



SHORT RESUME

PERSONAL DATA

Name: Luis Carlos Carneiro Gonçalves

Residence: Maia, Porto, Portugal

Nationality: Portuguese

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Core Competencies

- PhD in Electrotechnical Engineering; University teaching; Management; Industry experience
- Degree in Electronics and Telecommunications
- Over 10 years of experience in Telecommunications and Radio Channel
- Image Processing in High Dynamic Range Images
- Parallel Computing with CUDA and OpenMP
- Python, Matlab, Pspice and LabView
- Patent idea, major contributor, revision and submission

Work Career

- 2020, PostDoc Researcher at ESAN/University of Aveiro in Medical Image Processing. 3D Image Registration. Packages SimpleITK, PyCuda.
- 2018-2019 Researcher of Institute of Telecommunications at Aveiro in 5G Telecommunications. Projects Mobilizador 5G and ORCIP. Subjects: OpenAirInterface, 5G.
- 2017-2018 Ported program of Motorola DSP board (16 bits) to **Texas Instruments LAUNCHXL-F28069M** for Allied Motion, Vila do Conde, Portugal.
- 2017-2018 Post-Doc Researcher at INESC TEC (Vila Real, Portugal) in **Image Processing**. Knowledge, Mantiuk'08 TMO, IOIndustries Flare Camera + BitFlow Frame Grabber, Debevec Photo Merge, Photo Debayer, OpenCV, PFStools, HDRtools
 - Successfully reimplemented a widely used and highly regarded tone mapping algorithm for integrated High Dynamic Range video processing pipeline for object detection and tracking
 - Developed a solution to capture and merge in HDR images using Low Dynamic Range Flare image camera
- 2014-2015 Teaching at University of Aveiro *Introduction to Communication and Information Technology* to Management Degree. Microsoft Office: Excel, Word, Outlook and PowerPoint.
- 2014-2017 Post-Doc Researcher at University of Aveiro on the subject: **High Performance Computing in Telecommunications**
- 2013-2014 Post-Doc Researcher at Institute of Telecommunications at Aveiro on the subject **Cognitive Radio, Spectrum Occupancy**

- 2012-2013 Post-Doc Researcher at Centre of Innovation in Telecommunications and Integration of Services (CITI) of Institut National des Sciences Appliquées (INSA) de Lyon, France on the subject: **Radio propagation, Wireless Signal Measurement and Baseband Signal Impairment Compensation**
- 2010-2012 Post-Doc Researcher at Institute of Telecommunications at Aveiro on the subject: **Cognitive Radio, Spectrum Occupancy**
- Realization of three Software Projects for Globe Motors (now Allied Motion), Vila do Conde, Portugal
- 2009-2010 Assistant Professor at Lusófona University at Lisbon, Portugal. Lectures and ruled Signals and Systems.
- 2008-2009 Final phase of writing the thesis.
- 2004-2008 Invited Lecturer at University of Madeira, Portugal. Lectures on Electronics I, Electronics II, Telecommunications Fundamentals, Telecommunications Fundamentals II, Telecommunications Systems, Digital Systems and Circuits Analysis.
- 1999-2003 PhD Grant of FCT.
- Before 1999, worked at BLAUPUNKT, Audio and Video Company in Braga, Portugal and TEXAS INSTRUMENTS, Maia, Portugal

Education

- 1999-2009, PhD in Electrotechnical Engineering (Telecommunications), Unanimous in University of Aveiro, *Frequency Domain Multiuser Detection for DS-CDMA Systems*.
- 1985-1991, Degree (5 years) in Electronics and Telecommunications Engineering, at Aveiro University with average/grade of 15/20.
- High School at Maia. Admission at University with an average/grade of 18.7/20.

Patents

- 2015 Luís Gonçalves (50% share), Diogo Cunha, Atilio Gameiro, *Method to Determine the Delay between Measurements in two or more Spectrum Analyzers or Power Meters*. Number PT 107293B.

Publications

Published about 15 papers, in European Transactions on Telecommunications, IEEE Magazine, Bentham Science Publishers Journal, major IEEE conferences and others

Experience with Software

CUDA, OpenMP, Visual C, Gcc (Eclipse), Visual C++ Microsoft Foundation Classes, Python, Lab-View, Agilent ADS, System Studio of Synopsys, Latex, Microsoft Office, Matlab, Pspice, Code Composer Studio (Texas Instruments), MultiSim, Maintenance of a Linux Virtual Server (IPv6 Compliant) with Web Server and Email Server.

At <http://www.luisgo.pro>

Languages

Native in Portuguese, Fluent in English, Professional knowledge of French and Basic knowledge German.