

CURRICULUM VITAE

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EDUCATION

- October 2009 – November 2013 – PhD in electronics in the Spanish National Research Council and University of Alcalá de Henares (“Development of optical fiber sensors applied to the high speed railway environment”, “cum laude” first class with distinction and remission of registration fee).
- July 2012: Workshop in Optical Fiber Light Sources (FLFO), University of Valencia and SEDOPTICA (Valencia)
- March 2012: Photonics@be Doctoral School, Oostduinkerke, Photonics@be network community
- September 2011: M.Sc. Thesis in the University of Alcalá (first class with distinction and remission of registration fee)
- October 2010: Summer-Autumn School, Optical Fiber Measurement Techniques, SEDOPTICA (Sigüenza, Guadalajara, Spain)
- October 2009: “Laurea” second level Italian degree (5 year program) in Microelectronic Engineering from the Polytechnic of Bari, Bari, Italy: 106/110
- March 2009: Spring School Cost Action 299 on Optical Fiber Technology (Cyprus)
- September 2008 – October 2009: second level Italian degree Thesis student in Spain with research grant of the University of Alcalá

- September 2007 – August 2008: Erasmus Fellowship (University of Alcalá) during the second level Italian degree (5 years program)
- 1994-1999 – Electronic and Telecommunication Industrial Engineer in the State Industrial and Technical Institute (Qualified electronics technologist with European PS3 qualification: Diploma of post-secondary level): 100/100.

PROFESSIONAL EXPERIENCE AND APPOINTMENTS

06/2016–present	Marie Curie Fellow, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation (Athens, Greece).
02/2015–05/2016	Hired Researcher (public selection process), CeRICT, Regional Center of Information Communication Technology collaborating with University of Sannio. Project: Optofer.
11/2014–05/2016	Hired Researcher, Techno Solutions soc. coop. a r.l. Project: OptoBioLab.
10/2014–12/2014:	Hired Researcher (public selection process), CeRICT, Regional Center of Information Communication Technology collaborating with University of Sannio. Project: SFORI.
02/2014–01/2015	Hired Researcher (public selection process), CeRICT, Regional Center of Information Communication Technology collaborating with University of Sannio. Project: Smart Health 2.0.
11/2013 –01/2014	Hired Researcher, Product Development Manager, FOCUS, Fiber Optics Consulting Services and Technologies s.l. a CSIC spin-off.
09/2012–10/2013	Hired Researcher (public selection process), Optics Institute of CSIC, Spanish National Research Council (Madrid, Spain).
09/2010–08/2012	Research Assistant (public selection process), Optics Institute of CSIC, Spanish National Research Council (Madrid, Spain).
01/2012–04/2012	Visiting Researcher (three months stay), Electromagnetism and Telecommunication Department, University of Mons (Mons, Belgium).
10/2009–08/2010	Graduated Research Assistant Fellowship, Department of Electronic, University of Alcala de Henares (Alcala de Henares, Spain).
09/2008–08/2009	Undergraduate Assistant Fellowship, Department of Electronic, University of Alcala de Henares (Alcala de Henares, Spain).
09/2007–08/2008	Erasmus Fellowship, during the second level Italian degree, University of Alcalá, (Alcala de Henares, Spain).

MAIN RESEARCH INTERESTS

- Lasers and control circuits for lasers
- Fiber Optic Sensors, both point and distributed sensors of Temperature, Strain, Sounds, Vibrations, Electrical and Magnetic quantities
- Remote sensing, real time monitoring
- Microelectronic and embedded devices, microcontroller and portable devices
- Design and Development of electronic, optical and optoelectronic devices

EXTERNAL FUNDING

Participant to the DIVAS Marie Curie project as Experienced Researcher: Distributed Vibrational and Acoustic Sensing technology, 2016-2018, 165 k€.

Participated to several research project with companies, national, regional and European: MIFFO 363 k€, IFZONE 2.55 M€, FACTOTEM_CM II 121 k€, HaSSLE 01 158 k€, HaSSLE 02 71 k€, FIRMSCOM 272 k€, CISTER 258 k€, DESAFIO 43.8 k€, CENIT TARGET 120 k€, IND14 129 k€, MEHFO 60 k€, Temperature Distribution Measurement in High Power Voltage Transformers Using Fiber Optic 33 k€, Realization of a Setup for strain measurement in Civil Structures Using Brillouin Scattering and FBG 21 k€, PIT-STOP 529 k€, OptoBioLab 183 k€, Smart Health 2.0 1 M€, OptoFer 1.487 M€, SFORI 490 k€.

TEACHING EXPERIENCE

- Electronic for telecommunication Laboratory 2014-2015
- Undergraduate degree dissertation supervision: "Development of an optical fiber magnetic sensor applied to MRI".
- Electronic for telecommunication Laboratory 2015-2016
- Fundamentals of Optoelectronic – under the project "EXAM - EXpert in Aviation Maintenance"

PROFESSIONAL AFFILIATIONS & ACTIVITIES

Reviewer for several international journals.

AWARDS AND DISTINCTIONS

- **PhD dissertation in electronics, University of Alcalá de Henares**
“Development of optical fiber sensors applied to the high speed railway environment”: “cum laude” mention first class with distinction and remission of registration fee.
- **M.Sc. Thesis in the University of Alcalá, “Analysis of trains passing signals in high speed railway using sensors based in FBG”:** first class with distinction and remission of registration fee.

CONFERENCES & PUBLICATIONS

13 international and 11 national conferences, 7 peer-reviewed publications.

SELECTED PUBLICATIONS

1. “Real Time Monitoring of Railway Traffic Using Fiber Bragg Grating Sensors”, IEEE Sensors Journal, 05 April 2011, pages 85-92, ISSN: 1530-437X, several times in the “top 25 download” of the Sensors Journal during 2011 and 2012.
2. “Wheel flat detection in high-speed railway systems using fiber Bragg gratings”, IEEE Sensors J. (Online Publication July 18, 2013, Volume 13, Issue 12, Dec. 2013).
3. “Coherent noise reduction in high visibility phase-sensitive optical time domain reflectometer for distributed sensing of ultrasonic waves”, Journal of Lightwave Technology (Volume 31, Issue 23 2013).
4. “Phase-sensitive optical time domain reflectometer assisted by first-order Raman amplification for distributed vibration sensing over >100km”, Journal of Lightwave Technology (Volume 32 Issue 8 2014).