André ANJOS, D.Sc
D.Sc. on Electronics Engineering, Signal Processing

CERN, Genève 23 CH-1211 - Suisse/Switzerland
+4178 640 2708

Birth December: 31st. 1973 (currently 36)
Marital Status: Married
Nationality: Brazilian, from Rio de Janeiro
Home Address: 39, Rue de la Servette, Switzerland, CH-1202
andre.dos.anjos@cern.ch
http://andreanjos.org

EDUCATION

- **2001-2006**
  PhD on Electronics Engineering (Signal Processing) at the Post Graduate Program of the Federal University of Rio de Janeiro (COPPE/UFRJ).

- **2000-2001**
  Masters on Electronics Engineering (Signal Processing) at the Post Graduate Program of the Federal University of Rio de Janeiro (COPPE/UFRJ). Degree issued on June 2001.

- **1994-1999**
  Electronics Engineering at the Federal University of Rio de Janeiro. Degree issued on December 1999.

- **1989-1993**
  Technical Course in Electronics at the Federal Center of Technology of Rio de Janeiro - CEFET (from 1989 until 1992). Degree issued on 1993.

PROFESSIONAL EXPERIENCE

- **2004-present**
  I'm currently working on the development and construction of the final ATLAS Trigger System, as a full-time researcher associated with the University of Wisconsin/Madison/USA.

- **2001-2004**
  3 years associated with the Post Graduate Program of the Federal University of Rio de Janeiro (COPPE/UFRJ):
  Apr 2001-Nov 2001 Federal University of Rio de Janeiro, pre-thesis work;
  Dec 2001-2004 CERN, Switzerland, Collaborating for the implementation of a ATLAS Trigger Prototype based on Neural Networks

- **2000-2001**
  13 months associated with the Post Graduate Program of the Federal University of Rio de Janeiro (COPPE/UFRJ). Subject: Masters on Signal Processing.

- **1998-1999**
  One year and two months as a researcher on Signal Processing associated with the Signal Processing Laboratory (LPS) at the Federal University of Rio de Janeiro. Subject: High-performance computing applied to Signal Processing.

- **1997-1998**
  One year and one month (September, 1997 till October 1998) as a researcher at http://www.cern.ch (European Center for Particle Physics - Geneva - Switzerland), on Systems Engineering. This work was developed in the context of the ATLAS experiment.

- **1995-1997**
  Two and a half years (from begin of 1995 till middle of 1997) as a junior researcher on Signal Processing associated with the Brazilian National Research Program (CNPq) at the Federal University of Rio de Janeiro. Subjects: Digital filtering applied to particle identification, parallel processing in Transputer-based machines and Neural networks applied to particle identification.

PUBLICATIONS

Here is a shorter, selected list of publications including my thesis work. For a full list of publications, please consult http://andreanjos.org/publication/year/.

2008
- André Anjos et al., "The DAQ/HLT system of the ATLAS experiment", Proceedings of Conference, November/2008, International Workshop on Advanced Computing and Analysis Techniques in Physics Research

- G. Aad, E. Abat, J. Abdallah, A. A. Abdelalim, A. Abdesselam, O. Abdinov, B.A. Abi, M. Abolins, A. Anjos, et al, "The ATLAS Experiment at the CERN Large Hadron Collider", Journal, August/2008, Journal of Instrumentation, number S08003

2006
- André Anjos, "Sistema Online de Filtragem em um Ambiente com Alta Taxa de Eventos", Thesis, December/2006, COPPE/UFRJ

- A. dos Anjos, R.C. Torres, J.M. Seixas, B.C. Ferreira, T.C. Xavier, "Neural triggering system operating on high resolution calorimetry information", Journal, April/2006, Nuclear Instruments and Methods in Physics Research, volume 559, pages 134-138

- Dos Anjos, A; Ellis, Nick; Haller, J; Höcker, A; Kohno, T; Landon, M; von der Schmitt, H; Spiwoks, R; Wengler, T; Wiedenmann, W; Zobernig, H, "A configuration system for the ATLAS trigger", Journal, February/2006, Journal of Instrumentation, Institute of Physics Publishing and Sissa, number P05004

2004
- dos Anjos, A; Abolins, M; Armstrong, S; Baines, J T M; Barisonzi, M; Beck, H P; Bee, C P; et al, "The Second Level Trigger of the ATLAS Experiment at CERN's LHC", Journal, July/2004, IEEE Transaction on Nuclear Science, volume 51, number 3, pages 909-914

2003
- B. Caron, J. deJong, J.L. Pinfold, R. Soluk, S. Wheeler; A. dos Anjos; et al, "The ATLAS HLT, DAQ & DCS Technical Design Report", Technical Report, October/2003, CERN Publication

- dos Anjos, A and Seixas, J M, "Neural particle discrimination for triggering interesting physics channels with calorimetry data", Journal, August/2003, Nuclear Instruments And Methods In Physics Research A - Accelerators, Spectrometers, Detectors And Associated Equipament, volume 502, pages 713-715

2001
- André Anjos, "Sistema neuronal rápido de decisão baseado em calorimetria de altas energias", Thesis, April/2001, COPPE/UFRJ

1998
- Seixas, J.M.; Caloba, L.P.; Anjos, A.R.; Kastrup, B.; Dantas, A.C.H.; Linhares, R., "A neural online triggering system based on parallel processing", Journal, August/1998, IEEE Transactions on Nuclear Science, volume 45, number 4, pages 1814-1818

1997

  • André Rabello dos Anjos, "Sistema de classificação baseado em uma máquina com sistema distribuído", Thesis, September/1997, Departamento de Eletronica/UFRJ

  • Seixas, J. M. de, Calôba, L. P., Anjos, A. R., Dantas, A. C. H. and Linhares, R., "Fast Neural Decision System Based On DSPs And Parallel Processing",Proceedings of Conference, January/1997, International Conference on Signal Processing Applications and Technologies, San Diego, USA, pages 1629-1633

1996

  • Seixas, J. M. de ; Calôba, L. P. ; Anjos, A. R., "Particle discrimination using sub-optimal filtering techniques", Proceedings of Conference,January/1996, Congresso Brasileiro de Automatica (CBA), São Paulo, Brazil, pages 635-640

COMPUTING

  • Proficient in various Operating System types, including but not limited to Linux, Microsoft's Windows and Apple's OSX;

  • Advanced system and network administration skills;

  • Concepts of networking (intra/Internet), firewalling, Internet publishing, network protocols, architectures and associated technologies;

  • Masters structured (C, Pascal, etc.) and object-oriented programming (C++, Java, etc.), including the use of software development tools (Revision Control, Building Environments, Documentation Tools, High-level Description Tools, Testing Frameworks, etc.);

  • Masters techniques on concurrent/parallel programming, as well as the concepts of programming on multi-task Operating Systems;

  • Experience on building and integrating large software projects, managing releases and software policies;

  • Experience on the use and development of databases;

LANGUAGES

• **Portuguese** Mater language;
• **English** Read, write and speak fluently;
• **French** Read, write and speak fluently;
• **Spanish** Basic communication skills, can read well.

OFF-WORK ACTIVITIES

These are activities I like to conduct off work when time allows:

Sports Alpine skiing, Mountain hiking, Biking, Squash, Tennis, Swimming;

Music I enjoy playing music. I practice and play various percussive instruments. I can also play a Brazilian Cavaquinho, which is an harmonic instrument used in Brazil;

Computing Explore new programming techniques and tools.