

Leonardo Araujo

Curriculum Vitae

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Education

- 2008–current PhD in Electrical Engineering, Federal University of Minas Gerais / Technische Universität Dresden.
- 2004–2007 Master in Electrical Engineering, Federal University of Minas Gerais.
- 1999–2003 Bachelor in Electrical Engineering, Federal University of Minas Gerais.

PhD Thesis

- title Information Theory Applied to Speech Communication
- supervisors Pr Hani Camille Yehia

Master Thesis

- title Wavelet Filter Bank with Scale Factor Greater than Two
- supervisors Pr Hani Camille Yehia
- description This work presents a wavelet analysis using an integer scale factor greater than two in order to achieve a better frequency resolution ...

Experience

- 2000–current CEFALA, Research.
Member of CEFALA (Center for Research on Speech, Acoustic, Language and Music).
- June 2007–September 2008 Engineer, Ottimah.
Optimization and Artificial Intelligence.
- August 2007–Dezember 2007 Professor, Metropolitana.
Professor of Artificial Intelligence at the Metropolitana Faculty
- August 2005–December 2005 Professor, PUC–MG.
Professor of Artificial Intelligence at the Catholic University of Minas Gerais (PUC–MG)
- March 2003–May 2005 Developer, ATAN.
Programming and developing internet based applications.

Languages

- Portuguese Native
- English Very good
Taking classes at the Luziana Lanna (Brazil), Hearven School of English (UK) and King's School of English (UK). Scored 102/120 in TOEFL exam (2007).

German Good

Taking classes at the Faculty of Languages in the Federal University of Minas Gerais.

Computer skills

OS	Linux, Unix, Windows	administration	Apache
programming	Java, C/C++/C#	scripting	PHP, Shell, Perl
scientific	Matlab	typography	L ^A T _E X, The Gimp, PhotoShop, CorelDraw, Inkscape
web design	HTML, CSS, AJAX	database	MySQL

Interests

research	I have research interests on human perception: Visual, Auditory and Speech Perception; matters concerning Cognitive Sciences and Neurology; Signal Processing; Acoustics; Auditory Models; Speech Synthesis; Speech Analysis; Linguistics; Wavelets; Computer Graphics; Computer Vision; Telecommunications; Information Theory; Signal Detection Theory; Psychophysics; etc.
arts	I am a design fan, and I am also very found of photography and painting.
music	Music is a passion which I can gladly combine with my research interests.
literature	I like literature very much, so I try to study it a bit and read books in my spare time.

Undergraduate Research Assistant

- Space-Time Based Digital Video Coding Through Orthonormal Functions (supervisor: Hani Camille Yehia, DELT/UFGM)
- Numerical Methods for Differential Equations (supervisor: Denize Burgarelli Duczmal, DMAT/UFGM)

Organization of Events

- SemEA (Audio Engineering Seminar) 2002, organization and annals editing and publishing
- SBRN (Brazilian Symposium on Neural Networks) 2004, annals editing and publishing
- ISSP (International Seminar on Speech Production) 2006, organization and annals editing and publishing
- Abralín (Brazilian Association of Linguistics) 2008, annals editing and publishing
- Brazilian Congress of Hispanic 2008, annals editing and publishing

Congress, Conferences and Courses

- XXIV CNMAC (National Congress on Applied Mathematics), with presentation of a project in image coding using wavelets.
- Course on Music Education during the UFGM winter festival
- SBM 2002 (Brazilian Society of Mathematics)
- SIBGRAPI2003 (XVI Brazilian Symposium on Computer Graphics and Image Processing)
- Workshop in Image Processing
- Course on Introduction to Numerical Methods for solving differential equations
- Summer School on Linear Analysis

- Course on Rhythm Pattern Identification in Languages
- Course on Evolution Equations for Image Processing
- Course on Singularities Detection and Data Compression with Multiresolution Analysis
- Course Biennial of the Brazilian Mathematics Society
- SemEA 2002, Brazilian Seminar in Audio Engineering
- Presentation on Adaptive Numerical Methods for solving differential equations using wavelets
- Courses on Music Theory, Practice and Appreciation
- Winter School on Speech Science, 2005
- SBCM 2005 - Brazilian Symposium on Music and Computing
- Speech on Psychophysics for the University of Vicosa
- LASCON 2006 - Latin American School on Computational Neuroscience
- ISSP 2006 - International Seminar on Speech Production
- Course on Memory and Executive Functions
- Course an Introduction to the Neuropsychology of Language
- X National Congress and III International Congress on Phonetics and Phonology, 2006
- Xmeeting 2007, International Conference of the Brazilian Association for Bioinformatics and Computational Biology

Publications

Leonardo Araujo. Specialist system for detection of the clarinet timber. Brazilian Symposium on Music and Computing, 2005.

Leonardo Araujo, Tairone Nunes, Damares Placido, and Hani Yehia. A brief history of auditory models. Brazilian Symposium on Music and Computing, 2005.

Gustavo Rodrigues, Leonardo Araujo, Ana Claudia Souza, and Hani Yehia. Blind separation of speech convolutive mixtures via time-frequency. International Workshop on Telecommunications, 2007.

Nicolau Werneck, Lucas Malta, and Leonardo Araujo. A system for multimodal speech reproduction. XVI Brazilian Symposium on Computer Graphics and Image Processing, 2003.