

Curriculum Vitae et Studiorum of GIOVANNI MARIA SARDI

Office Phone +39-06-4993-4539

Office Email giovanni.sardi@artov.imm.cnr.it Skype contact: giovannisardi

Gender Male

Electromagnetism and RF electronics: design of antennas and microwave devices, EM compatibility problems, analysis and developing of EM simulators, radar system and related signal processing techniques. Near-Field systems and modelling for local characterization of samples.

Principal area of interest

Research and Development: management and control of research program and project

Professional Experiences

Period 04/11/2013 at today

Job Post-Doc Research Fellow

Main activities **Research activities in the framework of FP7 Research Project “VSMMARTNano” for developing new techniques and systems for microwave microscopy**

Job place Institute for Microelectronic and Microsystems – National Research Council of Italy (CNR) - Rome

Area Research, design and modeling on RF system for microwave microscopy

Period 01/02/2013– 30/04/2013

Job Short Post-Doc scholarship

Main activities **Research and design on metamaterials for antennas application (filtering and focusing systems)**

Job place Department of Information Engineering – University of Siena

Area Research and design on electromagnetic engineering

Period 01/10/2009 – 18/12/2012

Job PhD student

Main activities **Developing of a numerical tool for the description of propagation properties of multilayered planar periodic structures for electromagnetic application in microwave range**

Job place Department of Information Engineering – University of Siena

Area Research and design on electromagnetic engineering

Period 01/01/2009 – 30/04/2009

Job Short research grant

Main activities **Research on efficient electromagnetic model for the characterization of artificial material**

Job place Department of Information Engineering – University of Siena
Area Research on electromagnetic engineering

Period 01/01/20088 – 30/04/2008

Job Trainee on Master Degree thesis project

Main tasks Design of a radar system for monitoring vehicular traffic

Job place Wavecomm S.r.L.
Loc. Belvedere, Colle di Val d'Elsa (SI)

Area Radar system engineering

Education

Date 18/12/2015

Degree PhD in Information Engineering (research area Electromagnetic Waves)

Main competences achieved Development of electromagnetic models and design procedure for metamaterials for electromagnetic applications. Collaboration on external projects (Elettronica SpA, ESA, USAITC-A).

Thesis topic "Homogenization techniques for metamaterials realized by multilayer planar periodic structures" – Supervisor Prof Stefano Maci

Institution University of Siena

Date January 2009

Degree Passing the final state for the Professional Qualification in Information Engineering

Institution University of Florence

Date 29/09/2008

Degree Master Degree in Telecommunication Engineering

Mark 110/110 cum laude

Thesis Topic "Design of a radar system for monitoring vehicular traffic"
Supervisor Prof Alberto Toccafondi

Institution University of Siena

Date 05/12/2005

Degree Bachelor degree on Telecommunication Engineering

Mark 101/110

Thesis Topic "Feasibility analysis for leaky waves antennas realized by EBG periodic materials".
Supervisor Prof Filippo Capolino

Institution University of Siena

Personal skills

Mother tongue	Italian
Foreign Language	English
Certification	<u>C.A.E. – Certificate of Advanced English – level C1</u>
Social skills	Devotion to team work and activity sharing on R&D topics Teaching for master's students Supervision of graduating students
Planning skills	Independence on design tasks and project management
Technical skills	Knowledge on use of following EM and electronic instrumentations: Spectrum analyzer, Network analyzer, Digital oscilloscope, Reflectometry analyzer
Computer skills	Microsoft and Linux OS and Office automation suite Electromagnetic CAD: CST Microwave Studio, Ansoft HFSS, Ansoft Designer, AWR Microwave Studio, Feko, Comsol. Programming Matlab and C language Video editing tools Hardware and Software problem solving
Driver's licence	Patente B (Italy)

It is implicitly authorized the storage of the present curriculum vitae and all the personal information here reported, on the basis of the current law on personal information and privacy

Attachment to the CV

University Courses and Activities

- PhD** Attendance of the following short courses during the PhD programme
- Functional Analysis, prof Stefano Marmi,
 - Numerical Analysis, prof Alessandra Papini,
 - Advanced Techniques for Computational Electromagnetics, prof Raj Mittra
 - Qos and design cross-layer for wide-band wireless networks, prof. Giovanni Giambene,
 - Frequency Domain Techniques for Antenna Analysis, course inside the ESoA activities, c/o Università di Firenze,
 - Artificial EBG Surfaces And Metamaterial For Antennas, ESoA, c/o Università di Chalmers (Goteborg),
 - Advanced Mathematics For Antenna Analysis, ESoA, c/o Università di Zagabria (Dubrovnik),
 - Modern Radar System, prof Werner Wiesbeck,
 - Advanced Computation Electromagnetics for Antenna Analysis, ESoA, c/o E.P.F.L. (Losanna),
 - Propagation and MiMo, ESoA, c/o Università di Siena,
 - Effects to Be Observed with Metamaterials and Application Thereof, Metamorphose-Virtual Institute, c/o Università di Siena.
- ESoA = European School of Antennas www.esoa-web.org

Teaching Activities

- Short lectures on “Wide Band Antennas” for the “Antennas and Propagation” course in the Master Degree on TLC engineering and “Transmission Lines theory” for the “Electromagnetic Fields” course, in the Bachelor Degree on Information Engineering.
- Co-supervisor of the following thesis
 1. “Design of an 180° hybrid coupler usign complementary split ring resonators”, student Francesco Montomoli; supervisor: prof Stefano Maci. (MD).
 2. “Extraction of effective parameters of metamaterial structures”, student Giacomo Cigni; supervisor: prof Stefano Maci. (MD).
 3. “Analysis and Design of a calibration tool for measuring radiated em fields in an anechoic chamber”, student Raffaele Stanziola; supervisor: prof Matteo Albani. (BD).
 4. “Numerical Analysis of Multistrata Frequency Selective Surfaces”, student Marianna Biscarini; supervisor Frank Silvio Marzano (Sapienza University of Rome), °(MD)