SHORT RESUME

PERSONAL DATA

Name: Luís Carlos Carneiro Gonçalves

Residence: Paris, France.   **Nationality**: Portuguese

Core Competencies

- PhD in Electrical Engineering | University Teaching | Research & Industry Experience
- Telecommunications, Radio Channel, Digital Image Processing | Embedded Systems | Electronics
- Software Development (C++, C, Python, Matlab, LabView, Pspice) | High-Performance Computing (CUDA, OpenMP)
- Patent Idea, Development & Submission

Professional Experience

Senior Researcher | Institut Polytechnique de Paris, Télécom SudParis, France (Dec 2023 - Nov 2024)

- Research in Telecommunications, Cloud, and Data Analytics, 5G Core | Submitted journal article

Senior Researcher | OHB Digital Solutions, Austria (2023)

- Implemented MUSIC algorithm in Matlab, Python, C++ | Field tests | Noise filtering and outliers removal
- Algorithm to compute jammer positions by triangulation using Angle of Arrival (AoA) data

Postdoctoral Researcher | ESAN/University of Aveiro (2020 - 2022)

- Medical Digital Image Processing, 3D Image Registration | Client-Server Image Processing
- Developed facial preview for bilateral sagittal split osteotomy (BSSO)

Researcher | Institute of Telecommunications, Portugal (2018 - 2019)

- 5G Telecommunications (Mobilizador 5G, ORCIP) | OpenAirInterface expertise

Embedded Systems Engineer | Allied Motion (now Allient), Portugal (2017 - 2018)

- Ported DSP board program from Motorola to Texas Instruments | Worked with ADC, PIO, Timer, PWM, Quadrature Encoder, Timer

Postdoctoral Researcher | INESC TEC, Portugal (2017 - 2018)

- Tone Mapping Algorithm for Object Detection re-implementation.

- Captured LDR and merged in HDR images from Flare image cameras

University Lecturer | University of Aveiro (2014 - 2015)

- Taught "Intro to Communication & Information Technology" | Microsoft Office training

Postdoctoral Researcher (Various Positions) (2010 - 2017)

- Research in High-Performance Computing for Telecommunications

- Baseband Signal Impairment Compensation | Radio Propagation Analysis | Wireless Signal Measurement

- Cognitive Radio, Spectrum Occupancy

Assistant Professor | Lusófona University, Lisbon (2009 - 2010)

- Taught Signals and Systems

Lecturer | University of Madeira, Portugal (2004 - 2008)

- Taught Electronics, Telecommunications, Digital Systems, Circuit Analysis

Education

- PhD in Electrical Engineering (Telecommunications), University of Aveiro (2009)

- Degree in Electronics & Telecommunications Engineering, University of Aveiro (1991)

Patents & Publications

- Method to Determine Delay between Measurements in Spectrum Analyzers (PT 107293B, 2015)

- 15 papers in IEEE, Elsevier, European Transactions on Telecommunications, major conferences

Software Technical Skills

- Programming: C++, C, Python, CUDA, OpenCL, OpenMP, Matlab

- Software Tools: LabView, Agilent ADS, Synopsys System Studio, Latex, Microsoft Office, Pspice, MultiSim

- Embedded Systems: Code Composer Studio

- Networking & Server Administration: Linux Virtual Server, Web Server (SSL), Email Server (DMARC, DKIM, SPF)

Languages

- Portuguese (Native) | English (Fluent) | French (Professional) | German (Basic)