

CURRICULUM VITAE

NAME

Dr. Paulovich, Fernando Vieira

CONTACT INFORMATION

Address

Primary Affiliation	Dalhousie University, Goldberg Computer Science Building, 6050 University Avenue, PO BOX 15000 Halifax, Nova Scotia, Canada, B3H 4R2
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EDUCATION

Degrees

**Doctorate, Ph.D. Computer Science and Computational Mathematics, Computer Science, Mapping
Multidimensional Data - Integrating Mining and Visualization (Completed) Apr. 2005 - Oct. 2008**

Universidade de Sao Paulo, Brazil, Academic

Supervisors: Rosane Minghim (2005/4 - 2008/10)

Master's Thesis, M.Sc. Computer Science, Computer Science, An Approach to Develop Distributed Systems based on Components (Completed) Mar. 2001 - Feb. 2003

Federal University of São Carlos, Brazil, Academic

Supervisors: Wanderley Lopes de Souza (2001/3 - 2003/2)

Bachelor's, B.Sc. Computer Science, Computer Science (Completed) **Mar. 1997 - Dec. 2000**

Federal University of São Carlos, Brazil, Academic

Credentials

Associate Professor **Apr. 2017**

Dalhousie University, Nova Scotia, Canada, Academic

Associate Professor **Nov. 2014 - Mar. 2017**

Universidade de Sao Paulo, Brazil, Academic

Assistant Professor Jul. 2009 - Oct. 2014

Universidade de Sao Paulo, Brazil, Academic

Lecturer	Feb. 2003 - Jul. 2008
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Gennari & Peartree College, Brazil, Academic

RECOGNITIONS

Prize / Award, Honorable mention award for the paper "Concentric Radviz: Visual Exploration of Multi-task Classification", 2015 **Aug. 2015**

Conference on Graphics, Patterns and Images (SIBGRAPI)

Best paper award

Prize / Award, Research Productivity Fellowship, level 2, 2015

Feb. 2015 - Jan. 2018

CNPq, Brazil, Research

Brazilian grant based on productivity

Prize / Award, Research Productivity Fellowship, level 2, 2012

Feb. 2012 - Jan. 2015

CNPq, Brazil, Research

Brazilian grant based on productivity

Prize / Award, Honorable Mention Award for the paper "Local Affine Multidimensional Projection", 2011
Oct. 2011

IEEE Information Visualization Conference

Best paper award

Prize / Award, Second best work award in the Ph.D. category, 2009

Oct. 2009

Workshop of Theses and Dissertations (SIBGRAPI)

Award for the best PhD thesis from the Brazilian Steering Committee on Computer Graphics and Image Processing

Prize / Award, Second place on the Competition of Thesis and Dissertations, 2009

Jul. 2009

Brazilian Computer Society (SBC)

Award for the best PhD thesis from the Brazilian Computer Society

EMPLOYMENT

Academic Work Experience

Associate Professor, Associate Professor (Full-time)

Apr. 2017

Faculty Computer Science, Dalhousie University, Nova Scotia, Canada, Academic

Associate Professor, Associate Professor (Full-time)

Nov. 2014 - Mar. 2017

Computer Science, Universidade de Sao Paulo, Brazil, Academic

Assistant Professor, Assistant Professor (Full-time)

Jul. 2009 - Oct. 2014

Computer Science, Universidade de Sao Paulo, Brazil, Academic

Lecturer, Lecturer (Part-time)

Feb. 2003 - Jul. 2008

Informatics, Gennari & Peartree College, Academic

Non-academic Work Experience

Software Analyst (Full-time)

Feb. 2003 - Jan. 2004

Eldorado Research Institute (Motorola), Brazil, Research

Affiliations

Associate Professor and Canada Research Chair in Data Visualization Tier II

Apr. 2017

Faculty Computer Science, Dalhousie University, Nova Scotia, Canada, Academic

Associate professor
Computer Science, Universidade de Sao Paulo, Brazil, Academic

Nov. 2014 - Mar. 2017

Assistant professor
Computer Science, Universidade de Sao Paulo, Brazil, Academic

Jul. 2009 - Oct. 2014

Lecturer
Gennari & Peartree College, Academic

Feb. 2003 - Jul. 2008

RESEARCH FUNDING HISTORY

Principal Investigator, Scholarship, Mitacs Accelerate Proposal (Awarded)

Sep. 2018 - Aug. 2020

Clinical Research Project: No

Funding Sources

- Mitacs: Mitacs Accelerate Proposal #IT12193 (2018/9 - 2020/8) Total: \$90,000.00 (Canadian dollar)

Principal Investigator, Operating Grant, Visual analytics for time-dependent data (Awarded) Apr. 2018 - Mar. 2023

Clinical Research Project: No

Funding Sources

- Natural Sciences and Engineering Research Council of Canada (NSERC): Discovery Grants Program #RGPIN-2018-05508 (2018/4 - 2023/3) Total: \$140,000.00 (Canadian dollar), (competitive)

Principal Investigator, Operating Grant, Visual Data Analysis for Advanced Composite Materials Quality Control (Awarded) Mar. 2018 - Aug. 2018

Clinical Research Project: No

Funding Sources

- NSERC's Industrial Research Chair in Peatland management: Visual Data Analysis for Advanced Composite Materials Quality Control #EGP 521665 - 17 (2018/3 - 2018/8) Total: \$25,000.00 (Canadian dollar)

Principal Investigator, Research Chair, Tier II Canada Research Chair in Data Visualization (Awarded) Apr. 2017 - Mar. 2022

Funding Sources

- Natural Sciences and Engineering Research Council of Canada (NSERC) (2017/4 - 2022/3) Total: \$500,000.00 (Canadian dollar) Received: \$425,000.00, (competitive)

Principal Investigator, Equipment Grant, Visualization and Visual Analytics Facility (Awarded) Jan. 2017 - Jan. 2022

Funding Sources

- Canada Foundation for Innovation (CFI): John R. Evans Leaders Fund (2017/4 - 2022/3) Total: \$131,761.00 (Canadian dollar) Received: \$131,761.00, (competitive)

Co-investigator, Grant, Challenges on Exploratory Visualization of Multidimensional Datasets: new Paradigms, Scalability and Applications (Completed) Jan. 2012 - Jan. 2016

Funding Sources

- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) (State of São Paulo Research Foundation): Thematic (2012/1 - 2016/1) Total: \$526,928.00 (Brazilian real) Received: \$50,000.00, (competitive)

Co-applicant, Fellowship, M.Sc. scholarships (Completed)

Jan. 2011 - Jan. 2016

Funding Sources

- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) (State of São Paulo Research Foundation) (2011/1 - 2016/1) Total: \$252,000.00 (Brazilian real) Received: \$252,000.00, (competitive)

Co-applicant, Fellowship, Ph.D. scholarships (Completed)

Jan. 2011 - Jan. 2016

Funding Sources

- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) (State of São Paulo Research Foundation) (2011/1 - 2016/1) Total: \$345,600.00 (Brazilian real) Received: \$345,600.00, (competitive)

Co-applicant, Fellowship, Undergraduate scientific initiation scholarships (Completed)

Jan. 2011 - Jan. 2016

Funding Sources

- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) (State of São Paulo Research Foundation) (2009/1 - 2016/1) Total: \$72,600.00 (Brazilian real) Received: \$72,600.00, (competitive)

Co-investigator, Grant, Information Visualization based on Shapes and Images (Completed) Jan. 2011 - Jan. 2013

Funding Sources

- Foundation for the Coordination of Higher Education and Graduate Training (CAPES Foundation) (Brazil): CAPES/NUFFIC (2011/1 - 2013/1) Total: \$120,000.00 (Brazilian real) Received: \$50,000.00, (competitive)

Principal Investigator, Grant, VolVis: Exploring Large Time-varying Multidimensional Volumetric Datasets using Multidimensional Projection (Completed) Jan. 2010 - Jan. 2012

Funding Sources

- Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) (State of São Paulo Research Foundation) (2010/1 - 2012/1) Total: \$38,994.00 (Brazilian real) Received: \$38,994.00, (competitive)

Co-investigator, Grant, Exploratory Visualization of Multidimensional Volumetric Datasets (Completed) Jan. 2010 - Jan. 2012

Funding Sources

- Foundation for the Coordination of Higher Education and Graduate Training (CAPES Foundation) (Brazil): CAPES/DAAD (2010/1 - 2012/1) Total: \$45,000.00 (Brazilian real) Received: \$20,000.00, (competitive)

Collaborator, Grant, Nanostructured films with materials of biological interest: emphasis on membrane models and biosensors (Completed) Jan. 2009 - Jan. 2013

Funding Sources

- Foundation for the Coordination of Higher Education and Graduate Training (CAPES Foundation) (Brazil): Thematic (2009/1 - 2013/1) Total: \$2,254,531.00 (Brazilian real) Received: \$5,000.00, (competitive)

PUBLICATIONS

Journal Articles

1. Paulovich, Fernando V, de Oliveira, Maria Cristina Ferreira, Oliveira, Osvaldo Novais. (2018). A future with ubiquitous sensing and intelligent systems. *ACS sensors*, 3(8), 1433-1438.
2. Lais R. Lima, Alem-Mar B. Gonçalves, Fernando V. Paulovich, Osvaldo N. Oliveira Jr., Sidney J. L. Ribeiro, Marli L. Moraes. (2018). Electrical Immunosensor Made with Antigenic Peptide NS5A-1 Immobilized onto Silk Fibroin for Diagnosing Hepatitis C. *Journal of the Brazilian Chemical Society*, 29(10), 2054-2059.
3. Neves, Tácito TAT, Fadel, Samuel G, Hilasaca, Gladys M, Fatore, Francisco M, Paulovich, Fernando V. (2017). UPDis: A user-assisted projection technique for distance information. *Information Visualization*, 1-13. (In Press)
4. Daikuzono, Cristiane Margarete, Shimizu, Flavio Makoto, Manzoli, Alexandra, Riul, Antonio, de Oliveira Piazzetta, Maria Helena, Gobbi, Angelo Luiz, Correa, Daniel S, Paulovich, Fernando V, Oliveira, Osvaldo Novais, Jr. (2017). Information Visualization and Feature Selection Methods Applied to Detect

- Gliadin in Gluten-Containing Foodstuff with a Microfluidic Electronic Tongue. *ACS Applied Materials & Interfaces*, 9(23), 19646–19652.
5. Barbosa, Adriano, Paulovich, Fernando Vieira, Paiva, Afonso, Goldenstein, Siome, Petronetto, Fabiano, Nonato, Luis Gustavo. (2016). Visualizing and interacting with kernelized data. *IEEE transactions on visualization and computer graphics*, 22(3), 1314-1325.
 6. Coimbra, Danilo B, Martins, Rafael M, Neves, Tácito TAT, Telea, Alexandru C, Paulovich, Fernando V. (2016). Explaining three-dimensional dimensionality reduction plots. *Information Visualization*, 15(2), 154-172.
 7. Rubira, Rafael JG, Camacho, Sabrina A, Aoki, Pedro HB, Paulovich, Fernando V, Oliveira, Osvaldo N, Constantino, Carlos JL. (2016). Probing trace levels of prometryn solutions: from test samples in the lab toward real samples with tap water. *Journal of materials science*, 51(6), 3182-3190.
 8. Rodrigues Jr, Jose F, Paulovich, Fernando V, de Oliveira, Maria CF, de Oliveira Jr, Osvaldo N. (2016). On the convergence of nanotechnology and Big Data analysis for computer-aided diagnosis. *Nanomedicine*, 11(8), 959-982.
 9. Maximino, Mateus D, Dassi, Martin, Cibely Silva, Paulovich, Fernando Vieira, Alessio, Priscila. (2016). Layer-by-Layer Thin Film of Iron Phthalocyanine as a Simple and Fast Sensor for Polyphenol Determination in Tea Samples. *Journal of Food Science*, 81(10), C2344–C2351.
 10. Cantareira, Gabriel Dias, Nonato, Luis Gustavo, Paulovich, Fernando V. (2016). MoshViz: A Detail+ Overview approach to visualize music elements. *IEEE Transactions on Multimedia*, 18(11), 2238-2246.
 11. Neves, Tácito T, Fadel, Samuel G, Coimbra, Danilo B, Paulovich, Fernando Vieira, others. (2015). Análise visual utilizando projeções multidimensionais. *Revista de Informática Teórica e Aplicada-RITA*, 22(2), 258-288.
 12. Pagliosa, Paulo, Paulovich, Fernando V, Minghim, Rosane, Levkowitz, Haim, Nonato, Luis Gustavo. (2015). Projection inspector: Assessment and synthesis of multidimensional projections. *Neurocomputing*, 150, 599-610.
 13. Fadel, Samuel G, Fatore, Francisco M, Duarte, Felipe SLG, Paulovich, Fernando V. (2015). LoCH: A neighborhood-based multidimensional projection technique for high-dimensional sparse spaces. *Neurocomputing*, 150, 546-556.
 14. Oliveira Jr, Antonio B, Fatore, Francisco M, Paulovich, Fernando V, Oliveira Jr, Osvaldo N, Leite, Vitor BP. (2014). Visualization of protein folding funnels in lattice models. *PloS one*, 9(7), e100861.
 15. Rubira, Rafael JG, Camacho, Sabrina A, Aoki, Pedro HB, Maximino, Mateus D, Alessio, Priscila, Martin, Cibely S, Oliveira, Osvaldo N, Fatore, Francisco M, Paulovich, Fernando V, Constantino, Carlos JL. (2014). Detection of trace levels of atrazine using surface-enhanced Raman scattering and information visualization. *Colloid and Polymer Science*, 292(11), 2811-2820.
 16. Duarte, Felipe SLG, Sikansi, Fabio, Fatore, Francisco M, Fadel, Samuel G, Paulovich, Fernando V. (2014). Nmap: A novel neighborhood preservation space-filling algorithm. *IEEE transactions on visualization and computer graphics*, 20(12), 2063-2071.
 17. Oliveira, Osvaldo N, Jr, Neves, Tácito TAT, Paulovich, Fernando V, de Oliveira, Maria Cristina F. (2014). Where chemical sensors may assist in clinical diagnosis exploring "big data. *Chemistry Letters*, 43(11), 1672-1679.
 18. Aoki, Pedro HB, Alessio, Priscila, Volpati, Diogo, Paulovich, Fernando V, Riul, Antonio, Oliveira, Osvaldo N, Constantino, Carlos JL. (2014). On the distinct molecular architectures of dipping-and spray-LbL films containing lipid vesicles. *Materials Science and Engineering: C*, 41, 363-371.
 19. Aoki, Pedro HB, Alessio, Priscila, Furini, Leonardo N, Constantino, Carlos JL, Neves, Tácito TAT, Paulovich, Fernando V, De Oliveira, Maria Cristina F, Oliveira Jr, Osvaldo N. (2013). Molecularly designed layer-by-layer (LbL) films to detect catechol using information visualization methods. *Langmuir*, 29(24), 7542-7550.
 20. Aoki, Pedro HB, Carreon, Eduardo GE, Volpati, Diogo, Shimabukuro, Milton H, Constantino, Carlos JL, Aroca, Ricardo F, Oliveira Jr, Osvaldo N, Paulovich, Fernando V. (2013). SERS mapping in Langmuir-Blodgett films and single-molecule detection. *Applied spectroscopy*, 67(5), 563-569.
 21. Mamani, Gladys MH, Fatore, Francisco M, Nonato, Luis Gustavo, Paulovich, Fernando Vieira. (2013). User-driven Feature Space Transformation. *Computer Graphics Forum*, 32(3), 291-299.

22. Oliveira, Osvaldo N, Pavinatto, Felipe J, Constantino, Carlos JL, Paulovich, Fernando V, de Oliveira, Maria Cristina F. (2012). Information visualization to enhance sensitivity and selectivity in biosensing. *Biointerphases*, 7(1-4), 1-15.
23. Paulovich, Fernando V, Silva, Cláudio T., Nonato, Luis Gustavo. (2012). User-centered multidimensional projection techniques. *Computing in Science & Engineering*, 14(4), 74-81.
24. Alencar, Aretha B, de Oliveira, Maria Cristina F, Paulovich, Fernando V. (2012). Seeing beyond reading: a survey on visual text analytics. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, 2(6), 476-492.
25. Paulovich, Fernando V, Toledo, Franklina, Telles, Guilherme P, Minghim, Rosane, Nonato, Luis Gustavo. (2012). Semantic wordification of document collections. *Computer Graphics Forum*, 31(3), 1145-1153.
26. Martins, Rafael Messias, Andery, Gabriel Faria, Heberle, Henry, Paulovich, Fernando Vieira, de Andrade Lopes, Alneu, Pedrini, Helio, Minghim, Rosane. (2012). Multidimensional projections for visual analysis of social networks. *Journal of Computer Science and Technology*, 27(4), 791-810.
27. Felizardo, Katia R, Andery, Gabriel F, Paulovich, Fernando V, Minghim, Rosane, Maldonado, José C. (2012). A visual analysis approach to validate the selection review of primary studies in systematic reviews. *Information and Software Technology*, 54(10), 1079-1091.
28. Moraes, Marli L, Petri, Lais, Oliveira, Victor, Olivati, Clarissa A, de Oliveira, Maria Cristina F, Paulovich, Fernando V, Oliveira, Osvaldo N, Ferreira, Marystela. (2012). Detection of glucose and triglycerides using information visualization methods to process impedance spectroscopy data. *Sensors and Actuators B: Chemical*, 166, 231-238.
29. Poco, Jorge, Eler, Danilo M, Paulovich, Fernando V, Minghim, Rosane. (2012). Employing 2d projections for fast visual exploration of large fiber tracking data. *Computer Graphics Forum*, 31(3), 1075-1084.
30. Joia, Paulo, Coimbra, Danilo, Cuminato, Jose A, Paulovich, Fernando V, Nonato, Luis G. (2011). Local affine multidimensional projection. *IEEE Transactions on Visualization and Computer Graphics*, 17(12), 2563-2571.
31. Volpati, Diogo, Aoki, Pedro HB, Dantas, Cleber AR, Paulovich, Fernando V, de Oliveira, Maria Cristina F, Oliveira Jr, Osvaldo N, Riul Jr, Antonio, Aroca, Ricardo F, Constantino, Carlos JL. (2011). Toward the optimization of an e-tongue system using information visualization: a case study with perylene tetracarboxylic derivative films in the sensing units. *Langmuir*, 28(1), 1029-1040.
32. Paulovich, Fernando Vieira, Eler, Danilo Medeiros, Poco, Jorge, Botha, Charl P, Minghim, Rosane, Nonato, Luis Gustavo. (2011). Piece wise Laplacian-based Projection for Interactive Data Exploration and Organization. *Computer Graphics Forum*, 30(3), 1091-1100.
33. Ersoy, Ozan, Hurter, Christophe, Paulovich, Fernando, Cantareiro, Gabriel, Telea, Alex. (2011). Skeleton-based edge bundling for graph visualization. *IEEE Transactions on Visualization and Computer Graphics*, 17(12), 2364-2373.
34. Poco, Jorge, Etemadpour, Ronak, Paulovich, Fernando Vieira, Long, TV, Rosenthal, Paul, Oliveira, Maria Cristina Ferreira de, Linsen, Lars, Minghim, Rosane. (2011). A framework for exploring multidimensional data with 3D projections. *Computer Graphics Forum*, 30(3), 1111-1120.
35. Paulovich, Fernando V, Moraes, Marli L, Maki, Rafael Mitsuo, Ferreira, Marystela, Oliveira Jr, Osvaldo N, de Oliveira, Maria Cristina F. (2011). Information visualization techniques for sensing and biosensing. *Analyst*, 136(7), 1344-1350.
36. Paulovich, Fernando V, Maki, Rafael M, de Oliveira, Maria CF, Colhone, Marcelle C, Santos, Fabiana R, Migliaccio, Vanessa, Ciancaglini, Pietro, Perez, Katia R, Stabeli, Rodrigo G, Perinoto, Angelo C, others. (2011). Using multidimensional projection techniques for reaching a high distinguishing ability in biosensing. *Analytical and bioanalytical chemistry*, 400(4), 1153.
37. Paulovich, Fernando V, Silva, Claudio T, Nonato, Luis G. (2010). Two-phase mapping for projecting massive data sets. *IEEE Transactions on Visualization and Computer Graphics*, 16(6), 1281-1290.
38. Perinotto, Angelo Cesar, Maki, Rafael Mitsuo, Colhone, Marcelle C, Santos, Fabiana R, Migliaccio, Vanessa, Daghasanli, Katia R, Stabeli, Rodrigo G, Ciancaglini, Pietro, Paulovich, Fernando Vieira, Oliveira, Maria Cristina Ferreira de, others. (2010). Biosensors for efficient diagnosis of leishmaniasis: innovations in bioanalytics for a neglected disease. *Analytical chemistry*, 82(23), 9763-9768.
39. Moraes, Marli L, Maki, Rafael M, Paulovich, Fernando V, Rodrigues Filho, Ubirajara P, de Oliveira, Maria Cristina F, Riul Jr, Antonio, de Souza, Nara C, Ferreira, Marystela, Gomes, Henrique L, Oliveira Jr,

- Osvaldo N. (2010). Strategies to optimize biosensors based on impedance spectroscopy to detect phytic acid using layer-by-layer films. *Analytical chemistry*, 82(8), 3239-3246.
40. Siqueira Jr, Jose R, Maki, Rafael M, Paulovich, Fernando V, Werner, Carl F, Poghosian, Arshak, de Oliveira, Maria CF, Zucolotto, Valtencir, Oliveira Jr, Osvaldo N, Schöning, Michael J. (2009). Use of information visualization methods eliminating cross talk in multiple sensing units investigated for a light-addressable potentiometric sensor. *Analytical chemistry*, 82(1), 61-65.
41. Eler, Danilo M, Nakazaki, Marcel Y, Paulovich, Fernando V, Santos, Davi P, Andery, Gabriel F, Oliveira, Maria Cristina F, Batista Neto, João, Minghim, Rosane. (2009). Visual analysis of image collections. *The Visual Computer*, 25(10), 923-937.
42. Paulovich, Fernando V, Nonato, Luis G, Minghim, Rosane, Levkowitz, Haim. (2008). Least square projection: A fast high-precision multidimensional projection technique and its application to document mapping. *IEEE Transactions on Visualization and Computer Graphics*, 14(3), 564-575.
43. Paulovich, Fernando V, Minghim, Rosane. (2008). Hipp: A novel hierarchical point placement strategy and its application to the exploration of document collections. *IEEE Transactions on Visualization and Computer Graphics*, 14(6), 1229-1236.
44. Lopes, AA, Pinho, Roberto, Paulovich, Fernando Vieira, Minghim, Rosane. (2007). Visual text mining using association rules. *Computers & Graphics*, 31(3), 316-326.
45. Telles, Guilherme P, Minghim, Rosane, Paulovich, Fernando Vieira. (2007). Normalized compression distance for visual analysis of document collections. *Computers & Graphics*, 31(3), 327-337.
46. Lima, Lais R, Gonçalves, Alem-Mar B, Paulovich, Fernando V, Oliveira Jr, Osvaldo N, Ribeiroa, Sidney JL, Moraes, Marli L. Electrical Immunosensor Made with Antigenic Peptide NS5A-1 Immobilized onto Silk Fibroin for Diagnosing Hepatitis C.

Conference Publications

1. Ono, Jorge Henrique Piazzentin, Sikansi, Fabio, Corrêa, Débora Cristina, Paulovich, Fernando Vieira, Paiva, Afonso, Nonato, Luis Gustavo. (2015). Concentric RadViz: visual exploration of multi-task classification. In *28th SIBGRAPI Conference on Graphics, Patterns and Images (SIBGRAPI)* (p. 165-172).
2. Fadel, Samuel Gomes, Paulovich, Fernando Vieira, others. (2015). On the effectiveness of user manipulation in multidimensional projections. In *Conference on Graphics, Patterns and Images, XXVIII; Workshop on Visual Analytics, Information Visualization and Scientific Visualization, VI*.
3. Sikansi, Fábio Henrique Gomes, Paulovich, Fernando Vieira, others. (2015). Using phylogenetic trees to generate semantic meaningful edge bundles. In *Conference on Graphics, Patterns and Images, XXVIII; Workshop on Visual Analytics, Information Visualization and Scientific Visualization, VI*.
4. Soriano, Aurea, Paulovich, Fernando, Nonato, Luis Gustavo, Oliveira, Maria Cristina F. (2014). Visualization of music collections based on structural content similarity. In *27th SIBGRAPI Conference on Graphics, Patterns and Images (SIBGRAPI)* (p. 25-32).
5. Soriano, Aurea, Paulovich, Fernando, Nonato, L, Oliveira, M. (2014). Visualization of music collections based on structural similarity. In *SIBGRAPI 2014*.
6. Santos, TS Reis, Paulovich, Fernando Vieira, Molchanov, Vladimir, Linsen, Lars, de Oliveira, Maria Cristina Ferreira. (2013). Visualizing Temporal Behavior in Multifield Particle Simulations. In *GRAPP/IVAPP* (p. 573-582).
7. Toosi, Farshad Ghassemi, Paulovich, Fernando V, Hütt, Marc-Torsten, Linsen, Lars. (2012). Projection-based visualization of dynamical processes on networks. In *EuroVis-Short Papers* (p. 61-65).
8. Casaca, Wallace, Gomez-Nieto, Erick, Ferreira, Cynthia OL, Tavares, Geovan, Pagliosa, Paulo, Paulovich, Fernando, Nonato, Luis Gustavo, Paiva, Afonso. (2012). Colorization by multidimensional projection. In *25th SIBGRAPI Conference on Graphics, Patterns and Images (SIBGRAPI)* (p. 32-38).
9. Alencar, Aretha B, Börner, Katy, Paulovich, Fernando V, de Oliveira, Maria Cristina F. (2012). Time-aware visualization of document collections. In *27th Annual ACM Symposium on Applied Computing* (p. 997-1004).
10. Brandoli, Bruno, Eler, Danilo, Paulovich, Fernando, Minghim, Rosane, Batista, Joao. (2010). Visual data exploration to feature space definition. In *23rd SIBGRAPI Conference on Graphics, Patterns and Images (SIBGRAPI)* (p. 32-39).

11. Eler, Danilo Medeiros, Paulovich, Fernando Vieira, de Oliveira, Maria Cristina Ferreira, Minghim, Rosane. (2009). Topic-based coordination for visual analysis of evolving document collections. In *13th International Conference Information Visualisation* (p. 149-155).
12. Alencar, Aretha Barbosa, Paulovich, Fernando Vieira, Minghim, Rosane, de Andrade Filho, Marinho Gomes, de Oliveira, Maria Cristina Ferreira. (2008). Similarity-based visualization of time series collections: An application to analysis of streamflows. In *12th International Conference Information Visualisation* (p. 280-286).
13. Eler, Danilo Medeiros, Paulovich, Fernando Vieira, de Oliveira, Maria Cristina Ferreira, Minghim, Rosane. (2008). Coordinated and multiple views for visualizing text collections. In *12th International Conference Information Visualisation* (p. 246-251).
14. Eler, Danilo M, Nakazaki, Marcel Y, Paulovich, Fernando V, Santos, Davi P, Oliveira, M Cristina F, Neto, Joao ES Batista, Minghim, Rosane. (2008). Multidimensional visualization to support analysis of image collections. In *XXI Brazilian Symposium on Computer Graphics and Image Processing* (p. 289-296).
15. Paulovich, Fernando V, Pinho, Roberto, Botha, Charl P, Heijs, Anton, Minghim, Rosane. (2008). PEx-WEB: Content-based visualization of web search results. In *12th International Conference Information Visualisation* (p. 208-214).
16. Paulovich, Fernando V, Oliveira, Maria Cristina F, Minghim, Rosane. (2007). The projection explorer: A flexible tool for projection-based multidimensional visualization. In *XX Brazilian Symposium on Computer Graphics and Image Processing* (p. 27-36).
17. Cuadros, Ana M, Paulovich, Fernando Vieira, Minghim, Rosane, Telles, Guilherme P. (2007). Point Placement by Phylogenetic Trees and its Application to Visual Analysis of Document Collections. In *IEEE VAST* (p. 99-106).
18. Muniz, Marcelo, Paulovich, Fernando V, Minghim, Rosane, Infante, Kleber, Muniz, Fernando, Vieira, Renata, Aluisio, Sandra. (2007). Taming the Tiger Topic: An XCES Compliant Corpus Portal to Generate Subcorpora Based on Automatic Text-Topic Identification. In *Corpus Linguistic Conference, Birmingham*.
19. Dias, Delane PO, Minghim, Rosane, Paulovich, Fernando V, Telles, Guilherme P. (2007). A tool for visualizing and analyzing EST collections. In *Brazilian Symposium on Bioinformatics* (p. 187).
20. Alencar, Aretha Barbosa, De Oliveira, Maria CF, Paulovich, Fernando Vieira, Minghim, Rosane, Andrade, Marinho Gomes de. (2007). Temporal-PEx: Similarity-based visualization of time series. In *Proc. 20th Brazilian Symp. Comp. Graph. and Image Processing, SIBGRAPI*.
21. Paulovich, Fernando Vieira, Minghim, Rosane. (2006). Text map explorer: a tool to create and explore document maps. In *Information Visualization, 2006. IV 2006. Tenth International Conference on* (p. 245-251).
22. Minghim, Rosane, Paulovich, Fernando V, de Andrade Lopes, Alneu. (2006). Content-based text mapping using multi-dimensional projections for exploration of document collections. In *Electronic Imaging 2006* (p. 60600S-60600S).
23. Paulovich, Fernando Vieira, Nonato, Luis Gustavo, Minghim, Rosane. (2006). Visual mapping of text collections through a fast high precision projection technique. In *Tenth International Conference on Information Visualization* (p. 282-290).
24. de Andrade Lopes, Alneu, Minghim, Rosane, Melo, Vinícius, Paulovich, Fernando V. (2006). Mapping texts through dimensionality reduction and visualization techniques for interactive exploration of document collections. In *Electronic Imaging 2006* (p. 60600T-60600T).