In *Proc. 3rd Data Management for end-to-end Machine Learning (DEEM)*, 2019.

Year 2020

1. Pablo Badilla, Felipe Bravo-Marquez, Jorge Pérez. WEFÉ: The Word Embeddings Fairness Evaluation Framework. In *Proc. 29th International Joint Conferences on Artificial Intelligence (IJCAI)*, pp. 430-436, Jul 2020. ISBN 978-0-9992411-6-5.
2. Pablo Barceló, Nelson Higuera, Jorge Pérez, Bernardo Subercaseaux. On the Expressiveness of LARA: A Unified Language for Linear and Relational Algebra. In *Proc. 23rd International Conference on Database Theory (ICDT)*, pp. 6:1-6:20, Mar 2020. Copenhagen, Denmark. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series.
3. Pablo Barceló, Mikael Monet, Egor Kostylev, Jorge Pérez, Juan Reutter, Juan-Pablo Silva. The Logical Expressiveness of Graph Neural Networks. In *Proc. 8th International Conference on Learning Representations (ICLR)*, pp. 1-9, Apr 2020. Addis Ababa, ETHIOPIA (On-line).
4. Pablo Barceló, Egor Kostylev, Mikael Monet, Jorge Pérez, Juan Reutter, Juan-Pablo Silva. The Expressive Power of Graph Neural Networks as a Query Language. *SIGMOD Record* 49(2):6-17, Jun 2020. ACM Press, New York, NY, USA. ISSN 0163-5808.
5. Javier Carrasco, Aidan Hogan, Jorge Pérez. Laconic Image Classification: Human vs. Machine Performance. In *Proc. 29th ACM International Conference on Information and Knowledge Management (CIKM)*, pp. 115-124, Oct 2020. Galway, Ireland (Virtual). ACM Press, New York, NY, USA.
6. Pablo Barceló, Mikael Monet, Jorge Pérez, Bernardo Subercaseaux. Model Interpretability through the lens of Computational Complexity. In *Proc. 34th Advances in Neural Information Processing Systems (NeurIPS)*, Dec 2020. Vancouver (Online).
7. Bárbara Poblete, Jorge Pérez. Minding the AI Gap in LATAM. *Communications of the ACM (CACM)* 63(11):61-63, Nov 2020. ACM Press, New York, NY, USA. ISSN 0001-0782.
8. Jesus Perez-Martin, Benjamin Bustos, Jorge Pérez. Attentive Visual Semantic Specialized Network for Video Captioning. In *Proc. 25th International Conference on Pattern Recognition (ICPR)*, pp. 5767-5774, Jan 2020. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-7281-8808-9.

Year 2021

1. Jorge Pérez, Pablo Barceló, Javier Marinkovic. Attention is Turing-Complete. *Journal of Machine Learning Research (JMLR)* 75(22):1-35, Apr 2021. Microtome Publishing. ISSN 1532-4435.
2. Jesus Perez-Martin, Benjamin Bustos, Jorge Pérez. Improving Video Captioning with Temporal Composition of a Visual-Syntactic Embedding. In *Proc. IEEE Winter Conference on Applications of Computer Vision (WACV)*, pp. 3038-3048, Jan 2021. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-6654-4640-2.
3. Fabian Villena, Jorge Pérez, René Lagos, Jocelyn Dunstan. Supporting the Classification of Patients in Public Hospitals in Chile by Designing, Deploying and Validating a System based on Natural Language Processing. *BMC Medical Informatics and Decision Making (MIDM)* 208(21):1-11, Jul 2021. Springer Nature Switzerland AG, Cham, Switzerland. ISSN 1472-6947.
4. Ayme Arango, Jorge Pérez, Bárbara Poblete. Hate Speech Detection is not as Easy as you may Think: A Closer Look at Model Validation (Extended Version). *Information Systems* 105, 2021. Elsevier Science, Amsterdam, The Netherlands. ISSN 0306-4379.
5. Marcelo Arenas, Daniel Baez, Pablo Barceló, Jorge Pérez, Bernardo Subercaseaux. Foundations of Symbolic Languages for Model Interpretability. In *Proc. 35th Advances in Neural Information Processing Systems (NeurIPS)*, 2021.

Year 2022

1. Ayme Arango, Jorge Pérez, Bárbara Poblete, Valentina Proust, Magdalena Saldaña. Multilingual Resources for Offensive Language Detection. In *Proc. 6th Workshop on Online Abuse and Harms (WOAH)*, pp. 122-130, Jul 2022. Seattle, WA, USA. Association for Computational Linguistic.

Year 2023

1. Francisco Plana, Jorge Pérez, Andrés Abeliuk. Modularity of Food-Sharing Networks Minimises the Risk for Individual and Group Starvation in Hunter-Gatherer Societies. *PLOS ONE (PLOS ONE)* 18(5):article e0272733, May 2023. PLOS ONE. ISSN 1932-6203.
2. Cinthia Sánchez, Hernán Sarmiento, Andrés Abeliuk, Jorge Pérez, Bárbara Poblete. Cross-Lingual and Cross-Domain Crisis Classification for Low-Resource Scenarios. In *Proc. International AAAI Conference on Web and Social Media (ICWSM)*, 2023. Association for the Advancement of Artificial Intelligence, www.aaai.org.

Year 2024

1. Francisco Plana, Andrés Abeliuk, Jorge Pérez. Quickcent: A Fast and Frugal Heuristic for Harmonic Centrality Estimation on Scale-Free Networks. *Computing*, Jun 2024. Springer Nature Switzerland AG, Cham, Switzerland. ISSN 0010-485X.

Year 2025

1. Pablo Badilla, Felipe Bravo-Marquez, María José Zambrano, Jorge Pérez. WEFÉ: A Python Library for Measuring and Mitigating Bias in Word Embeddings. *Journal of Machine Learning Research (JMLR)* 26(156):1-6, 2025. Microtome Publishing. ISSN 1532-4435.