

Publications of Nancy Hitschfeld by year

Year 2009

1. Pedro Rossel, Cecilia Bastarrica, Nancy Hitschfeld. A Systematic Process for Defining a Meshing Tool Product Line Domain Model. In Claudia Ayala, Carla Silva, Hernán Astudillo (ed.), *Proc. 12th Workshop on Requirements Engineering (WER)*, pp. 103-114, Jul 2009. Valparaíso, Chile. Universidad Técnica Federico Santa María, Valparaíso, Chile. ISBN 978-956-319-941-3.
2. Cecilia Bastarrica, Nancy Hitschfeld, Pedro Rossel, César Castro. Rapidly Generating Different Meshing Tools. In Somnath Ghosh (ed.), *Proc. 10th U.S. National Congress on Computational Mechanics (USNCCM)*, Jul 2009. Columbus, Ohio, USA. U.S. Association for Computational Mechanics.

Year 2010

1. Felipe Contreras, Nancy Hitschfeld, Cecilia Bastarrica, Carlos Lillo. Balancing Flexibility and Performance in Three Dimensional Meshing Tools. *Advances in Engineering Software* 41(3):471-479, Mar 2010. Elsevier Science, Amsterdam, The Netherlands. ISSN 0965-9978.
2. Claudio Lobos, Johan Payan, Nancy Hitschfeld. Techniques for the Generation of 3D FInite Element Meshes of Human Organs. In *Informatics in Oral Medicine: Advanced techniques in clinical and diagnostic technologies*, pp. 126-158, 2010. IGI Global, Hershey, PA, USA. ISBN 978-1-60566-733-1.
3. Mauricio Cerda, Renato Valenzuela, Nancy Hitschfeld, Lucas Terissi, Juan C. Gomez. Generic Face Animation. In Sergio Ochoa, Federico Meza, Domingo Mery, Claudio Cubillos (ed.), *Proc. 29 Proceedings of the International Conference of the Chilean Computer Science Society (SCCC)*, pp. 252-257, Nov 2010. Antofagasta, Chile. IEEE Computer Society Press, Los Alamitos, CA, USA.

Year 2011

1. Cristobal Navarro, Nancy Hitschfeld, Eliana Scheihing. A Parallel GPU-based Algorithm for Delaunay Edge-flips. In Michael Hoffmann (ed.), *Proc. 27th European Workshop on Computational Geometry (EuroCG)*, pp. 75-78, Mar 2011. Morschach, Switzerland.
2. Claudio Lobos, Marek Bucki, Yohan Payan, Nancy Hitschfeld. Jacobian-based Repair Method for Finite Element Meshes after Registration. *Engineering with Computers (EWC)* 27(3):285-297, 2011. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 0177-0667.
3. Lucas Terissi, Mauricio Cerda, Juan C. Gomez, Nancy Hitschfeld, Bernard Girau, Renato Valenzuela. Animation of Generic 3D Head Models Driven by Speech. In *Proc. IEEE*

International Conference on Multimedia and Expo (ICME), Jul 2011. Barcelona, Spain. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-61284-348-3.

Year 2012

1. Pedro Sanzana, Ximena Vargas, J. Gironás, Sonja Jankowsky,, F. Branger, I. Braud, Nancy Hitschfeld. Representatividad de una Red de Drenaje Mediante el uso de Funciones de Ancho en una Cuenca Periurbana. *Anales del Instituto de Ingenieros de Chile* 124(3):87-96, Dec 2012. ISSN 0716-2340.
2. Pedro Sanzana, Ximena Vargas, F. Branger, I. Braud, Sonja Jankowsky,, Nancy Hitschfeld. Automatic Pre-processing for an Objetc-Oriented Distributed Hydrological Model using Grass-Gis. In *Proc. 193 European Geosciences Union (EGU)*, pp. 193, Apr 2012. Vienna, Austria.

Year 2013

1. Cristobal Navarro, Nancy Hitschfeld, Eliana Scheihing. A GPU-based Method for Generating Quasi-Delaunay Triangulations based on Edge-Flips. In *Proc. 8th International Conference on Computer Graphics Theory and Applications (GRAPP)*, pp. 27-34, Feb 2013. Barcelona, Spain. SCITEPress: Science and Technology Publicatios. ISBN 978-989-8565-46-4.
2. Pedro Sanzana, Sonja Jankowsky,, F. Branger, I. Braud, Ximena Vargas, Nancy Hitschfeld, J. Gironás. Computer-Assisted Mesh Generation based on Hydrological Response Units for Distributed Hydrological Modeling. *Computers & Geosciences (CG)* 57:32-43, Aug 2013. Elsevier Science, Amsterdam, The Netherlands. ISSN 0098-3004.
3. Lucas D. Terissi, Mauricio Cerda, Juan C. Gómez, Nancy Hitschfeld, Bernard Girau. A Comprehensive System for Facial Animation of Generic 3D Head Models Driven by Speech. *EURASIP Journal on Audio, Speech, and Music Processing (EURASIP ASMP)* 2013(5), Feb 2013. SpringerOpen, Springer-Verlag, Heidelberg, Germany. ISSN 1687-4722.
4. Carlos Hervias, Nancy Hitschfeld, Luis Campusano, Giselle Font. On Finding Large Polygonal Voids Using Delaunay Triangulation: The Case of Planar Point Sets. In Josep Sarrate, Matthew Staten (ed.), *Proc. 22th International Meshing Roundtable (IMR)*, pp. 275-292, Oct 2013. Orlando, USA. Springer-Verlag, Berlin/Heidelberg, Germany.
5. Cristobal Navarro, Nancy Hitschfeld, Fabrizio Canfora. Multi-core Computation of Transfer Matrices for Strip Lattices in the Potts Model. In *Proc. 10th IEEE International Conference on High Performance Computing and Communications (HPCC)*, pp. 125-134, Nov 2013. Zhangjiajie, China. IEEE Press, Piscataway, NJ, USA.

Year 2014

1. Cristobal Navarro, Nancy Hitschfeld, Luis Mateu. A Survey on Parallel Computing and its Applications in Data-Parallel Problems Using GPU Architectures. *Communications in*

Computational Physics (CiCP) 15:285-329, Feb 2014. Global Science Press.

2. Pedro Rossel, Cecilia Bastarrica, Nancy Hitschfeld, Violeta Diaz, Mario Medina. Domain Modeling as a Basis for Building a Meshing Tool Software Product Line. *Advances in Engineering Software* 70:77-89, Apr 2014. Elsevier Science, Amsterdam, The Netherlands. ISSN 0965-9978.
3. Violeta Chang, Jose Saavedra, Nancy Hitschfeld, Victor Castañeda, Luis Sarabia, Steffen Haertel. Gold-Standard and Improved Framework for Sperm Head Segmentation. *Computer Methods and Programs In Biomedicine (CMPB)* 117:225-237, Nov 2014. Elsevier Science, Amsterdam, The Netherlands. ISSN 0169-2607.
4. David Contreras, Nancy Hitschfeld. Generation of Polyhedral Delaunay Meshes. In *Proc. 23rd International Meshing Roundtable (IMR)*, pp. 291-300, 2014. London, UK. Springer-Verlag, Berlin/Heidelberg, Germany.
5. Cristobal Navarro, Nancy Hitschfeld. GPU Maps for the Space of Computation in Triangular Domain Problems. In *Proc. 11th IEEE International Conference on High Performance Computing and Communications (HPCC)*, pp. 375-382, Aug 2014. Paris, France. IEEE Press, Piscataway, NJ, USA.
6. Cristobal Navarro, Eliana Scheihing, Nancy Hitschfeld. Quasi-Delaunay Triangulations Using GPU-Based Edge-Flips. In *Computer Vision, Imaging and Computer Graphics – Theory and Applications*, pp. 36-49, Sep 2014. Springer-Verlag, Berlin/Heidelberg, Germany. Communications in Computer and Information Science vol. 458.

Year 2015

1. Cristobal Navarro, Fabrizio Canfora, Nancy Hitschfeld, Gonzalo Navarro. Parallel Family Trees for Transfer Matrices in the Potts Model. *Computer Physics Communications (CPC)* 187:55-71, 2015. Elsevier Science, Amsterdam, The Netherlands. ISSN 0010-4655.
2. Aldo Canepa, Claudio Lobos, Nancy Hitschfeld. Camarón: A Visualization Tool for the Quality Inspection of Polyhedral Meshes. In Francisco Chinesta, Pedro Díez, Ludovic Chamoin (ed.), *Proc. 7th International Conference in Adaptive Modeling and Simulation (ADMOS)*, pp. 35, Jun 2015. École Centrale de Nantes, France. International Center for Numerical Methods in Engineering.

Year 2016

1. Aldo Canepa, Claudio Lobos, Nancy Hitschfeld, Gonzalo Infante. Camarón: An Open-source Visualization Tool for the Quality Inspection of Polygonal and Polyhedral Meshes. In *Proc. 11th International Conference on Computer Graphics Theory and Applications (GRAPP)*, pp. 130-137, Feb 2016. Rome, Italy. SCITEPress: Science and Technology Publications. ISBN 978-989-758-175-5.

2. Cristobal Navarro, Benjamin Bustos, Nancy Hitschfeld. Potential Benefits of a Block-Space GPU Approach for Discrete Tetrahedral Domains. In *Proc. 42nd Latin American Conference on Informatics (CLEI)*, pp. 1-5, Oct 2016. Valparaiso, Chile. ISBN 978-1-5090-1633-4.

Year 2017

1. Nancy Hitschfeld, Steffen Haertel, Violeta Chang, Alejandra Garcia. Gold-Standard for Computer-Assisted Morphological Sperm Analysis. *Computers in Biology and Medicine* 83:143-150, Apr 2017. Elsevier Science, Amsterdam, The Netherlands. ISSN 0010-4825.
2. Ximena Vargas, Pedro Sanzana, I. Braud, J. Gironás, F. Branger, F. Rodriguez, F. A. Jankowsky, Nancy Hitschfeld, J.F. Muñoz, S. Vicuña. A GIS-based Urban and Peri-Urban Landscape Representation Toolbox for Hydrological Distributed Modeling. *Environmental Modelling & Software* 91:168-185, May 2017. Elsevier Science, Amsterdam, The Netherlands. ISSN 1364-8152.
3. Violeta Chang, Steffen Haertel, Nancy Hitschfeld, Laurent Heutte, Caroline Petitjean. Automatic Classification of Human Sperm Head Morphology. *Computers in Biology and Medicine* 84:205-216, May 2017. Elsevier Science, Amsterdam, The Netherlands. ISSN 0010-4825.
4. Sebastian Pereira, Luis Campusano, Nancy Hitschfeld, Daniel Pizarro, Christopher Haines, Roger Clowes, Gabriel Marinello, Ilona Soechting. A 3D Voronoi+Gapper Galaxy Cluster Finder in Redshift Space to $z = 0.2$ I: an Algorithm Optimized for the 2dFGRS. *The Astrophysical Journal (APJ)* 838(2):109-126, Apr 2017. IOP Publishing, London, UK. ISSN 0004-637X.
5. Nelson Baloian, Wolfram Luther, Daniel Biella, Nare Karapetyan, José A. Pino, Tobias Schreck, Andres Ferrada, Nancy Hitschfeld. Exploring Collaboration in the Realm of Virtual Museums. In *Proc. 23rd Collaboration Researchers' International Workshop on Groupware (CRIWG)*, pp. 252-259, Aug 2017. Saskatoon, Canada. Springer-Verlag, Berlin/Heidelberg, Germany. Lecture Notes in Computer Science vol. 10391.
6. Cristobal Navarro, Raimundo Vega, Benjamin Bustos, Nancy Hitschfeld. Block-space GPU Mapping for Embedded Sierpinski Gasket Fractals. In *Proc. 19 IEEE International Conference on High Performance Computing and Communications (HPCC)*, pp. 427-433, Dec 2017. Bangkok, Thailand. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-5386-2588-0.

Year 2018

1. Luis Campusano, Carlos Hervias, Nancy Hitschfeld, Rodrigo Alonso, José Ojeda. Delaunay based Algorithm for Finding Polygonal Voids in Planar Point Sets. *Astronomy and Computing* 22:48-62, Jan 2018. Elsevier Science, Amsterdam, The Netherlands. ISSN 2213-1337.
2. Mauricio Cerda, Cristobal Navarro, Juan Silva, Scott R. Waitukaitis, Nicolas Mujica, Nancy Hitschfeld. A High-speed Tracking Algorithm for Dense Granular Media. *Computer Physics*

Communications (CPC) 277:8-16, Feb 2018. Elsevier Science, Amsterdam, The Netherlands. ISSN 0010-4655.

3. Francisco Carter, Nancy Hitschfeld, Cristobal Navarro, Rodrigo Soto. GPU Parallel Simulation Algorithm of Brownian Particles with Excluded Volume using Delaunay Triangulations. *Computer Physics Communications (CPC)* 229:148-161, Aug 2018. Elsevier Science, Amsterdam, The Netherlands. ISSN 0010-4655.
4. Francisco Gutierrez, Jocelyn Simmonds, Nancy Hitschfeld, Cecilia Casanova, Cecilia Sotomayor, Vanessa Peña. Assessing Software Development Skills among K-6 Learners in a Project-based Workshop with Scratch. In *Proc. 40th ACM/IEEE International Conference on Software Engineering (ICSE)*, pp. 98-107, May 2018. Gothenburg, Sweden. ACM Press, New York, NY, USA.
5. Cecilia Bastarrica, Nancy Hitschfeld, Maira Marques, Jocelyn Simmonds. Affirmative Action for Attracting Women to STEM in Chile. In Erika Abraham, Elisabetta Di Nitto, Raffaella Mirandola (ed.), *Proc. 1st International Workshop on Gender Equality in Software Engineering (GE)*, pp. 45-48, May 2018. ACM.
6. Francisco Gutierrez, Jocelyn Simmonds, Cecilia Casanova, Cecilia Sotomayor, Nancy Hitschfeld. Coding or Hacking? Exploring Inaccurate Views on Computing and Computer Scientists among K-6 Learners in Chile. In *Proc. 49th ACM Technical Symposium on Computer Science Education (SIGCSE)*, pp. 993-998, Feb 2018. Baltimore, MD, USA. ACM Press, New York, NY, USA. ISBN 78-1-4503-5103-4/18/02.
7. Cristobal Navarro, Matthieu Vernier, Benjamin Bustos, Nancy Hitschfeld. Competitiveness of a Non-linear Block-space GPU Thread Map for Simplex Domains. *IEEE Transactions on Parallel and Distributed Systems (TPDS)* 29(12):2728-2741, Dec 2018. IEEE Computer Society Press, Los Alamitos, CA, USA. ISSN 1045-9219.
8. Lucas D. Terissi, Gonzalo Sad, Mauricio Cerda, Slim Ouoni, Rodrigo Galvez, Juan C. Gomez, Bernard Girau, Nancy Hitschfeld. A French-Spanish Multimodal Speech Communication Corpus Incorporating Acoustic Data, Facial, Hands and Arms Gestures Information. In *Proc. 19th Annual Conference of the International Speech Communication Association (Interspeech)*, pp. 2778-2782, Sep 2018. Hyderabad, India. ICSA archive.
9. Luis Campusano, Gabriel Marinello, Roger Clowes, Christopher Haines, Sebastian Pereira, Daniel Pizarro, Nancy Hitschfeld, Ilona Soechting. A 3D Voronoi+Gapper Galaxy Cluster Finder in Redshift Space to $z = 0.2$. II. An Abundant Cluster Population Dominated by Late-type Galaxies Unveiled. *The Astrophysical Journal (APJ)* 869(145), Dec 2018. IOP Publishing, London, UK. ISSN 0004-637X.

Year 2019

1. Jocelyn Simmonds, Francisco Gutierrez, Cecilia Casanova, Cecilia Sotomayor, Nancy Hitschfeld. A Teacher Workshop for Introducing Computational Thinking in Rural and Vulnerable En-

- vironments. In *Proc. 50th ACM Technical Symposium on Computer Science Education (SIGCSE)*, pp. 1143-1149, Feb 2019. Minneapolis. ACM Press, New York, NY, USA.
2. Pedro Sanzana, J. Gironás, I. Braud, Nancy Hitschfeld, F. Branger, F. Rodriguez, M. Fuamba, Joaquin Romero, Ximena Vargas, J.F. Muñoz, S. Vicuña, A. Mejia. Decomposition of 2D Polygons and its Effect in Hydrological Models. *Journal of Hydroinformatics* 21(1):104-122, Jan 2019. IWA Publishing, London, UK. ISSN 1464-7141.
 3. Pedro Sanzana, J. Gironás, I. Braud, J.F. Muñoz, S. Vicuña, Sonia Reyes-Paecke, Francisco De la Barrera, F. Branger, F. Rodriguez, Ximena Vargas, Nancy Hitschfeld, Santiago Hormazabal. Impact of Urban Growth and High Residential Irrigation on Streamflow and Groundwater Levels in a Peri-Urban Semiarid Catchment. *Journal of the American Water Resources Association* 55(3):720-739, Jun 2019. John Wiley & Sons, Hoboken, NJ, USA. ISSN 1752-1688.
 4. Alejandro Ortiz-Bernardin, Catalina Alvarez, Nancy Hitschfeld, A. Russo, R. Silva-Valenzuela, E. Olate-Sanzana. Veamy: An Extensible Object-oriented C++ Library for the Virtual Element Method. *Numerical Algorithms* 82(4):1189-1220, 2019. Springer Nature Switzerland AG, Cham, Switzerland. ISSN 1017-1398.
 5. Cristobal Navarro, Benjamin Bustos, Nancy Hitschfeld. Analysis of a Self-Similar GPU Thread Map for Data-parallel m-Simplex Domains. In *Proc. International Conference on High Performance Computing & Simulation (HPCS)*, pp. 1002-1010, Jul 2019. Dublin, Ireland. IEEE Press, Piscataway, NJ, USA. ISBN 978-1-7281-4484-9.

Year 2020

1. Carla Sepúlveda-Díaz, Elson Stuardo Rojas, Jocelyn Simmonds, Francisco Gutierrez, Nancy Hitschfeld, Cecilia Casanova, Cecilia Sotomayor. Lessons Learned from Introducing Preteens in Parent-Led Homeschooling to Computational Thinking. In *Proc. 51st ACM Technical Symposium on Computer Science Education (SIGCSE)*, pp. 65-71, Mar 2020. Portland, OR. ACM Press, New York, NY, USA.
2. Cristobal Navarro, Felipe A. Quezada, Nancy Hitschfeld, Raimundo Vega, Benjamin Bustos. Efficient GPU Thread Mapping on Embedded 2D Fractals. *Future Generation Computer Systems (FGCS)* 113:158-169, Dec 2020. Elsevier Science, Amsterdam, The Netherlands. ISSN 0167-739X.
3. Joaquin Torres, Nancy Hitschfeld, Rafael Ruiz, Alejandro Ortiz-Bernardin. Convex Polygon Packing Based Meshing Algorithm for Modeling of Rock and Porous Media. In *Proc. 5th International Conference on Computational Science (ICCS)*, pp. 257-269, Jun 2020. Amsterdam, the Netherlands. Springer, London, UK. Lecture Notes in Computer Science.
4. Héctor Ferrada, Cristobal Navarro, Nancy Hitschfeld. A Filtering Technique for Fast Convex Hull Construction in R. *Journal of Computational and Applied Mathematics (JCAM)* 364:article 112298, Jan 2020. Elsevier Science, Amsterdam, The Netherlands. ISSN 0377-0427.

5. R. Silva-Valenzuela, Alejandro Ortiz-Bernardin, N. Sukumar, Edoardo Artioli, Nancy Hitschfeld. A Nodal Integration Scheme for Meshfree Galerkin Methods using the Virtual Element Decomposition. *International Journal for Numerical Methods in Engineering (IJNME)* 121(10):2174-2205, May 2020. John Wiley & Sons, Hoboken, NJ, USA. ISSN 0029-5981.
6. Jorge Jara-Wilde, I. Castro, C.G. Lemus, Karina Palma, F. Valdes, Victor Castañeda, Nancy Hitschfeld, Miguel Concha, Steffen Haertel. Optimising Adjacent Membrane Segmentation and Parameterisation in Multicellular Aggregates by Piecewise Active Contours. *Journal of Microscopy (JMI)* 278(2):59-75, May 2020. John Wiley & Sons, Hoboken, NJ, USA. ISSN 0022-2720.
7. Amin Hekmatnejad, Benoit Crespín, Alvaro Opazo, Xavier Emery, Nancy Hitschfeld, Davide Elmo. Investigating the Impact of the Estimation Error of Fracture Intensity (P 32) on the Evaluation of In-situ Rock Fragmentation and Potential of Blocks Forming around Tunnels. *Tunnelling and Underground Space Technology* 106:article 103596, Dec 2020. Elsevier Science, Amsterdam, The Netherlands. ISSN 0886-7798.

Year 2021

1. Jocelyn Simmonds, Cecilia Bastarrica, Nancy Hitschfeld. Impact of Affirmative Action on Female Computer Science/Software Engineering Undergraduate Enrollment. *IEEE Software* 38(2):32-37, Mar 2021. IEEE Press, Piscataway, NJ, USA. ISSN 0740-7459.
2. Claudio Lobos, Cristopher Arenas, Esteban Daines, Nancy Hitschfeld. Measuring Geometrical Quality of Different 3D Linear Element Types. *Numerical Algorithms* 90(1):423-446, Oct 2021. Springer Nature Switzerland AG, Cham, Switzerland. ISSN 1017-1398.

Year 2022

1. Sergio Salinas, Nancy Hitschfeld, Alejandro Ortiz-Bernardin, Hang Si. POLYLLA: Polygonal Meshing Algorithm based on Terminal-Edge Regions. *Engineering with Computers (EWC)*, Mar 2022. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 0177-0667.
2. Felipe Quezada, Cristobal Navarro, Nancy Hitschfeld, Benjamin Bustos. Squeeze: Efficient Compact Fractals for Tensor Core GPUs. *Future Generation Computer Systems (FGCS)* 135(2022):10-19, May 2022. Elsevier Science, Amsterdam, The Netherlands. ISSN 0167-739X.
3. Pablo Pizarro, Nancy Hitschfeld, Iván Sipirán, Jose Saavedra. Automatic Floor Plan Analysis and Recognition. *Automation in Construction* 140:article 104348, Jun 2022. Elsevier Science, Amsterdam, The Netherlands.
4. Jocelyn Simmonds, Francisco Gutierrez, Nancy Hitschfeld, Catalina Torrent, Cecilia Casanova, Sebastián Toro-Guajardo, Valentín Muñoz. A Model for Infusing Computational Thinking Skills at Teacher Colleges in a Developing Country. In *Proc. 17th Workshop in Primary and*

Secondary Computing Education (WiPSCE), pp. article 17, 2022. Morscharch, Switzerland. ACM Press, New York, NY, USA.

5. Heinich Porro, Benoit Crespín, Nancy Hitschfeld, Cristobal Navarro. Fixed-Radius Near Neighbors Searching for 2D Simulations on the GPU using Delaunay Triangulations. In *Proc. 43th Annual Conference of the European Association for Computer Graphics (Eurographics)*, pp. 2, Mar 2022. Reims Champagne-Ardenne. Eurographics Association.

Year 2023

1. Cristobal Navarro, Felipe Quezada, Benjamin Bustos, Nancy Hitschfeld, Rolando Kindelan. A Scalable and Energy Efficient GPU Thread Map for m-Simplex Domains. *Future Generation Computer Systems (FGCS)* 141:651-662, Apr 2023. Elsevier Science, Amsterdam, The Netherlands. ISSN 0167-739X.
2. Heinich Porro, Benoit Crespín, Nancy Hitschfeld, Cristobal Navarro, Francisco Carter. Maintaining 2D Delaunay Triangulations on the GPU for Proximity Queries of Moving Points. In *Proc. 31st SIAM International Meshing Roundtable Workshop (IMR)*, pp. 5, Mar 2023. Amsterdam, The Netherlands. Elsevier Science, Amsterdam, The Netherlands.
3. Alejandro López-Ortiz, R. Silva-Valenzuela, Sergio Salinas, Nancy Hitschfeld, Sebastian Luza, Bruno Rebolledo. Node-based Uniform Strain Virtual Element Method for Compressible and Nearly Incompressible Elasticity. *International Journal for Numerical Methods in Engineering (IJNME)* 124(8):1697-1927, Apr 2023. John Wiley & Sons, Hoboken, NJ, USA. ISSN 0029-5981.
4. Valeria Guidotti, Rodrigo Alonso, Matias Bravo, Nancy Hitschfeld, Gabriel Marinello, Carlos Hervias, Luis Campusano B.. Delfin++: A Delaunay based Algorithm for Finding 3D Polyhedral Voids in Galaxy Surveys. *Astronomy and Computing* 44(article 100713), Jul 2023. Elsevier Science, Amsterdam, The Netherlands. ISSN 2213-1337.
5. Rolando Kindelan, Jose Frias, Mauricio Cerda, Nancy Hitschfeld. A Topological Data Analysis based Classifier. *Advances in Data Analysis and Classification (ADAC)*, 2023. Springer, New York, NY, USA. ISSN 1862-5347.
6. Pablo Pizarro, Nancy Hitschfeld, Iván Sipirán. Large-Scale Multi-Unit Floor Plan Dataset for Architectural Plan Analysis and Recognition. *Automation in Construction* 156:article 105132, Dec 2023. Elsevier Science, Amsterdam, The Netherlands.
7. Jorge Diaz, Claudio Lobos, Nancy Hitschfeld. Node-Based Data Structure for Balancing Process Optimization of Quadtree Meshes. In *Proc. 42nd Proceedings of the International Conference of the Chilean Computer Science Society (SCCC)*, Oct 2023. Concepción, Chile. IEEE Computer Society Press, Los Alamitos, CA, USA.
8. Sergio Salinas, José Fuentes, Nancy Hitschfeld. Generation of Polygonal Meshes in Compact Space. In *Proc. 31st SIAM International Meshing Roundtable Workshop (IMR)*, pp. 3-22, Mar 2023. Amsterdam, The Netherlands. Elsevier Science, Amsterdam, The Netherlands.

Year 2024

1. Roberto Carrasco, Héctor Ferrada, Cristobal Navarro, Nancy Hitschfeld. An Evaluation of GPU filters for Accelerating the 2D Convex Hull. *Journal of Parallel and Distributed Computing (JPDC)* 184:article 104793, Feb 2024. Elsevier Science, Amsterdam, The Netherlands. ISSN 0743-7315.
2. Rolando Kindelan, Mircea Petrache, Mauricio Cerda, Nancy Hitschfeld. A Class of Topological Pseudodistances for Fast Comparison of Persistence Diagrams. In *Proc. 38th Annual AAAI Conference on Artificial Intelligence (AAAI)*, pp. 13202-13210, Feb 2024. Vancouver, Canada. Association for the Advancement of Artificial Intelligence, www.aaai.org.
3. Jocelyn Simmonds, Cecilia Bastarrica, Nancy Hitschfeld, Pablo Villar Mascaró, Diego Wistuba, Jo Muñoz Montenegro, Millaray Cárdenas. Rethinking Gender Diversity and Inclusion Initiatives for CS and SE in a University Setting. In *Equity, Diversity, and Inclusion in Software Engineering. Best Practices and Insights*, pp. 399-412, Sep 2024. Apress, One New York Plaza, Suite 4600, New York.
4. Jocelyn Simmonds, Nancy Hitschfeld, Cecilia Casanova, Valentín Muñoz, Catalina Torrent, Eliana Scheihing, Valeria Henriquez, Paulo Contreras, Daniel Estrada, Karen Mercado, Lucia Marquez. Designing Project-based learning experiences to integrate Computational Thinking skills at Teacher Colleges. In *Proc. 19th Workshop in Primary and Secondary Computing Education (WiPSCE)*, pp. article 38, Sep 2024. ACM Press, New York, NY, USA.
5. Cristobal Navarro, Felipe Quezada, enzo menseses, Héctor Ferrada, Nancy Hitschfeld. CAT: Cellular Automata on Tensor Cores. *IEEE Transactions on Parallel and Distributed Systems (TPDS)* 36(2):341-355, Dec 2024. IEEE Computer Society Press, Los Alamitos, CA, USA. ISSN 1045-9219.

Year 2025

1. Pedro Sanzana, Antonio Torga, Nancy Hitschfeld, Claudio Lobos. GeoLinkage2.0 and GeoChecker: Hydroinformatics Tools for Large and Complex Hydrological-Hydrogeological Models using WEAP- MODFLOW. Case Study: Severe Drought in the Limarí River Basin, Chile. In *Proc. European Geosciences Union (EGU)*, Apr 2025. Vienna, Austria.
2. Sergio Salinas, Magdalena Alvarez, Nancy Hitschfeld. Exploring Polyhedral Mesh Generation from Delaunay Tetrahedral Meshes. In *Proc. 33rd SIAM International Meshing Roundtable Workshop (IMR)*, Mar 2025. Fort Worth, TX, USA. Elsevier Science, Amsterdam, The Netherlands.