

# VITA

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## 1. Personal

**Name:** André Carlos Ponce de Leon Ferreira de Carvalho

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## 2. Education

Degree	Year	School
B.Sc. Computer Science	1987	Federal University of Pernambuco - Brazil
M.Sc. Informatics	1990	Federal University of Pernambuco - Brazil
Ph.D. Electronic Engineering	1994	University of Kent at Canterbury - England
Habilitation	1998	University of São Paulo - Brazil

## 3. Academic Positions

- Auxiliar Professor, Departament de Informatics, Catholic University of Pernambuco, Recife, Brazil, from 03/90 to 07/90.
- Teaching Assistant, Electronic Engineering Labs, University of Kent at Canterbury, Canterbury, UK, from 09/90 to 12/93.
- Pos-Doctorate, Departament of Computer Science and Statistics, University of Sao Paulo, Sao Carlos, Brazil, from 07/94 to 08/94.
- Assistant Professor (Hired in the University Program “Young Talents”), Departamento de Ciências de Computação e Estatística, University of Sao Paulo, Sao Carlos, Brazil, from 08/94 to 12/95.

- Assistant Professor, Departament of Computer Science and Statistics, University of Sao Paulo, Sao Carlos, Brazil, from 12/95 to 06/98.
- Associate Professor, Department of Computing and Information Science, University of Guelph, from 01/2000 to 12/2000. (on leave from USP)
- Associate Professor (with habillitation), Departament of Computer Science and Statistics, University of Sao Paulo, Sao Carlos, Brazil, from 06/98 (on leave from 01/2000 to 10/01/2001).
- Visiting Researcher, Laboratory of Artificial Intelligence and Data Analysis, LIAAD, Universidade do Porto, Portugal, from October 2005 to September 2006
- Full Professor, Departament of Computer Science and Statistics, University of Sao Paulo, from 09/2006
- Visiting Professor, School of Computing, University of Kent, UK from March 2010 to February 2011

## 4. Main interests

- Machine Learning
- Data Mining
- Data Streams
- Evolutionaty Computation
- Bioinformatics
- Hybrid Intelligent Systems
- Metalearning

## 5. Awards

- Hewlett-Packard Scientific Award 1998 as one of the best five papers in the 20th International Symposium on Capillary Chromatography, Paper title: Chemical Classification of Monoterpenes by Their Mass Spectra Using Artificial Neural Networks of the Multilayer Perceptron Model. Together with Airton Soares, F. Lanças, J. Vilegas, and Roseli Romero. Riva del Garda, Italy, May, 1998.
- Best paper of the Mexican Conference on Artificial Intelligence, with the work: Applying One-sided Selection to Unbalanced Datasets, Lecture Notes of Artificial Intelligence, Springer-Verlag. Together with Gustavo Batista and Maria Carolina Monard. Acapulco, Mexico, April 2000.
- Young researcher of the year, Secretary of Science and Tecnology of Sao Carlos, SP, Brazil, December 2000.
- Second best work in the XXV National Meeting of Condensed Material with the work Taste Sensor Based on Conducting Polymers. Together with A. Riul Jr., R. Malmegrin, L. H. C. Mattoso and H. de Souza. Caxambu, Brazil, May 2002.
- Third place in the II PUC-Rio award. Together with Antônio Valério Neto and Maria Cristina Ferreira. IV mostra PUC-Rio, Rio de Janeiro, Brazil, August 2002.
- Best oral paper in the IV National Meeting of Artificial Intelligence, ENIA'2003, Annual Conference of the Brazilian Computer Society. Together with Ronaldo Prati and Maria Carolina Monard. Campinas, Brazil, August 2003.

- National Team Prize (external collaborator), Category Venture Caption, Embrapa Instrumentação Agropecuária, Embrapa, August 2004.
- Supervisor of the 3rd best undergraduate work in the XXIV undergraduate work context of the Annual Conference of the Brazilian Computer Society. Together with Murilo Naldi. São Leopoldo, Brazil, July 2005.
- Best paper award 18<sup>th</sup> International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, IEA/AIE 2005. Together with Giampaolo Libralão and Osvaldo Almeida. Bari, Italy, June 2005.
- Supervisor of the 2<sup>nd</sup> best undergraduate work in the XXV undergraduate work context of the Annual Conference of the Brazilian Computer Society. Together with Bruno Nery, Rodrigo Mello. Campo Grande, Brazil, July 2006.
- Supervisor of the 2<sup>nd</sup> best MSc work in the V Best MSc dissertation/ PhD thesis contest - CTDIA'2006, IBERAMIA'2006. Together Bruno Feres de Souza. Ribeirão Preto, Brazil, October 2006.
- Supervisor of the 3rd best PhD work in the VII Best MSc dissertation/ PhD thesis contest - CTDIA'2008. Together with Mariá Nascimento and Franklin Toledo, São Bernardo, Brazil, October 2010.
- Honour mention as one of the best papers in the computing track of the SBGames. Together with Rosane Maffei. Florianópolis, Sociedade Brasileira de Computação, 2010.
- One of the authors of one of the three best works in the VIII Encontro Nacional de Inteligência Artificial, ENIA 2011, Sociedade Brasileira de Computação Congress. Together with Márcio Basgalupp, Marcio Quiles and Rodrigo Barros. Natal, Brazil, 2011.
- Best paper award in the GECCO'2012 Genetic and Evolutionary Computation Conference, in the IGEC+S\*S+SBSE ACM SIGEVO. Together with Rodrigo Barros, Marcio Basgalupp and Alex Freitas, Philadelphia, USA, 2012.
- Best paper award in the 2012, IEEE Conference on System, Man and Cybernetics, Together with Pericles Miranda, Ricardo Prudêncio and Carlos Soares, Seoul, South Korea, 2012
- Jabuti award for the best Brazilian Book in Technology and Informatics 2012, together with Katti Faceli, Ana Carolina Lorena and Joao Gama, Brazilian Book Board, São Paulo, Brazil, 2012.
- Best Paper award in the 2012 Brazilian Neural Networks Symposium, together with André Rossi and Carlos Soares, Curitiba, Brazil, 2012.
- Best Student Paper award in the 2013 IEEE Conference on Evolutionary Computation, CEC'2013. Together with Ricardo Cerri, Rodrigo Barros and Alex Freitas, Cancun, Mexico, 2013.

## **6. Publications**

### **6.1. Books written**

#### **6.1.1. National**

- 1 Braga, A., Carvalho, A. C. P. F. and Ludermir, T.: Fundamentos de Redes Neurais (in Portuguese) (translation: Neural Networks Foundations). Published by COPPE/UFRJ for the XI Brazilian Computing School, Rio de Janeiro, Brazil, July 1998.
- 2 Braga, A., Ludermir, T. and Carvalho, A. C. P. F.: Redes Neurais Artificiais: Teoria e Aplicações (in Portuguese) (translation: Artificial Neural Networks: Theory and Applications). ISBN 9788521612184. Published by LTC Press, Rio de Janeiro, Brazil, February, 2000 (Update and extension of the previous book). 262 pages
- 3 Braga, A., Carvalho, A. C. P. F. and Ludermir, T.: Redes Neurais Artificiais: Teoria e Aplicações (in Portuguese) (translation: Artificial Neural Networks: Theory and Applications). ISBN 9788521615644. Published by LTC Press, Rio de Janeiro, Brazil, February, 2007 (Second edition - update and extension of the previous book). 226 pages
- 4 Faceli, K., Lorena, A. C., Gama, J. and Carvalho, A. C. P. F.: Inteligência Artificial Uma abordagem de Aprendizado de Máquina (translation: Artificial Intelligence: A Machine Learning Approach), ISBN 9788521618805. Editora LTC, GEN - Grupo Editorial Nacional, Rio de Janeiro, Brasil, 378 pages.
- 5 Gama, J., Carvalho, A. C. P. F. Faceli, K., Lorena, A. C. and Oliveira, M. : Extração de Conhecimento de Dados: data Mining (translation: Knowledge Extraction from Data: Data Mining), ISBN 9789726186960.. Editora Sílabo, Porto, Portugal, 378 pages.

### **6.2. Books edited**

#### **6.2.1. International**

- 1 B. Verma, H. Selvaraj, A. de Carvalho and X. Yao (Eds.): Proceedings of the III International Conference on Computational Intelligence and Multimedia Applications, IEEE Computer Press, New Dheli, India, September, 1999.
- 2 B. Verma, H. Selvaraj, A. de Carvalho and X. Yao (Eds.): Proceedings of the IV International Conference on Computational Intelligence and Multimedia Applications, IEEE Computer Press, Yokosuka City, Japan, October 2001.
- 3 H. Selvaraj, B. Verma and A. de Carvalho (Eds.): Proceedings of the VI International Conference on Computational Intelligence and Multimedia

- Applications, IEEE Computer Press, Las Vegas, USA, August 2005. ISBN 0-7695-2358-7.
- 4 S. Arivazhagan, H. Selvaraj, B. Verma and A. de Carvalho (Eds.): Proceedings of the VII International Conference on Computational Intelligence and Multimedia Applications, IEEE Computer Press, Sivakasi, India, December 2007. ISBN 0-7695-3050-8.
  - 5 A. Abraham, A. Hassanien, and A. de Carvalho (Eds.): Foundations of Computational Intelligence: Bio-Inspired Data Mining. Berlin, Springer, 2009, v. 204. ISBN 978-3-642-01087-3.
  - 6 A. Abraham, A. Hassanien, A. de Carvalho and V. Snasel (Eds.): Foundations of Computational Intelligence: Data Mining. Berlin, Springer, 2009, v. 206. ISBN 978-3-642-01090-3.
  - 7 De Carvalho, A. C. P. L. F., S. Rodríguez-González, J. F. De Paz Santana, J. M. Corchado Rodríguez (Eds.): Distributed Computing and Artificial Intelligence - 7th International Symposium, DCAI 2010, 7-10 September 2010, Valencia, Spain. Advances in Soft Computing 79, Springer 2010, ISBN 978-3-642-14882-8
  - 8 J.-S. Pan, Marios M. Polycarpou, M. Woźniak De Carvalho, A. C. P. L. F., H. Quintián and E. Corchado (Eds.): Proceedings of the 8th International Conference, HAIS 2013, Salamanca, Spain, September 11-13, 2013. Lecture Notes in Artificial Intelligence 8073. ISBN 978-3-642-40845-8 e-ISBN 978-3-642-40846-5. DOI 10.1007/978-3-642-40846-5

## 6.2.2. National

- 1 Carvalho, A. C. P. F. and Barone, D.: Proceedings of the II Brazilian Symposium on Neural Networks (Simpósio Brasileiro de Redes Neurais) (in Portuguese). Published by the Brazilian Computer Society, Rio de Janeiro, Brazil, October 1995.
- 2 Carvalho, A. C. P. F. and Maldonado, J.: Coletânea de Textos da VI Escola Regional de Informática de São Paulo, Sociedade Brasileira de Computação; Published by ICMC-USP São Carlos, Brazil, May 2001. ISBN 85-87837-05-02.
- 3 Bazzan, A. and Carvalho, A. C. P. F.: Proceedings of the I Brazilain Workshop on Bioinformatics (I Workshop Brasileiro de Bioinformática), I WOB. Published by the Brazilian Computer Society, Porto Alegre, Brazil, October 2002. ISBN 85 88442-35-3
- 4 Carvalho, A. C. P. F. and Maldonado, J., Mendonça Neto, M. and Acuña, S.: Proceedings of the 2<sup>nd</sup> Ibero-American Symposium On Software Engineering And Knowledge Engineering (II Jornada de Engenharia de Software e Engenharia de Conhecimento), JIISIC'2002, Salvador, Brazil, October 2002 ISBN 85-87837-05-02.
- 5 Plastino, A., Carvalho, A. C. P. F., Ramos, R. and Meira, W.: Proceedings of the II Workshop on Algorithms and Applications of Data Mining (WAAMD'2006), Florianópolis, Brazil, October 2006. ISBN 85-7669-088-8

- 6 Carvalho, A. C. P. F. and Vellasco, M.: Proceedings of the I Workshop on Computational Intelligence (WCI'2006), Ribeirão Preto, Brazil, October 2006. ISBN 85-87837-11-7
- 7 Plastino, A., Carvalho, A. C. P. F., Ramos, R. and Meira, W.: Proceedings of the III Workshop on Algorithms and Applications of Data Mining (WAAMD'2007), João Pessoa, Brazil, October 2007. ISBN 85-766-9135-3
- 8 Carvalho, A. C. P. F. and Kowaltowski, T.: Jornadas de Atualização em Informática (Informatics Journays Update), Brazilian Computer Society, SBC, 2009, 431 p; ISBN 978-85-87926-54-8
- 9 Meira, W. and Carvalho, A. C. P. F.: Jornadas de Atualização em Informática (Informatics Journays Update), Brazilian Computer Society, SBC, 2010, 431 p; ISBN 978-85-80060-11-9

## 6.3. Book chapters

### 6.3.1. International

- 1 Carvalho, A., M. C. Fairhurst and D. L. Bisset.: Comparative Study of GSN<sup>f</sup> Learning Methods. Published in the book RAM-Based Neural Networks, pages 31-42, Series Progress in Neural Processing, England, World Scientific, 1998.
- 2 Carvalho, A., M. C. Fairhurst and D. L. Bisset.: Combining Two Boolean Neural Networks for Image Classification. Published in the book RAM-Based Neural Networks, pages 193-204, Series Progress in Neural Processing, England, World Scientific, 1998.
- 3 Ludermir, T., Braga, A., C. Nobre, Carvalho, A.: Extracting Rules from Neural Networks: A Datamining Approach. In Data Mining, N. Ebecken (Editor), pages 303-314, WIT Press, England, 1998.
- 4 Martineli, E., Diniz, H. Carvalho, A., Rezende, S. and Matias, A.: Bankruptcy Prediction Using Connectionist and Symbolic Learning Algorithms. In Computational Finance 1999, CF99, A. Mustafa (Editor), pages 515-524, MIT Press, New York, USA, 1999.
- 5 Lacerda, E. Carvalho, A. and Ludermir, T.: Evolutionary Optimization of RBF networks, Radial basis function neural networks: design and applications, pages 282-310, Chapter 11. In Radial Basis Function Networks 1: Recent Developments in Theory and Application. R. J. Howlett and L Jain (Editors), Physica-Verlag (a Springer-Verlag company), Studies in Fuzziness and Soft Computing Series 66, March 2001 (ISBN 3-7908-1367-2).
- 6 Braga, A., Carvalho, A. and Ludermir, T.: Radial Basis Functions: Theory and Applications, pages 159-178. In Nonlinear Modeling and Forecasting of High Frequency Financial and Economic Time Series. A. S. Soofi and L. Cao (Editors), Kluwer, April 2002 (ISBN 0-7923-7680-3).
- 7 Carvalho, A., Braga, A.; S. Rezende; Ludermir, T. and E. Martineli: Understanding Credit Card Users Behaviour: A Data Mining Approach, pages 240-261, Chapter 14. In Heuristic and Optimization for Knowledge Discovery.

- Ruhul A. Sarker, Hussein A. Abbass and Charles S. Newton (Editors), Idea Group Publishing, February 2002.
- 8 Naldi, M. and Carvalho, A.: Partitional Clustering Improvements with Genetic Algorithms. Book of extended version of selected papers from HAIS'2006. pp. 9-16. J. Bajo, E. Corchado, A. Herrero and J. Corchado (org.) Universidad de Salamanca and Universidad de Burgos. 2007. ISBN 84-934181-9-6
  - 9 Freitas, A. and Carvalho, A.: A Tutorial on Hierarchical Classification with Applications in Bioinformatics. Pages 176-209, Research and Trends in Data Mining Technologies and Applications: Advances in Data Warehousing and Mining. D. Taniar (Editor)., Volume 1, Idea Group Inc, Hershey, USA. 2007. ISBN-10: 159904272X, ISBN-13: 978-1599042725
  - 10 Naldi, M., Carvalho, A., Campello, R. J. G. B. and Hruschka, E. R.: Evolutionary Clustering for Data Mining. In the book Soft Computing for Knowledge Discovery and Data Mining, pp. 95-114. Oded Maimon and Lior Rokach (Org.). Springer 2007. ISBN: 978-0-387-69934-9
  - 11 Lorena A. C. and Carvalho A. C. P. L. F.: Evolutionary Design of Code-matrices for Multiclass Problems. In the book Soft Computing for Knowledge Discovery and Data Mining, pp. 147-175. Oded Maimon and Lior Rokach (Org.). Springer 2007. ISBN: 978-0-387-69934-9
  - 12 Carvalho A. C. P. L. F., Braga, A. and Oliveira, J.: Computational Intelligence applied to the Automatic Monitoring of Dressing Operations in an Industrial CNC Machine, In the book Advances of Computational Intelligence in Industrial Systems, pp. 249-268, Vol. 116, Liu Ying and Sun Aixin (Org.), Springer, 2007. ISBN: 978-3-540-78296-4. DOI 10.1007/978-3-540-78297-1\_12
  - 13 Nery, B., de Mello, R., Carvalho, A. P. L. F. and Yan, L.T.: Artificial Ants in the Real World: Solving On-line Problems Using Ant Colony Optimization, In the book Swarm Intelligence, Focus on Ant and Particle Swarm Optimization, pp. 217-234. FelixT.S.Chan and Manoj KumarTiwari (org.), I-Tech Education and Publishing, Vienna, Austria, 2007. ISBN 978-3-902613-09-7.
  - 14 Lorena A. C. and Carvalho A. C. P. L. F.: Investigation of Strategies for the Generation of Multiclass Support Vector Machines. In the book New Challenges in Applied Intelligence Technologies, Studies in Computational Intelligence, pp. 319-328. Vol. 134. Ngoc Thanh Nguyen and Radoslaw Katarzyniak (Org.). Springer 2008. ISBN: 978-3-540-79354-0
  - 15 Faceli, K., Carvalho, A. and M. C. P. Souto: Cluster Ensemble and Multi-objective Clustering Methods. Pattern Recognition Technologies and Applications: Recent Advances. pp. 325-343, Brijesh Verma; Michael Blumenstein. (Org.). Information Science Reference, IGI Group, 2008. ISBN 978-159904807-9.
  - 16 Naldi, M., Horta, D., Carvalho, A., Campello, R. J. G. B. and Hruschka, E.: Evolutionary Fuzzy Clustering: An Overview and Efficiency Issues. In the book Foundations of Computational Intelligence: Bio-Inspired Data Mining, pp. 95-114. A. Abraham, A. Hassanien and Carvalho, A. (Org.). Springer 2009. ISBN 978-3-642-01087-3.
  - 17 Freitas, A. and Carvalho, A.: A Tutorial on Multi-Label Classification Techniques, Accepted for the book Foundations of Computational Intelligence,

- Chapter 5, Vol 5: Function Approximation and Classification, Series: Studies in Computational Intelligence, Vol. 205 Abraham, Ajith; Hassanien, Aboul-Ella; Snášel, Václav (Eds.), 2009, ISBN: 978-3-642-01535-9.
- 18 Basgalupp, M., Barros, R., Carvalho, A. C. P. L. F. and Freitas, A.: A Beam Search Based Decision Tree Induction Algorithm. In: Siddhivinayak Kulkarni. (Org.). Machine Learning Algorithms for Problem Solving in Computational Applications. Hershey, Pennsylvania: IGI Global, 2012, v. 1, p. 357-370.

### **6.3.2. National**

1. Lacerda, E. and Carvalho, A.: Introdução aos Algoritmos Genéticos (Introduction to Genetic Algorithms). In Sistemas Inteligentes - Aplicações a Recursos Hídricos e Ciências Ambientais (in Portuguese), C. Galvão and M. Valença (Editors), Universidade Federal do Rio Grande do Sul Press, pages 99-150, Vol. 7, ABRH Collection, Porto Alegre, Brazil, December 1999.
2. Braga, A.; Carvalho, A. and Ludermir, T.: Redes Neurais Artificiais (Artificial Neural Networks), pages 141-168, Chapter 6. In Sistemas Inteligentes: Fundamentos and Aplicações – Intelligent Systems: Fundations and Applications (in Portuguese). S. O. Rezende (Editor), Editora Manole, São Paulo, Brazil, January 2003.
3. Carvalho, A.; Braga, A. and Ludermir, T.: Computação Evolutiva (Evolutve Computation), pages 225-248, Chapter 9. In Sistemas Inteligentes: Fundamentos e Aplicações – Intelligent Systems: Fundations and Applications (in Portuguese). S. O. Rezende (Editor), Editora Manole, São Paulo, Brazil, January 2003.
4. Ludermir, T.; Carvalho, A. and Braga, A.: Sistemas Inteligentes Híbridos (Hybrid Intelligent Systems) pages 249-268, Chapter 10. In Sistemas Inteligentes: Fundamentos e Aplicações – Intelligent Systems: Fundations and Applications (in Portuguese). S. O. Rezende (Editor), Editora Manole, São Paulo, Brazil, January 2003.
5. De Souza, Bruno Feres, Prudêncio, R. and Carvalho, A. C. P. L. F.: Meta-Aprendizado para Recomendação de Algoritmos. In: Alberto Ferreira de Souza; Wagner Meira Jr.. (Org.). Jornadas de Atualizacao em Informatica 2011. 1 ed. Rio de Janeiro: Editora PUC Rio, 2011, v. 1, p. 159-208.
6. Rossi, A., Basgalupp, M., Lorena, A. C. De Carvalho, A. C. P. L. F.: Algoritmos Genéticos em Problemas de Classificação. In: António Gaspar-Cunha; Ricardo Takahashi; Carlos Henggeler Antunes. (Org.). Manual de Computação Evolutiva e Metaheurística. 1 ed. Coimbra e Belo Horizonte: Imprensa da Universidade de Coimbra/Editora da Universidade Federal de Minas Gerais, 2012, v. , p. 381-405.

### **6.4. Encyclopedia contributions**

1. Carvalho, A., Braga, A. and Ludermir, T.: Credit Card Users' Data Mining, pages 603-605, Encyclopedia of Information Science and Technology. Mehdi Khosrow-Pour (Editor), Idea Group Inc, Hershey, USA.. ISBN 1-59140-553-X, 2004.
2. Gama, J. and Carvalho, A.: Machine Learning Accepted for the Encyclopedia of Information Science and Technology. 2<sup>nd</sup> Edition. Mehdi Khosrow-Pour (Editor), Idea Group Inc, Hershey, USA. 2007.

## 6.5. Refereed Journals

### 6.5.1. International

1. Carvalho, A., M. C. Fairhurst and D. L. Bisset: Classifying Images Using Goal Seeking Neural Network Architectures. IEE Proceedings-I Communications, Speech and Vision, Vol. 140, Num. 1, pages 12-18, February 1993. ISSN: 1350-2425
2. Carvalho, A., M. C. Fairhurst and D. L. Bisset: A Progressive Learning Algorithm for GSN Feedforward Neural Architectures. IEE Electronic Letters, Vol. 30, Num. 6, pages 506-507, March 1994. ISSN 0013-5194
3. Carvalho, A., M. C. Fairhurst and D. L. Bisset: An Integrated Boolean Neural Network for Pattern Classification. Pattern Recognition Letters, Vol. 15, pages 807-813, August 1994. ISSN: 0167-8655
4. Carvalho, A., M. C. Fairhurst and D. L. Bisset: Combining Boolean Neural Architectures for Image Recognition. Connection Science, Vol. 9, No. 4, pages 405-418, December 1997. ISSN 0954-0091
5. Carvalho, A. and M. C. Fairhurst: Applying Adaptive Logic Networks to Character Recognition. Pattern Recognition Letters, Vol. 19, No. 5-6, pages 469-473, North-Holland, April 1998. ISSN: 0167-8655
6. Delbem, A. C. B., Bretas. N. G. and Carvalho, A.: Energy Restoration in Distribution Systems Using Search with fuzzy heuristics. Engineering Intelligent Systems for Electrical Engineering and Communications (now Engineering Intelligent Systems), Vol. 6, No. 4, pages 29-37, CRL Publishing Ltd., December 1998. ISSN 1472-8915
7. Ludermir, T., Carvalho, A., Braga, A. and M. Souto: Weightless Neural Models: a review of current and past work. Published in the Journal Neural Computing Surveys, pages 41-61, volume 2, 1999. ISSN 1093-7609. <http://www.icsi.berkeley.edu/~jagota/NCS/>
8. Nobre, C., Martineli, E., Braga, A., Carvalho, A., Rezende, S., Braga, J. and Ludermir, T.: Knowledge extraction: a comparison between symbolic and connectionist methods. Published in the International Journal of Neural Systems. Vol. 9, No. 3, pages 257-264, World Scientific Press. October 1999. ISSN: 0129-0657.
9. Carvalho, A. and Brizotti, M.: Combining RBF Networks Trained with Different Clustering Techniques, Journal Neural Processing Letters, Vol. 14, pages 227-240, Kluwer Academic Publishers, December 2001. ISSN: 1370-4621.

10. Lacerda, E., Carvalho, A. and Ludermir, T.: Evolutionary Design of Radial Basis Function Networks, International Journal of Neural Systems, Vol. 11, No. 3, pages 287-294, World Scientific Press, June 2001. ISSN: 0129-0657,
11. Riul Jr, A., dos Santos Jr, D.S., Wohnrath, K., Di Tommazo, R. Carvalho, A., Fonseca, F.J., Oliveira, O.N. Jr, Taylor, D.M. and Mattoso, L.H.C.: An artificial taste sensor: Efficient combination of sensors made from Langmuir-Blodgett films of conducting polymers and a ruthenium complex and self-assembled films of an azobenzene-containing polymer. *Langmuir*, 18, 239-245, American Chemical Society, January 2002. ISSN: 0743-7463
12. Leite, P., Carneiro, A. and Carvalho, A.: Energetic Operation Planning Using Genetic Algorithms. *IEEE Transactions on Power Systems*, Vol. 17, No. 1, pages 173-179, February 2002. ISSN 0885-8950.
13. Milaré, C. R., Carvalho, A. and M. C. Monard: An Approach to Explain Neural Networks using Symbolic Algorithms. *International Journal of Computational Intelligence and Applications*, Vol. 2, No. 4, pages 365-376, December 2002. ISSN: 1469-0268
14. Lacerda, E. G. M., A. P. L. F. de Carvalho and Ludermir, T.: Model Selection via Genetic Algorithms for RBF Networks. *Journal of Intelligent & Fuzzy Systems*, Vol. 13, N0. 2-4, pages 111-122, IOS Press, 2003. ISNN 1064-1246.
15. Macedo, R., Silva, D. Coury, D. V. and Carvalho A. P. L. F.: A Genetic Algorithm Based Approach to Track Voltage and Current Harmonics in Electrical Power Systems. *Journal of Intelligent and Fuzzy Systems*, Vol. 13, N0. 2-4, pages 167-175, IOS Press, 2003. ISNN 1064-1246.
16. Zhao, L., Furukawa, R. A. and Carvalho A. P. L. F.: A Network of Coupled Chaotic Maps for Adaptive Multi-Resolution Image Segmentation. *International Journal of Neural Systems*, Vol. 13, No. 2, pages 131-140, World Scientific Press, 2003. ISSN 0129-0657.
17. Delbem, A. C. B., Carvalho, A. and Bretas, N. G.: Optimal Energy Restoration in Radial Distribution Systems Using a Genetic Approach and Graph Chain Representation. *Electric Power Systems Research Journal*, Vol. 67, No. 3, pages 197-205. Elsevier, 2003. ISNN 0378-7796
18. Faceli, K., Carvalho, A. and S. Resende: Combining Intelligent Techniques for Sensor Fusion, *Applied Intelligence*, Vol. 20, N. 3, pages 199-213. Kluwer, 2004. ISNN 0924-669X.
19. Riul Jr, A., Sousa, H., Carvalho, A. C. P. L. F., dos Santos Jr, D. S. Oliveira Jr, O. N. and Mattoso, L. H. C.: Wine classification by taste sensors made from ultrathin films and using neural networks, *Sensors and Actuators B: Chemical*, Vol. 98, pages 77-82. Elsevier, 2004. ISSN 0925-4005
20. Delbem, A. C. B., Carvalho, A. and Bretas, N. G.: Graph Chain Representation Associated to an Evolutionary Algorithm for Restoration of Radial Distribution Systems. *Engineering Intelligent Systems for Electrical Engineering and Communications*, Vol. 12, pages 3-12, ISSN 0969-1170, CRL Publishing, 2004.
21. Zhao, L., Carvalho, A. and Li, Z.: Pixel Clustering by Adaptive Pixel Moving and Chaotic Synchronization, *IEEE Transactions on Neural Networks*, Vol. 15, No. 5, pages 1176-1185, IEEE, 2004.
22. Damiance, A., L. Zhao and Carvalho, A.: A dynamical model with adaptive pixel moving for microarray image segmentation. *Bioimaging Special Issue of the Journal Real Time Imaging*, Vol. 10, No. 4, pages 189-195, Elsevier, 2004. ISSN 1077-2014.

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58. Thiago Covões, Eduardo Hruschka, Leandro de Castro, André Ponce de Leon F Carvalho: Seleção de Atributos para Classificação de Grãos, Proceedings of the IV Workshop de Algoritmos e Aplicações de Mineração de Dados, WAAMD 2008, trilha de Algoritmos, Campinas, Outubro de 2008.
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## 7. Patents

1. De Castro, L., Knidel, H., Lorena, A. C. and Carvalho, A.: Sistema automático para classificação física de amostras de café e processo para análise das mesmas, Patent Number PI0804903-3A2, 2010.

## 8. Research Grants

Sponsor	Project	Value	Start	Partners
CNPq	Postcode Recognition using Neural Networks	US\$ 10,500 (aprox.)	1995	Dr. A. Araújo and Dr. R. Francelin
FAPESP	Hybrid Environment for Machine Learning	US\$ 35,000 (aprox.)	1996	Dr. R. Francelin and Dr. M. C. Monard*
CNPq/PROTEM	Image Acquisition	US\$ 56.000 (aprox.)	1997	Dr. R. Francelin

	Processing and Recognition System			
CNPq/PROTEM	Integration of Symbolic,Fuzzy and Neural Paradigms for Knowledge Acquisition	US\$ 45,000 (aprox.)	1997	Dr. M. C. Monard* and Dr. S. Resende
FINEP	Artificial Intelligence for Engineering	US\$ 108,000 (aprox.)	1998	Dr. M. C. Monard and Dr. S. Resende*
CNPq/BMBF (Germany)	Parallel and Flexible Environmental Analysis	US\$ 12,000 (aprox.)	1996	Dr. G. Kock, Dr. T. Becker and Dr. M. Endler*
FAPESP	MSc grant	US\$ 10,000 (aprox.)	1997	Helio Diniz (Graduate student)
FAPESP	MSc grant	US\$ 10,000 (aprox.)	1998	Humberto de Sousa (Graduate student)
FAPESP	MSc grant	US\$ 10,000 (aprox.)	1998	Katti Faceli (Graduate student)
FAPESP	PhD grant	US\$ 25,000 (aprox.)	1998	Ricardo Sovat (Graduate student)
CAPES	Research Cooperation Between Brazilian Institutions	US\$ 30,000 (aprox.)	2001	Dr. Ludermir, T.*, Dr. Braga, A. P. and Dr. A. Araújo
FAPESP	PhD grant	US\$ 25,000 (aprox.)	2002	Katti Faceli
FAPESP	PhD grant	US\$ 25,000 (aprox.)	2002	Ana Carolina Lorena
CNPq	PhD grant	US\$ 20,000 (aprox.)	2002	Silvia Modenese
CNPq	Neural Networks and Bioinformatics	US\$ 30,000 (aprox.)	2002	Dr. Z. Liang
FAPESP	Human Cancer Clinical Genomics	US\$ 50,000 (aprox.)	2002	Dr. Z. Liang, Dr. M. Dr. C. Monard, Dr. M. Biajiz and Dr. S. Resende

CNPq	Water Monitoring	US\$ 100,000 (aprox.)	2002	Dr. L. Mattoso*, Dr. A. Ruhl, Dr. O. Novaes and others
FAPESP	Taste Recognition	US\$ 120,000 (aprox.)	2002	Dr. L. Mattoso*, Dr. A. Ruhl, Dr. O. Novaes and others
CNPq	Genoma Shrimp EST	US\$ 20,000 (aprox.)	2003	Dr. Z. Liang and Dr. Delbem, A.
CNPq	Bioinformatics using Machine Learning	US\$ 6,000 (aprox.)	2003	
FAPESP	PhD grant	US\$ 25,000 (aprox.)	2003	Rodrigo Bianchi
CNPq	Gene Expression Analysis Using Machine Learning	US\$ 35,000 (aprox.)	2003	Dr. Z. Liang, Dr G. Telles, Dr. Delbem, A., Dr. E. Simões
CNPq	Advanced Classification Techniques	US\$ 25,000 (aprox.)	2006	Dr. Adriano Cansian, Dr João Gama, Dr. Alex Freitas, Dra. Ana Carolina Lorena and Dra. Katti Faceli
CAPES	Research Cooperation Between Brazilian Institutions	US\$ 130,000 (aprox.)	2008	Dr. Ludermir, T., Dr. M. Souto
CNPq	Machine Learning for Bioinformatics	US\$ 20,000 (aprox.)	2008	Dr João Gama, Dr. Alex Freitas, Dr Carlos Soares
CAPES	Research Cooperation Between Universidade de Sao Paulo and Universidade do Porto	US\$ 100,000 (aprox.)	2009	Dr. Ludermir, T., Dr. M. Souto, Dr Joao Gama, Dr Carlos Soares, Dr Eduardo Hruschka, Dr Ricardo Campello

CNPq	Meta Learning and Data Streams	US\$ 30,000 (aprox.)	2010	Dr João Gama, Dr. Alex Freitas, Dr Carlos Soares
USP	NAP Research Center	US\$ 500,000 (aprox.)	2012	Several other researchers
CNPq	Advanced Data Mining	US\$ 60,000 (aprox..)	2012	Dr. Adriano Cansian, Dr João Gama, Dr. Alex Freitas, Dra. Ana Carolina Lorena, Dr. Eduardo Hruschka
FAPESP	Center for Mathematical Sciences Applied to Industry – CEPID-CeMEAI	US\$ 7,000,000 (aprox..)	2013	Coordinated by Prof. J. Cuminato and with several other researchers

\* - Project leader

## 9. Journal Editions

1. Founding Co-Editor (with B. Verma and Ludermir, T.) of the International Journal of Computational Intelligence and Applications, IJCA, Imperial College Press, UK.
2. Co-editor (with S. Kremer) of the special edition "Non-Gradient Learning Techniques" of the International Journal of Neural Systems, IJNS, World Scientific, Vol. 11, No. 6, December 2001
3. One of the Associate Editors of the Special Issue of the II ICOBICOBI, of the Genetics and Molecular Research Journal, Vol. 3, No. 4, December 2004.
4. Co-editor (with A. Araújo) of the Special Issue "Brazilian Symposium on Neural Netowrks" of the Neurocomputing, vol. 70, No. 1-3, Neurocomputing, Elsevier. September 2006, ISSN 0925-2312
5. Co-editor (with A. Araújo) of the special edition "Brazilian Symposium on Neural Netowrks" of the International Journal of Hybrid Intelligent Systems, IOS Press, Vol. 4, No. 1, April 2007 ISSN: 1448-5869.
6. Co-editor (with A. Araújo) of the special edition "Brazilian Symposium on Neural Netowrks" of the Journal of Intelligent Fuzzy Systems (JIFS), World Scientific, Vol. 18, N. 5, October 2007 ISSN: 1064-1246
7. Co-editor (with M. Cardoso and Gama, J.) Special Issue on Data Mining Applications in Retailing and Consumer Services of the Journal of Retailing and Consumer Services, Elsevier, Vol. 14, N. 6, November 2007 ISSN: 0969-6989

8. Co-editor (with Ludermir, T. and A. Konig) of the special edition "Hybrid Intelligent Systems conference" of the International Journal of Hybrid Intelligent Systems, IOS Press, Vol. 5, No. 2, 2008. ISSN 1448-5869.
9. Co-editor (with M. Souto and A. Canuto) of the Special Issue "Brazilian Symposium on Neural Networks" of the Neurocomputing, vol. 71, No. 1-3, Neurocomputing, Elsevier. September 2008, ISSN 0925-2312
10. Co-editor (with E. Corchado and A. Abraham) of the Special Issue "Hybrid Artificial Intelligent Systems" of the Information Systems Journal, 180(14): 2633-2634 (2010) Elsevier, ISSN 0020-0255.

## **10. Editorial Board**

1. International Journal of Computational Intelligence and Applications (ISSN: 1469-0268) by World Scientific
2. International Journal of Computational Intelligence Theory and Practice (ISSN: 0973-5267) by Serial Publications
3. International Review on Computers and Software (ISSN: 1828-6003) by Praise Worth Prize
4. Recent Patents on Biomedical Engineering (ISSN: 1874-7647), by Bentham Science
5. International Journal of Computational Intelligence Research (ISSN: 0973-1873) by Research India Publications
6. International Journal of Hybrid Intelligent Systems (ISSN: 1448-5869), by IOS Press
7. International Journal of Autonomic Computing (ISSN 1741-8577), by Inderscience
8. International Journal of Bio-inspired Computation (ISSN: 1758-0366), by Inderscience

## **11. Conference/Workshop Committees**

### **11.1 Chair / Co-Chair**

#### **11.1.1 National Conferences**

- 1 II Brazilian Neural Networks Symposium, SBRN'95 - São Carlos, Brazil - October 1995 - General Chair
- 2 III Brazilian Neural Networks Symposium, SBRN'96 - Recife, Brazil - November 1996 - Program Committee Co-Chair
- 3 VII ERI - Regional Computing School - Brazilian Computer Society - SBC - São Carlos, Brazil - May 2001 - General Co-Chair
- 4 InBio - Brazilian School on Artificial Intelligence and Bioinformatics - São Carlos, Brazil - December 2001 - General Co-Chair

- 5 I Brazilian Workshop on Bioinformatics - Gramado, Brazil - October 2002 - General Co-Chair
- 6 Brazil-Argentina Computational Biology Course – Ribeirão Preto, Brazil - May 2003 - General Co-Chair
- 7 I Brazilian Workshop on Evolutionary Computation, I BEC – São Luis, Brazil - October 2004 - Program Committee Co-Chair
- 8 I Workshop on Computational Intelligence (WCI' 2006), Ribeirão Preto, Brazil - October 2006 - Program Committee Co-Chair
- 9 II Workshop em Algoritmos e Aplicações de Mineração de Dados (Workshop on Algorithms and Applications on Data Mining, WAAMD'2006), Florianópolis, Brazil, October, 2006 - Applications Track Co-Chair
- 10 III IWorkshop em Algoritmos e Aplicações de Mineração de Dados (Workshop on Algorithms and Applications on Data Mining, WAAMD'2007), João Pessoa, Brazil, October, 2007 – General Chair
- 11 III Brazilian Symposium on Bioinformatics (BSB'2008), Santo André, Brazil, August 2008 – General Chair
- 12 IV IWorkshop em Algoritmos e Aplicações de Mineração de Dados (Workshop on Algorithms and Applications on Data Mining, WAAMD'2008), Campinas, Brazil, October, 2008 - General Chair and Applications Track Co-Chair
- 13 XXIX Brazilian Computing Conference - Bento Gobçalves, Brazil, Selection Committee for Minicourses - JAI'09, July 2009 – One of the General Chairs
- 14 XXIX Brazilian Computing Conference - Belo Horizonte, Brazil, Selection Committee for Minicourses - JAI'10, July 2010 – One of the General Chairs

### **11.1.2 International Conferences**

- 1 International Joint Conference on Neural Networks, IJCNN'99 - Washington, USA - June 1999 - Financial Analysis Track of the Tutorial Session Chair
- 2 III International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'99 - New Delhi, India - September 1999 - Program Committee Co-Chair
- 3 IV International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'01 – Yokosuka City, Japan - September 2001 - Program Committee Co-Chair
- 4 Workshop on Dynamical Intelligent Systems, part of the 7th International Conference on Intelligent Systems Design and Applications (ISDA'07) – October 2007 - Workshop Co-Chair
- 5 Data streams Track – ACM 23<sup>rd</sup> Annual Symposium on Applied Computing, SAC'08 – Fortaleza, Brazil – March 2008 - Track Co-Chair
- 6 9th IEEE International Conference on Computational Science and Engineering (SCE-08) – São Paulo, Brazil December 2008 - Program Committee Vice-Chair
- 7 8th Hybrid Intelligent Systems Conference, Barcelona, September 2008 – One of the International Co-chair
- 8 Eight International Conference on Intelligent Systems Design and Applications, ISDA'08, Kaohsiung, Taiwan, November 26-28, 2008 - International Advisory Board

- 9 15th International Conference on Neural Information Processing (ICONIP 2008), Auckland, New Zealand, December 2008, Ensemble Track Chair
- 10 World Congress on Nature and Biologically Inspired Computing (NaBIC 2009), February, 2009, Bhubaneswar, Orissa, India, one of the Program Committee Chairs
- 11 Data streams Track – ACM 24<sup>th</sup> Annual Symposium on Applied Computing, SAC'09 – Hawaii, USA – March 2009 - Track Co-Chair
- 12 Second World Congress on Nature and Biologically Inspired Computing, NABIC'2010 – Kitakyushu, Japan, Publication Chair
- 13 International Conference on Computer Information Systems and Industrial Management Applications, 2010 – One of the Program Committee Chairs
- 14 10th International Conference on Hybrid Intelligent Systems, HIS'2010 – Atlanta, USA – September 2010 – One of the Program Committee Chairs
- 15 Third World Congress on Nature and Biologically Inspired Computing, NABIC'2011 – Salamanca, Spain, One of the Program Committee Chairs
- 16 Distributed Computing and Artificial Intelligence, DCAI'2011 - Salamanca, Spain, one of the General Chairs

## **11.2. Member of the Program Committee**

### **11.3. 11.2.1 National Conferences**

- 1 II Brazilian Neural Networks Symposium, SBRN'95 - São Carlos, Brazil - October 1995.
- 2 XVI Brazilian Computing Conference - Recife, Brazil , Selection Committee for Minicourses - JAI'96, August 1996.
- 3 III Brazilian Neural Networks Symposium, SBRN'96 - Recife, Brazil - November 1996.
- 4 II Workshop on Cybernetic Vision, WCV'96 - São Carlos, Brazil - December 1996
- 5 IV Brazilian Neural Networks Symposium, SBRN, 97 - Goiania, Brazil - December 1997.
- 6 V Brazilian Neural Networks Symposium, SBRN'98 - Belo Horizonte, Brazil - December 1998.
- 7 IV Brazilian Symposium on Intelligent Automation, SBAI'99 - Sao Paulo, Brazil - September 1999.
- 8 VI Brazilian Neural Networks Symposium, SBRN'2000 - Rio de Janeiro, Brazil - December 2000.
- 9 VII Brazilian Neural Networks Symposium, SBRN'2002 - Recife, Brazil - November 2002.
- 10 Workcomp'2001 - São José dos Campos, Brazil - October 2001.
- 11 I Brazilian Workshop on Bioinformatics - Gramado, Brazil - October 2002.
- 12 Workcomp'2002 - São José dos Campos, Brazil - October 2002.
- 13 II Jornada de Engenharia de Software e Engenharia de Conhecimento - Salvador, Brazil - October 2002.
- 14 VII SBRN - Brazilian Neural Networks Symposium - Recife, Brazil, November 2002.

- 15 1st International Conference on Bioinformatics and Computational Biology, Ribeirão Preto, Brazil, May 2003.
- 16 ENIA'2003 - Brazilian Meeting of Artificial Intelligence (Brazilian Computer Society), Campinas, Brazil - August 2003.
- 17 XVI National Context of Computer Science Thesis and Dissertations, CTD - Brazilian XXIII Computer Society Conference, Campinas, Brazil - August 2003.
- 18 XXX Integrated Seminar of Software and Hardware, SEMISH - Brazilian XXIII Computer Society Conference, Campinas, Brazil - August 2003.
- 19 II Brazilian Workshop on Bioinformatics, Macaé, Brazil - December 2003.
- 20 VIII SBRN - Brazilian Neural Networks Symposium, São Luis, Brazil - October 2004.
- 21 I Brazilian Workshop on Evolutionary Computation, I BEC, São Luis, Brazil - October 2004.
- 22 III Brazilian Workshop on Bioinformatics - Brasilia, Brazil - October 2004
- 23 4th Brazilian Symposium on Bioinformatics (BSB'05) - São Leopoldo, Brazil, July 2005.
- 24 IX SBRN - Brazilian Neural Networks Symposium – Ribeirão Preto, Brazil - October 2006.
- 25 XVIII SBIA - Brazilian Symposium on Artificial Intelligence– Ribeirão Preto, Brazil - October 2006
- 26 XXVI Brazilian Computing Conference, Undergraduate Research Works – CTIC'06- Campo Grande, Brazil - July 2006.
- 27 1st Latin American Autonomic Computing Symposium (LAACS), mpo Grande, Brazil, July 2006.
- 28 I Workshop on Computational Intelligence (WCI' 2006), Ribeirão Preto, Brazil - October 2006, Florianópolis, Brazil, October 2006.
- 29 II Workshop em Algoritmos e Aplicações de Mineração de Dados (Workshop on Algorithms and Applications on Data Mining, WAAMD'2006), Florianópolis, Brazil, October 2006.
- 30 ENIA'2007 - Brazilian Meeting of Artificial Intelligence (Brazilian Computer Society) – Rio de Janeiro, Brazil – July 2007.
- 31 2nd Brazilian Symposium on Bioinformatics (BSB'07) – Angra dos Reis, Brazil - September 2007.
- 32 III Workshop em Algoritmos e Aplicações de Mineração de Dados (Workshop on Algorithms and Applications on Data Mining, WAAMD'2007), João Pessoa, Brazil, October 2007.
- 33 XXXIV Integrated Seminar of Software and Hardware, SEMISH - Brazilian XXVII Computer Society Conference, Rio de Janeiro, Brazil - August 2007.
- 34 XXXV Integrated Seminar of Software and Hardware, SEMISH - Brazilian XXVIII Computer Society Conference, Belem, Brazil - August 2008.
- 35 XXVIII Brazilian Computing Conference - Belem, Brazil , Selection Committee for Minicourses - JAI'08, August 2008.
- 36 XXI National Context of Computer Science Thesis and Dissertations, CTD - Brazilian XXVIII Computer Society Conference, Belem, Brazil - August 2008.
- 37 X SBRN - Brazilian Neural Networks Symposium – Salvador, Brazil - October 2008.
- 38 XIX SBIA - Brazilian Symposium on Artificial Intelligence– Salvador, Brazil - October 2008.

- 39 IVWorkshop em Algoritmos e Aplicações de Mineração de Dados (Workshop on Algorithms and Applications on Data Mining, WAAMD'2008), Campinass, Brazil, October 2008.
- 40 Webmedia 2008 - Workshop de Gerência de Processos de Negócio, Vila Velha, Brazil, October 2008
- 41 XXIX Brazilian Computing Conference, Undergraduate Research Works – CTIC'09- Bento Gonçalves, Brazil - July 2009.
- 42 ENIA '2009 - Brazilian Meeting of Artificial Intelligence (Brazilian Computer Society), Bento Gonçalves, Brazil – July, 2009.
- 43 V Workshop em Algoritmos e Aplicações de Mineração de Dados (Workshop on Algorithms and Applications on Data Mining, WAAMD'2009), Fortaleza, Brazil, October 2009.
- 44 4th Brazilian Symposium on Bioinformatics (BSB'09) – Porto Alegre, Brazil - August 2009.

## 11.2.2 International Conferences

- 1. I International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'97 - Gold Coast, Australia - February 1997
- 2. II International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'98 - Melbourne, Australia - February 1998
- 3. VII International Conference on Image Processing and its Applications, IPA'99 - Manchester, UK -July 1999.
- 4. III International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'99 - New Dheli, India - September 1999.
- 5. IV International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'01 – Yokosuka City, Japan - September 2001.
- 6. Mexican International Conference on Artificial Intelligence, MICAI'2002 - April 2002
- 7. II International Conference on Hybrid Intelligent Systems, HIS'02 - Santiago, Chile, December 2002.
- 8. V International Conference on Computation Biology and Genome Informatics - Raleigh-Duram, North Carolina, EUA, September 2003
- 9. V International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'03 – Xi'an, China - September 2003.
- 10. III Ibero-American Symposium on Software Engineering and Knowledge Engineering, JIISIC 2003 - Chile - November 2003
- 11. Third International Conference on Hybrid Intelligent Systems (HIS'03) - Melbourne, Australia - December 2003
- 12. 3rd Mexican International Conference in Artificial Intelligence, MICAI 2004 – Mexico - April 2004
- 13. 2004 Information Resources Management Association (IRMA) International Conference, New Orleans, USA
- 14. IX Ibero-American Conference on Artificial Intelligence (IBERAMIA '2004), Puebla, México – November 2004
- 15. Fourth International Conference on Hybrid Intelligent Systems (HIS'04) – Kitakyushu, Japão - December 2004

16. Fourth International Workshop on Soft Computing as Transdisciplinary Science and Technology (WSTST'05) – Japan, May 2005
17. 2005 Information Resources Management Association (IRMA) International Conference, San Diego, USA - May 2005.
18. I International Conference on Advanced Data Mining and Applications (ADMA'05), – Wuhan, China - July 2005.
19. VIII European Conference on Artificial Life (ECAL 2005) - UK, September 2005
20. VI International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'05 – Las Vegas, USA - September 2005.
21. XVI European Conference on Machine Learning (ECML'05) – Porto, Portugal – October 2005.
22. V International Conference on Hybrid Intelligent Systems (HIS'05) – Rio de Janeiro, Brazil - December 2005
23. VI International Symposium on Biological and Medical Data Analysis (ISBMDA-2005)– Aveiro, Portugal – November 2005
24. I International Conference on ADMA 2005 (Advanced Data Mining and Applications)– Wuhan, China – July 2005
25. 4th Mexican International Conference in Artificial Intelligence, MICAI 2005 – Monterrey, Mexico – November 2005
26. Workshop on Extraction of Knowledge from Databases and Warehouses, EKDB&W 2005 - Part of 12th Portuguese Conference on Artificial Intelligence - EPIA 2005- Covilhã, Portugal - December 2005
27. Workshop on Computation Methods in Bioinformatics, CMB 2005 - Part of 12th Portuguese Conference on Artificial Intelligence - EPIA 2005- Covilhã, Portugal - December 2005
28. Workshop on Learning Algorithms for Pattern Recognition, -Part of the Australian Joint Conference on Artificial Intelligence, Sidney, Austrália, December 2005
29. IASTED International Conference on Computational Intelligence, San Francisco, USA, October, 2006
30. 7<sup>th</sup> International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'06), Burgos, Spain, September, 2006.
31. 6<sup>th</sup> International Conference on Simulated Evolution and Learning (SEAL'06), Hefei, China, October 2006.
32. 5<sup>th</sup> Mexican International Conference in Artificial Intelligence, MICAI'06 – Apizaco, Mexico – November 2006.
33. 1<sup>st</sup> International Conference on Neural Networks and Associative Memories, NNAM'2006, Mexico City, Mexico, November 2006.
34. 2<sup>nd</sup> International Conference on ADMA 2006 (Advanced Data Mining and Applications)– Xi'an, China – August 2006
35. 1<sup>st</sup> Hybrid Artificial Intelligent Systems Workshop (HAIS'06) Ribeirão Preto, Brazil - October 2006
36. Workshop on Practical Data Mining: Applications, Experiences and Challenges, in conjunction with the 16th European Conference on Machine Learning (ECML) and the 9th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD), Berlin, Germany - September 2006
37. Workshop on Knowledge Discovery from Data Streams, in conjunction with the 16th European Conference on Machine Learning (ECML) and the 9th European

- Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD), Berlin, Germany - September 2006
38. 15<sup>th</sup> International Conference on Computing, Mexico City, Mexico – November 2006
39. VII International Symposium on Biological and Medical Data Analysis (ISBMDA-2006)– Thessaloniki , Greece– December 2006
40. VI International Conference on Hybrid Intelligent Systems, HIS'06 - Auckland, New Zealand, December 2006.
41. IASTED International Conference on Computational Intelligence 2007, Banff, Canadá, October, 2007
42. VII International Conference on Computational Intelligence and Multimedia Applications, ICCIMA'07 – Sivakasi, India, December 2007.
43. Workshop on Data Mining for Business, in conjunction with the 11th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PKDD), Nanjing, China, May 2007
44. VII International Conference on Hybrid Intelligent Systems, HIS'07 - Kaiserslautern, Germany, September 2007.
45. 2<sup>nd</sup> Hybrid Artificial Intelligent Systems Workshop (HAIS'07), Salamanca, Spain, November 2007
46. 3<sup>rd</sup> International Conference on ADMA 2007 (Advanced Data Mining and Applications)– Harbin, China, August 2007
47. 2007 International Symposium on Computational Models for Life Sciences – CMLS'07, Gold Coast, Australia, December 2007.
48. 8<sup>th</sup> International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'07), Birmingham, December 2007.
49. Workshop on Knowledge Discovery from Ubiquitous Data Streams, in conjunction with the 17th European Conference on Machine Learning (ECML) and the 10th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD), Warsaw, Poland - September 2007
50. Workshop on Computational Methods in Bioinformatics and Systems Biology, CMBSB 2007 - Part of 13th Portuguese Conference on Artificial Intelligence - EPIA 2007- Guimarães, Portugal - December 2007.
51. Workshop on Business Intelligence, BI 2007 - Part of 13th Portuguese Conference on Artificial Intelligence - EPIA 2007- Guimarães, Portugal - December 2007.
52. Symposium on Machine Learning and Applications, part of the third International Conference on Intelligent Sensors, Sensor Networks and Information Processing - 2007– Melbourne, Australia - December 2007.
53. ACM Workshop on Knowledge Discovery from Sensor Data. Workshop of the The Thirteenth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining- San Jose, USA, August 2007.
54. 4th Mexican International Conference in Artificial Intelligence, MICAI 2007 – Aguascalientes, Mexico – November 2007
55. Eighth International Conference on Intelligent Systems Design and Applications, ISDA '08, Kaohsiung, Taiwan, November 26-28, 2008
56. 2nd International Workshop on Evolutionary Techniques in Data-Processing, ETID'08, Turin, Italy – September 2008
57. 4th International Conference on ADMA 2008 (Advanced Data Mining and Applications)– Chengdu, China, July 2008

58. VIII International Conference on Hybrid Intelligent Systems, HIS'08 – Barcelona, Spain, September 2008.
59. ACM Workshop on Data Streams. Workshop of the ACM SAC 2008, International Symposium on Applied Computing- Fortaleza, Brazil, March 2008.
60. AMS 2008 (Asia Modelling Symposium 2008), Kuala Lumpur, Malaysia, May 2008.
61. International Workshop on Computational Intelligence in Security for Information Systems CISIS'08, Genova, Italy, October 2008.
62. 9th Conference on Computing: A new event of the series of international conferences CORE!, Mexico City, Mexico, May, 2008
63. First IEEE International Conference on the Applications of Digital Information and Web Technologies (ICADIWT 2008), Ostrava, Czech Republic, August 2008
64. 15th International Conference on Neural Information Processing (ICONIP 2008), Auckland, New Zealand, December 2008
65. XI Ibero-American Conference on Artificial Intelligence (IBERAMIA '2008), Lisbon, Portugal, October 2008
66. Data Mining for Business Applications Workshop, held in conjunction with the 14<sup>th</sup> ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD-2008), Las Vegas, USA, August 2008.
67. Third International Conference on Digital Information Management (ICDIM 2008), London, November 2008.
68. 3rd Hybrid Artificial Intelligent Systems Workshop (HAIS'08), Burgos, Spain, September 2008
69. 2<sup>nd</sup> International Workshop on Knowledge Discovery from Sensor Data (Sensor-KDD '08), held in conjunction with the 14<sup>th</sup> ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD-2008), Las Vegas, USA, August 2008.
70. Fifth IEEE International Conference on Soft Computing as Transdisciplinary Science and Technology (CSTST'08), Cergy-Pointoise, France, October 2008.
71. 7<sup>th</sup> Mexican International Conference in Artificial Intelligence, MICAI'08 – Mexico City, Mexico – November 2008.
72. 2008 Fourth International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP 2008), Sydney, Australia, December 2008.
73. 2009 International Conference on Advanced Data Mining and Applications (ADMA 2009), Beijing, China, August, 2009
74. 11th International Conference on Computer Modelling and Simulation, (UKSim 2009), Cambridge, UK, March 2009
75. International Conference on Advances in Social Networks Analysis and Mining 2009 (ASONAM09), Athens, Greece, July 20-22, 2009
76. ACM Track on Data Streams. Track of the ACM SAC 2009, International Symposium on Applied Computing- Hawaii, EUA, March 2009.
77. Ninth International Conference on Intelligent Systems Design and Applications, ISDA '09, Pisa, Italy, November 30- December 2, 2009.
78. 4th Hybrid Artificial Intelligent Systems Workshop (HAIS'09), Salamanca, Spain, June 2009
79. XX European Conference on Machine Learning (ECML'09), Bled, Slovenia, September, 2009
80. 1st Asian Conference on Machine Learning (ACML'09), Nanjing, China, November 2009

81. First International Workshop on Data Warehousing and Knowledge Discovery from Sensors and Streams (DKSS 2009), held in conjunction with the 5th International Conference on Distributed Computing in Sensor Systems (DCOSS 2009), California, USA, June 2009.
82. 12th Discovery Science Conference (DS), Porto, Portugal, on October 2009.
83. 4th International Workshop on Soft Computing Models in Industrial Applications (SOCO09), Salamanca, Spain, June 2009
84. Knowledge Discovery and Business Intelligence (KDBI 2009), Thematic Track of the 14th Portuguese Conference on Artificial Intelligence (EPIA 2009), Aveiro, Portugal, October 2009
85. Computational Methods in Bioinformatics and Systems Biology (CMBSB'09), Thematic Track of the 14th Portuguese Conference on Artificial Intelligence (EPIA 2009), Aveiro, Portugal, October 2009
86. 10th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'09), Burgos, Spain, September, 2009
87. 20th International Conference on Database and Expert Systems Applications (DEXA 2009), Linz, Australia, September 2009
88. 4th international conference on digital information management (ICDIM 2009), Michigan, USA, November 2009.
89. 1st Int Conference on Computational Intelligence, Communication Systems and Networks (CICSyN2009), Indore, India, July 2009.
90. The International ACM Conference on Management of Emergent Digital EcoSystems, MEDES'2009, Lyon, France, October 2009
91. The 8th International Conference on Pervasive Intelligence and Computing (PiCom 2009) Chengdu, China, December 2009
92. 2nd International Conference on Emerging Trends in Engineering and Technology (ICETET-09), Nagpur, India, December, 2009
93. International Conference of Soft Computing and Pattern Recognition (*SoCPaR* 2009), Malacca, Malaysia, December 2009
94. 24th International Conference on Advanced Information Networking and Applications, Perth, Australia, April, 2010.
95. 23rd International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems, IEA/AIE 2010, Córdoba, Spain, June 2010.
96. 21<sup>st</sup> International Conference on Database and Expert Systems Applications (DEXA 2010), Bilbao, Spain, August-September 2010
97. International Conference on Advances in Social Networks Analysis and Mining 2010 (ASONAM10), Odense, Denmark, August 9-11, 2010
98. **1st IET International Conference on Frontier Computing (FC'10)** IET FC'10, Taichung, Taiwan, August 2010.
99. 10th International Conference on Algorithms and Architecture for Parallel Processing (ICA3PP'10), Busan, Korea, May 2010
100. Workshop on Data Quality in Information Systems, part of CISTI'2010 (5<sup>a</sup> Conferência Ibérica de Sistemas e Tecnologias de Informação), July 2010, Santiago de Compostela, Spain
101. 5th International Workshop on Soft Computing Models in Industrial Applications (SOCO10), Guimarães, Portugal, June 2010
102. XXIII European Conference on Machine Learning (ECML'12), Bristol, September, 2012

103. XXIV European Conference on Machine Learning (ECML'13), Prague,

September, 2013

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## 12. Referee, National Committees and Assessor

- Chairman of the Neural Network Committe in the Brazilian Computer Society, from October 1995 until November 1996.
- Member of the Bioinformatics Committe in the Brazilian Computer Society, from September 2003 until December 2004.
- Referee of the Journals
  - Advances in Complex Systems, 2009
  - Pattern Recognition Letters, 1994, 1996, 1997, 1999, 2000, 2001, 2002, 2003, 2004, 2006, 2007, 2008
  - Journal of the Brazilian Computer Society, 1997, 1998
  - Journal of Intelligent Systems, 1998
  - Image and Vision Computing Journal, 1998
  - Controle e Automação Journal, 1999, 2000
  - Artificial Intelligence, 2002
  - Neural Processing Letters, 2003, 2005
  - NeuroComputing, 2003, 2004, 2006, 2007, 2008, 2009
  - Information Fusion Journal, 2003
  - International Journal of Pattern Recognition and Artificial Intelligence, 2005
  - IEEE Transactions on Neural Networks, 1999, 2000, 2002, 2004, 2005, 2008
  - IEEE Transactions on Power Systems, 2002
  - IEEE Transactions on Evolutionary Computation, 2002
  - IEEE Transactions on Systems,Man and Cybernetics, Part B, 2006
  - IEEE Transactions on Data and Knowledge Engineering, 2008,2009
  - IEE Proceedings – Vision, Image and Signal Processing, 2000
  - Journal of Integrated Computer-Aided Engineering, 2000
  - Genetic and Molecular Biology, 2003
  - Genetic and Molecular Research, 2004
  - Journal of Applied Logic, 2003
  - Soft Computing, 2006
  - Intelligent Data Analysis, 2006
  - Revista de Informática Teórica e Aplicada, RITA, 2006
  - Ciência Hoje, 2003
- Referee of several International and Brazilian Conferences, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002 and 2003.
- Assessor ad hoc for the Research Funding Agecies:
- Internationals
  - NSERC (Natural Sciences and Engineering Research Council of Canada – Canadian Research Agency, 2003.
  - The Leverhulme Trust, UK, 2004.
  - EPSRC (Engineering and Physical Sciences Research Council - UK Research Agency, 2003.
  - Czech Science Foundation, GACR, Repúlica Tcheca, 2010

- Comisión Nacional de Investigacion Científica y Tecnológica, CONICYT, Chile, 2009
- CNPq (Brazilian research agency), 1997-2003
- FAPESP (São Paulo research agency), 1997-2003.
- FAPEAL (Alagoas research agency), 2002-2003.
- FAPEMAT (Mato Grosso research agency), 2005.
- FAPITEC (Sergipe research agency), 2008.
- Fundação Araucária (Parana research agency)

## **13. Supervision of Graduate Students**

### **13.1. M.Sc. Supervisions**

#### **13.1.1. Concluded**

1. Claudia Regina Milaré, Sistemas Híbridos Inteligentes: Redes Neurais e Raciocínio Baseado em Casos (Hybrid Intelligent Systems: Neural Networks and Case-Based Reasoning), ICMC-USP, 1997.
2. Elson Felix Mendes Filho, Avaliação de Crédito utilizando Redes Neurais Artificiais Evolutivas (Credit Evaluation Using Evolutive Artificial Neural Networks), ICMC-USP, 1997.
3. Paulo Sérgio Prampero, Combinação de Estimadores para Reconhecimento de Padrões (Estimators Combination for Pattern Recognition), ICMC-USP, 1998.
4. Ernesto Cuadros Vargas, Kipu: Um Simulador para Redes Neurais Construtivas (Kipu: A Simulator for Constructive Neural Networks), ICMC-USP, 1998.
5. Estefane Lacerda, Otimização de Redes Neurais do tipo Radial Basis Function utilizando Algoritmos Genéticos (Radial Basis Function Neural Networks Optimization Using Genetic Algorithms), ICMC-USP, 1999.
6. Edmar Martinelli, Extração de Conhecimento de Redes Neurais Artificiais (Knowledge Extraction from Artificial Neural Networks), ICMC-USP, 1999.
7. Hélio Diniz, Combinação de Redes Neurais e Métodos Estocásticos para Previsão de Séries Temporais (Combining Neural Networks and Stochastic Methods for Time Series Analysis), ICMC-USP, 1999.
8. Fábio Melfi, Utilização de Redes Neurais para Definição de Trajetória de Robôs Móveis (Using Neural for Mobile Robots Trajectory Definition), ICMC-USP, 1999.
9. Marco Antônio Alvarez Vega, Avaliação de Técnicas de Prunning para Redes Neurais Artificiais (Evaluation of Pruning Techniques for Artificial Neural Networks), ICMC-USP, 1999.
10. Humberto de Sousa, Utilização de Redes Neurais Contrutivas para Reconhecimento de Padrões (Using Constructive Neural Networks for Pattern Recognition), ICMC-USP, 2000.
11. Katti Faceli, Fusão de Sensores Utilizando Combinação de Técnicas de Inteligência Artificial (Sensor Fusion through combination of Fuzzy Techniques), ICMC-USP, 2001.

12. Thiago Turchetti Maia, Estratégias para combinação de técnicas de Boosting e Support Vector Machines, Electrical Engineering School, Federal University of Minas Gerais, 2003 (as co-supervisor, the supervisor was Dr. Antonio de Pádua Braga from Electrical Engineering School, Federal University of Minas Gerais, Brazil).
13. Alfredo Lanari, Hipermídia Adaptativa Utilizando Redes Neurais (Adaptive Hypermedia Using Neural Networks), ICMC-USP, 2004.
14. Cláudio Policastro, Adaptação em Sistemas Híbridos de RBC (Adaptation in Hybrid CBRs), ICMC-USP, 2004.
15. Bruno Feres de Souza, Seleção de Atributos por Algoritmos Genéticos para Classificação de Dados de Expressão Genética (Attributes Selection by Genetic Algorithms for Classification of Gene Expression Data), ICMC-USP, 2005
16. Sabrina de Oliveira de Sousa, Utilizando Algoritmos Genéticos para o Alinhamento de Seqüências (Using Genetic Algorithms for Sequence Alignment), Genetics/UFSCar, 2005 (as co-supervisor, the supervisor was Dr. Pedro Galetti from Genetics Department, Federal University of São Carlos, Brazil).
17. Murilo Coelho Naldi, Agrupamento de Dados Usando Algoritmos Genéticos (Clustering Using Genetic Algorithms), ICMC-USP, 2006.
18. Giampaolo Libralato, Detecção de Ruídos em Dados de Expressão Gênica (Noise Detection in Gene Expression Data), ICMC-USP, 2007.
19. Eduardo de Paula Costa, Investigação de Técnicas de Classificação Hierárquica para Problemas de Bioinformática (Investigation of Hierarchical Classification Techniques for Bioinformatics Problems), ICMC-USP, 2008.
20. André Rossi, Bioinspired Parameter Adjustment, ICMC-USP, 2009.
21. Cerri, R., Hierarchical Multi-Label Classifiers, ICMC-USP, 2010.
22. Rosane Maffei, Multi-Label Classification Using Learning Classifiers, 2010.

## 13.2 PhD Supervisions

### 13.2.1. Concluded

1. Adriano Mauro Cansuan, Desenvolvimento de um Sistema Adaptativo de Detecção de Intrusos em Redes de Computadores (Development of an Adaptive System for Intrusion Detection in Computer Networks), São Carlos Physics Institute - University of São Paulo, 1997 (as co-supervisor, the supervisor was **Dr. Edson Moreira from ICMC - Universidade de São Paulo, Brazil**). –  
Currently, Associate Professor at UNESP
2. Werner Siegfried Hanisch, Desenvolvimento de Modelos Mecanístico e Neural para o Processo de Lodos Ativados de Tratamento de Esgotos Domésticos (Development of Mechanistic and Neural Models for the Activated Sludge Process Treating Domestic Sewage), São Carlos Engineering School -University of São Paulo, 1999 (as co-supervisor, the supervisor was **Prof. Eduardo Pires from São Carlos Engineering School -University of São Paulo, Brazil**).  
Currently, Assistant Professor at Universidade Federal de São Paulo
3. Ricardo Barz Sovat, Combinando Redes Neurais Artificiais e Raciocínio Baseado em Casos (Combining Artificial Neural Networks and Case-Based Reasoning), ICMC - University of São Paulo, Brazil, 2002.

Currently, Assistant Professor at Instituto Federal de Educação, Ciência e Tecnologia de São Paulo

4. Alexandre Botazzo Delben, Algoritmos Genéticos Híbridos para o Planejamento de Sistemas Hidroelétricos (Energy Restoration Using Genetic Algorithms), São Carlos Engineering School -University of São Paulo, Brazil, 2002 (**as co-supervisor, the supervisor was Prof. Newton Bretas from São Carlos Engineering School-University of São Paulo, Brazil**).  
Currently, Assistant Professor at Universidade de São Paulo
5. Estéfane George Lacerda, Model Selection of RBF Networks via Genetic Algorithms, Center of Informatics - Federal University of Pernambuco, 2003 (**as co-supervisor, the supervisor was Prof. Teresa Ludermir, Center of Informatics - Federal University of Pernambuco, Brazil**).  
Currently, Researcher ar Universidade Federal do Rio Grande do Norte
6. Cláudia Regina Milaré, Extração de Conhecimento de Redes Neurais (Knowledge Extraction from Neural Networks), ICMC - University of São Paulo, Brazil, 2003.  
Currently, Assistant Professor at Centro Universitário das Faculdades Associadas de Ensino
7. Antonio Valério Neto, Processamento e Análise de Imagens para Medição de Vícios de Refração Ocular (Image Processing and Analysis to Measure Ocular Refractive Vicious), ICMC - University of São Paulo, Brazil, 2003 (**as co-supervisor, the supervisor was Dr. Maria Cristina Ferreira de Oliveira, ICMC / Universidade de São Paulo P, Brazil**).
8. Patricia Leite Teixeira, Algoritmos Genéticos Híbridos para o Planejamento de Sistemas Hidroelétricos (Hybrid Genetic Algorithms for Hydroletric Systems Planning), EESC/ Universidade de São Paulo, Brazil, 2003 (**as co-supervisor, the supervisor was Dr Adriano França from São Carlos Engineering School-University of São Paulo, Brazil**).
9. Ana Carolina Lorena, Investigação de Estratégias para Geração de Máquinas de Vetores de Suporte Classification Multiclasses (Investigation of Strategies for the Generation of Multiclass Support Vector Machines), ICMC-USP, 2006.
10. Katti Faceli, Combinação de clusters para Análise de Expressão Gênica (Cluster Ensemble for Gene Expression Analysis), ICMC-USP, 2006.
11. Eduardo Spinola, Detecção de Novidade com Aplicação a Fluxos Contínuos de Dados (Novelty Detection with Application to Data Streams), ICMC-USP, 2008.
12. Luiz Carlos G. Lopes, Aplicação de algoritmos genéticos híbridos na resolução de problemas numéricos (Applying Hybrid Genetic Algorithms to Solve Numerical problems), Universidade da Madeira, Portugal, 2008.
13. Rodrigo Bianchi, Extração de Conhecimento de Classificadores de Margens Largas Aplicadas à Análise de Expressão Gênica (Knowledge Extraction from Large Margin for Gene Expression Analysis), ICMC-USP, 2008.
14. Débora Medeiros, Gene Semi-supervised Clustering Using Text Mining, ICMC-USP, 2010.
15. Bruno Feres de Souza, Using Meta-Learning and Bioinspired Algorithms for Parameters Tuning, ICMC-USP, 2010
16. Marcio Basgalupp, Induction of decision trees for classification using Evolutionary Computation, ICMC-USP, 2010.
17. Mariá Cristina Vasconcelos Nascimento, Metaheuristics for the graph clustering problem (co-supervised by Dr Franklina Toledo), ICMC-USP, 2010.

18. Murilo Coelho Naldi. Investigação de Técnicas de Computação Evolutiva em Problemas de Agrupamento de Dados. 2011. Tese (Doutorado em Ciências da Computação e Matemática Computacional) - Universidade de São Paulo, Fundação de Amparo à Pesquisa do Estado de São Paulo. Co-Orientador:
19. Sabrina de Oliveira. Análise do efeito proliferativo da desintegrina Alternagina-C (ALT-C) em células precursoras endoteliais por técnicas proteômicas, Biotechnology, Universidade Federal de São Carlos, (**as co-supervisor, the supervisor was Dr Adriano França from São Carlos Engineering School-University of São Paulo, Brazil**).
20. Jorge Kanda, Meta-aprendizado em Otimização, Meta-learning for Optimization, ICMC-USP, 2011  
Currently, Assistant Professor at Universidade Federal do Amazonas
- 21.

### **13.2.2. Current**

1. José Augusto de Andrade, Attribute Selections for Clustering in Bioinformatics, ICMC-USP, since August, 2008, Grant from CNPq
2. André Rossi, Meta-learning for Data streams, ICMC-USP, since March 2009, Grant from FAPESP
3. Rosane Vallim Maffei, machine learning for data streams in computer games, ICMC-USP, since March 2010, Grant from FAPESP
4. Ivani de Oliveira Negrão Lopes, Semi-supervised learning for microRNA detection, since March 2010, Grant from CNPq
5. Elaine Ribeiro de Faria, Novelty detection using clustering algorithms, since March 2010, Grant from CNPq
6. Ricardo Cerri, Hierarchical and multilabel classification, since March 2010, Grant from FAPESP
7. Rodrigo Coelho Barros: Evolving tree induction algorithms by evolutionary programming, since March 2010, Grant from FAPESP
8. Davi Pereira dos Santos, Using ensembles for novelty detection, since March 2011, Grant from CAPES
9. Luis Paulo Faina Garcia, Data pre-processing by noise detection, since August 2011, Grant from CAPES

## **13.3. Pos-Doctorate Supervisions**

### **13.3.1. Concluded**

1. Alexandre Cláudio Botazzo Delbem, Using Evolutionary Computation in Bioinformatics, from 04/2002 to 02/2003, Grant from CNPq
2. Marcílio Carlos Pereira Souto, Computability of Hybrid Neural Networks, from 08/2002 to 09/2003, Grant from FAPESP
3. Renato Tinos, Temporal Genetic Algorithms, from 03/2003 to 03/2004, Grant from CNPq
4. Arthur Plínio de Sousa Braga, Fault Detection in Engines, from 06/2004 to 04/2005, Grant from CNPq

5. Arthur Plínio de Sousa Braga, Intelligent Automation of Retification Processing Monitoring Using Kyatera Network, from 07/2005 to 08/2006 ,Grant from FAPESP
6. Ana Carolina Lorena, Multiclass Classification, from 10/2006 to 09/2007, Grant from CNPq
7. Katti Faceli, Ensemble of Clustering Techniques, from 11/2006 to 12/2007, Grant from FAPESP
8. Antônio Nilder, Data Mining for Credit Analysis, from 03/2007 to 12/2007, Grant from Northeast Brazilian Bank
9. Daniel Luís Barreiro, Music Composition by Genetic Algorithms, from 06/2008 to 10/2008, Grant from CNPq
10. Milaré, C., from 03/2009 to 01/2011, Grant from CNPq
11. Bruno Feres de Souza, from 10/2010 to 10/2012, Grant from CNPq
12. Tiago Silva das Silva, from 05/2012 to 11/2012, Grant from CNPq
13. Tiago Silva das Silva, from 12/2012 to 05/2013, Grant from FAPESP

### **13.3.2. Current**

- Edwin Vilalta, since 04/2013, Grant from FAPESP

## **14. International collaborations**

- Arizona State University, USA
- Auckland University of Technology, New Zealand
- Central Queensland University, Australia
- Institut national de recherche en sciences et technologies pour l'environnement et l'agriculture, France
- Rutgers University, USA
- University of Alberta, Canada
- University of Newcastle, Australia
- University of Kent, UK
- University of Surrey, UK
- Universidade do Porto, Portugal
- Universidade de Rosario, Argentina

## **15. Courses taught**

### **15.1. Undergraduate level**

- Advanced Programming
- Artificial Intelligence
- Bioinformatics
- Computer and Society

- Data Mining for Molecular Biology
- Data Structures and Databases
- Digital Logic I (shared)
- Digital Logic II
- Entrepreneurship
- Intelligent Systems in Biology
- Intelligent Systems
- Introduction to Compilers
- Introduction to Computer Science II
- Introduction to Computer Science to Engineering
- Neural Networks
- Object Oriented Programming
- Programming Languages
- System Analysis and Design in Applications
- Statistics I

## **15.2. Graduate level**

- Artificial Intelligence
- Bioinformatics
- Bioinspired Computing
- Intelligent Systems
- Machine Learning
- Neural Networks
- Special Topics in Bioinspired Computing
- Special Topics in Neural Networks

## **16. Academic Committees**

### **16.1. Local**

- Member of the Institute of Mathematics and Computer Science of the University of São Paulo ICMC-USP Research Commission, May 2001 - May 2004.
- Chair and of the Institute of Mathematics and Computer Science of the University of São Paulo ICMC-USP Research Commission, May 2002 - May 2004.
- Member of the Institute of Mathematics and Computer Science of the University of São Paulo (ICMC-USP) Library Commission, from April 2002 to April 2004 and from July 2007 to July 2009.
- Member of the Research Council of the University of São Paulo, from May 2002 to May 2004.
- Member of the Institute of Mathematics and Computer Science of the University of São Paulo (ICMC-USP) Library Commission, from April 2003 to April 2004 and from July 2007 to July 2009.
- Member of the Department of Computer Science Summer School Commission, January 1996.

- One of the Editors of the “Cadernos de Computação” of the Institute of Mathematics and Computer of the University of São Paulo (ICMC-USP), from May 2002 to May 2004.

## **16.2. National and International**

- Chair of the Neural Networks Committee of the Brazilian Computer Society, SBC, from November/1995 to October/1996
- Member of the Council of the Brazilian Computer Society, SBC, from 2001 to 2005
- Member of the Council of the Brazilian Computer Society, SBC, from 2007 to 2011
- Member of the Bioinformatics Steering Committee of the Brazilian Computer Society, from September/2003 – December/2004
- Member of the Bioinformatics Steering Committee of the Brazilian Computer Society, September/2007 – September/2009.
- Member of the Neural Networks Steering Committee of the Brazilian Computer Society, September/2008 – October/2010
- Member of the Neural Networks Steering Committee of the Brazilian Computer Society, September/2007 – September/2009.
- Chair of the Computational Biology committee of the Brazilian Computer Society, SBC, October 2008 - October 2010
- Editor of the textbook series SBC-Campus-Elsevier, July 2009-July 2012
- Member of the International Association for Statistical Computing (IASC), 2013-2017

## **17. Administrative Duties**

- Member of the Department of Computer Science Council in several occasions
- Member of the Institute of Mathematics and Computer Science of the University of São Paulo (ICMC-USP) Congregation on several occasions
- Member of the Institute of Mathematics and Computer Science of the University of São Paulo ICMC-USP Research Commission, May 2001 - May 2004.
- Chair and of the Institute of Mathematics and Computer Science of the University of São Paulo ICMC-USP Research Commission, May 2002 - May 2004.
- Member of the Institute of Mathematics and Computer Science of the University of São Paulo (ICMC-USP) Library Commission, from April 2002 to April 2004 and from July 2007 to July 2009.
- Member of the Research Council of the University of São Paulo, from May 2002 to May 2004.
- Member of the Institute of Mathematics and Computer Science of the University of São Paulo (ICMC-USP) Library Commission, from April 2003 to April 2004 and from July 2007 to July 2009.
- Member of the Department of Computer Science Summer School Commission, January 1996.

- One of the Editors of the “Cadernos de Computação” of the Institute of Mathematics and Computer of the University of São Paulo (ICMC-USP), from May 2002 to May 2004.
- Chair of the Institute of Mathematics and Computer Science Research Committee, University of São Paulo, June/2002 – May/2004
- Deputy Chair of the Department of Computer Science, Institute of Mathematics and Computer Science, University of São Paulo, September/2002 – August/2004
- Chair of the Computer Science Department, University of São Paulo, October 2008 – February 2010
- Deputy Chair of the Computer Science Department, University of São Paulo, Since October 2011

## **18. Other activities**

- Member of SBC (Brazilian Computer Society)
- Member of ACM
- Member of INNS
- Member of IEEE
- Member of the Brazilian Society Council 2001-2003, 2003-2005 and 2007-
- Member of the Ministry of Education Commission in charge of the evaluation of Computing Degrees offered by Brazilian Universities, since 2002.

## **19. Tutorials**

- André Carvalho: Designing Neural Networks for Credit Analysis, International Joint Conference on Neural Networks, IJCNN'99, July 1999
- André Carvalho: Hybrid Intelligent Systems, Argentine Symposium on Artificial Intelligence, ASAII 2001, Argentine Conference on Computer Science and Operational Research, 30 JAIIO - 2001, Buenos Aires, Argentina, 6 hours, September 2001.
- André Carvalho: Inteligência Artificial (in Portuguese) – Artificial Intelligence, I Brazilian School on Artificial Intelligence and Bioinformatics, São Carlos, Brazil, 4 hours, December 2001
- André Carvalho: Hybrid Intelligent Systems, Congreso Latino Americano de Sistemas, Informatica, Telematica, Electronica y Computacion, CLASSITEC'2002, Arequipa, Peru, 6 hours, July 2002
- André Carvalho: AI and Bioinformatics, Summer School, University of Burgos, Spain, 2 hours, July 2003
- M. Souto, Lorena, A., Delbem, A. and André Carvalho: Técnicas de Aprendizado de Máquina em Problemas de Biologia Molecular (in Portuguese) – Machine Learning Techniques in Problems of Molecular Biology, XXI Brazilian Congress on Computer, SBC'2003, Campinas, Brazil, 6 hours, August 2003
- André Carvalho: Inteligência Artificial e Bioinformática (in Portuguese) - AI and Bioinformatics, Computing Week, SEMAC, Unesp de São José do Rio Preto, São José do Rio Preto, Brazil, 6 hours, September 2003

- Ana Lúcia Bazzan and André Carvalho: Computational Intelligence, II Brazilian Workshop on Bioinformatics, WOB 2003, Macaé, Brazil, 3 hours, December 2003.
- André Carvalho, Delbem, A., G. Telles, E. Simões and R. Romero: Computação Bioinspirada (in Portuguese) – Bioinspired Computing, XXII Brazilian Congress on Computer, SBC'2004, Salvador, Brazil, 6 hours, August 2004.
- André Carvalho: Datamining in Bioinformatics, Norwegian University of Science and Technology, Trondheim, Norway, September, 2004.
- André Carvalho: Bioinspired Machine Learning, XVI European Conference on Machine Learning (ECML'05) – Porto, Portugal – October 2005.
- André Carvalho: Bioinspired Intelligent Systems, VI Hybrid Intelligent Systems (HIS'06) – Auckland, New Zealand – December 2006.
- André Carvalho, Faceli, K. and Lorena, A. C., Datamining in Bioinformatics VII International Conference on Intelligent Systems Analysis, (ISDA'07) – Rio de Janeiro, Brazil – October 2007.
- André Carvalho, Faceli, K. and Lorena, A. C., Datamining in Bioinformatics Brazilian School on Bioinformatics – Santo Andre, Brazil – August 2008.
- André Carvalho, Datamining in Bioinformatics, Workshop Brazil-France – Recife, Brazil – October 2009.
- Eduardo Hruschka, Ricardo Campello and André Carvalho, Evolutionary Algorithms for Clustering, 4th Hybrid Artificial Intelligent Systems Workshop (HAIS'09), Salamanca, Spain, June 2009
- André Carvalho, Datamining in Bioinformatics, Part of the course "Técnicas de biologia molecular aplicadas à produção animal", funded by CBAB/CABBIO– São Carlos, Brazil – July 2009.
- Bruno Feres de Souza, Ricardo Prudêncio and André Carvalho: Meta-aprendizado (in Portuguese) – Bioinspired Computing, XXII Brazilian Congress on Computer, SBC'2011, Natal, Brazil, 6 hours, August 2011.
- André Carvalho, Metalearning, 13th Argentine Symposium on Artificial Intelligence (ASAII 2012), La Plata, Argentina, 5 hours, August 2012

## 20. Invited Talks

- Hybrid Neural Networks, Computing and Information Science Department, University of Guelph, Canada, March 1999.
- Applying Machine Learning to Problems in Molecular Biology, LORIA, Nancy, France, July 2003.
- Utilização de Inteligência Artificial em Bioinformática (in Portuguese) – Using Artificial Intelligence in Bioinformatics, Universidade da Madeira, Funchal, Portugal, July 2003.
- Computação Bioinspirada: de Redes Neurais e Bioinformática (in Portuguese) – Bioinspired Computing: From Artificial Neural Networks to Bioinformatics, Institute of Advanced Studies – São Carlos Branch - University of São Paulo, São Carlos, Brazil, September 2003.

- Classificação de Tumores Utilizando Inteligência Artificial (in Portuguese) – Tumor Classification Using Artificial Intelligence, Hemocentro Foundation, Ribeirão Preto, Brazil, October 2003.
- Applying Artificial Intelligence Techniques to Bioinformatics, University of Newcastle, Newcastle, Australia, December 2003.
- Applications of Artificial Intelligence in Bioinformatics, Griffith University, Gold Coast, Australia, December 2003
- Using Machine Learning to solve problems from Molecular Biology, Uppsala, University, Uppsala, Sweden, March 2004
- Datamining, Norwegian University of Science and Technology, Trondheim, Norway, September 2004.
- Using Machine Learning in Bioinformatics, University of Porto, Porto, Portugal, February 2005.
- Optimization Techniques based on Biology, Universidade de Aveiro, Portugal, April 2006.
- Artificial Intelligence and Bioinformatics, Central Queensland University (CQU) Rockhampton, Australia, November 2007.
- Bioinspired Machine Learning, The Hong Kong Polytechnic University, Hong Kong, June, 2008.
- Non-Trivial Classification Problems, Brain Inspired Cognitive Systems (BISC'2008), São Luís, Brazil, June 2008.
- Advanced Classification Problems, Computer Engineering Department, University of Alberta, Canada, September, 2009.
- Meta-learning for Bioinformatics, Functional Genomics Group, University of Regensburg, Germany, October 2010.
- Using Metalearning for Technique Recommendation, World Congress on Information and Communication Technologies (WICT 2011), Mumbai, India, December 2011
- Technique recommendation using Metalearning, 13<sup>th</sup> International Conference on Intelligent Data Engineering and Automated Learning (IDEAL), Natal, Brazil, 2012

## **21. Participation in Exams of PhD Thesis**

1. Luiz Camolesi Junior, São Carlos Physics Institute, University of São Paulo, Brazil, 1996.
2. João Fernando Marar, Center of Informatics, Federal University of Pernambuco, Brazil, 1997.
3. Giovani Baratto, Engineering School, University of São Paulo, Brazil, 1997.
4. Antônio Nilder Duarte Furtado, São Carlos Engineering School, University of São Paulo, Brazil, 1998.
5. Meuser Jorge Valençá, Center of Informatics, Federal University of Pernambuco, Brazil, 1999.
6. Edward Colville, School of Engineering, University of Tasmania, Hobart, Tasmania, Australia, 2000
7. Maurizete Silva Santos, Center of Informatics, Federal University of Pernambuco, Brazil, 2000.

8. Myer Blumenstein, Faculty of Information Technology, Griffith University, Gold Coast, Australia, 2001
9. Alexandre G. Nowosad, National Institute of Space Research, São José dos Campos, Brazil, 2001.
10. Roselito de Albuquerque Teixeira, Engineering School, Federal University of Minas Gerais, Brazil, 2001.
11. Eduardo Raul Hruschka, Engineering Pos-Graduate Program, Federal University of Rio de Janeiro, Brazil, 2001.
12. Mário Oleskovicz, São Carlos Engineering School, University of São Paulo, Brazil, 2001.
13. Ricardo Barz Sovat, Institute of Mathematics and Computer Science, University of São Paulo, Brazil, 2002.
14. Roberto Alves de Oliveira, São Carlos Physics Institute, University of São Paulo, Brazil, 2002.
15. Paulo Eduardo Almeida, Engineering School, University of São Paulo, Brazil, 2002.
16. Ildeberto Aparecido Rodello, São Carlos Physics Institute, University of São Paulo, Brazil, 2003.
17. Vanessa Cristina de Castilho, São Carlos Engineering School, University of São Paulo, Brazil, 2003.
18. Estéfane George Macedo de Lacerda, Center of Informatics, Federal University of Pernambuco, Brazil, 2003.
19. Andréa Gomes Campos, São Carlos Physics Institute, University of São Paulo, Brazil, 2003.
20. Cláudia Regina Milaré, Institute of Mathematics and Computer Science, University of São Paulo, Brazil, 2003.
21. Leônicio Zárate Gamarra, Engineering School, University of São Paulo, Brazil, 2003.
22. Antonio Valério Neto, Institute of Mathematics and Computer Science, University of São Paulo, Brazil, 2003.
23. Vanessa Portioli Rolnik, São Carlos Engineering School, University of São Paulo, Brazil, 2003.
24. Patricia Leite Teixeira, São Carlos Engineering School, University of São Paulo, Brazil, 2003.
25. Ernesto Cuadros Vargas, Institute of Mathematics and Computer Science, University of São Paulo, Brazil, 2003.
26. Akio Yamazaki, Center of Informatics, Federal University of Pernambuco, Brazil, 2004.
27. André Luís V. Coelho, Faculty of Computer and Electrical Engineering, University of Campinas, Brazil, 2004.
28. Clinton Pereira, Engineering School, University of São Paulo, Brazil, 2004.
29. Alexandre César Muniz de Oliveira, National Institute of Space Research, São José dos Campos, Brazil, 2004.
30. Daniela Sabino, São Carlos Physics Institute, University of São Paulo, Brazil, 2004.
31. Kelen C. de Oliveira Teixeira, São Carlos Engineering School, University of São Paulo, Brazil, 2004.
32. Adriano Lorena Inácio de Oliveira, Center of Informatics, Federal University of Pernambuco, Brazil, 2004.

33. Ricardo Linden, Engineering Pos-Graduate Program, Federal University of Rio de Janeiro, Brazil, 2005.
34. Said Sadique Adi, Computer Science Pos-Graduate Program, University of São Paulo, Brazil, 2005.
35. Karla Vittori, São Carlos Engineering School, University of São Paulo, Brazil, 2005.
36. John Zakos, Faculty of Information Technology, Griffith University, Gold Coast, Australia, 2005.
37. Teodora Figueroa, São Carlos Engineering School, University of São Paulo, Brazil, 2005.
38. Gladys Jordan, Mathematics Department, University of Aveiro, Aveiro, Portugal, 2006.
39. Katti Faceli, Department of Computer Science, University of São Paulo, Brazil, 2006.
40. Gisele Buschia Baioco, Department of Computer Science, University of São Paulo, Brazil, 2007.
41. Adriano Pila, Department of Computer Science, University of São Paulo, Brazil, 2007.
42. Odilon Delmont Filho, São Carlos Engineering School, University of São Paulo, Brazil, 2007.
43. Marcelo Ribeiro Alves, Engineering Pos-Graduate Program, Federal University of Rio de Janeiro, Brazil, 2007.
44. André Fujita, Department of Computer Science, University of São Paulo, Brazil, 2007.
45. Luiz Henrique Merschmann, Institute of Computing, Fluminense Federal University, Niterói, Brazil, 2007.
46. Fabiana Cristina Bertoni, São Carlos Engineering School, University of São Paulo, Brazil, 2007.
47. Jorge Eduardo de Shoucair Jambeiro Filho, Computing Institute, State University of Campinas, Brazil, 2007.
48. Eduardo Jaques Spínosa, Department of Computer Science, University of São Paulo, Brazil, 2008.
49. Cleber Zanchettin, Center of Informatics, Federal University of Pernambuco, Brazil, 2008.
50. Eufrásio de Andrade Lima Neto, Center of Informatics, Federal University of Pernambuco, Brazil, 2008.
51. Waldo Gonzalo Cancino Ticona, Department of Computer Science, University of São Paulo, Brazil, 2008.
52. Márcia Lika Mon-Ma, São Carlos Engineering School, University of São Paulo, Brazil, 2008.
53. Rodrigo Elias Bianchi, Department of Computer Science, University of São Paulo, Brazil, 2008.
54. Cláudio Adriano Policastro, Department of Computer Science, University of São Paulo, Brazil, 2008.
55. Grazieli Carosio, São Carlos Engineering School, University of São Paulo, Brazil, 2008.
56. Robson Mariano, Engineering Pos-Graduate Program, Federal University of Rio de Janeiro, Brazil, 2009.

57. Leonardo Chaves Dutra da Rocha, Department of Computer Science, Federal University of Minas Gerais, Brazil, 2009.
58. Augusto César dos Santos, São Carlos Engineering School, University of São Paulo, Brazil, 2009.

## References

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