CURRICULUM VITAE
Fabio AMARU'

PERSONAL INFORMATION

First name(s):	Fabio
Family name(s):	Amarù
E-mail address:	fabio.amaru@univr.it.
Nationality	Italian
Date (place) of birth:	15 June 1980 (Ragusa-Italy)
Gender:	Male

DEGREES

2008   Qualification to practice to profession Engineer at Catania University, Italy.

2008   Master's Degree in Electronic Engineering (field: "Automatic Controls") at Catania University, Italy.
University Training Thesis:
Experimental Thesis: *"A new modular architecture for bio-signal analysis"*.
Thesis Stage at Automatic and Robot Team of STMicroelectronics, Catania, Italy

WORK EXPERIENCE

01.10.2011 – 21.01.2012

Student Tutor in the academic class of "*Linear Algebra with elements of Geometry*" and "*Numerical methods for the solution of differential equations*" for the Faculty of Applied Mathematics at the University of Verona, Italy

During this period I have acquired experience in MatLab programming and implementation of methods for solution of differential equation: linear interpolation, sparse matrices, Newton Method, Boundary Value Problems(BVPs), Partial difference Equations(PDEs), Finite element Method(FEM) and Ordinary differential Equations(ODEs)

01.01.2011 – Current

Philosophiae Doctor Student (Ph.D.St.) in *Multimodal Imaging in Biomedicine* at Dep. of Neurological, Neuropsychological, Morphological and Movement Sciences of University of Verona, Italy.

      Main activities (1th Annual Activities: from 01.01.2011 to 31.12.2011): Development of a new methodology of design of footwear based on the finite element (Project title: *Innovative shoes -* Albo n. 221/2010 Prot. N.16066 del 24/03/2010). This project was been finalized to a 3D finite element analysis of foot model with ABAQUS 6.10 FEA. During this study I have acquired a first

preliminary experience in the DICOM Image Segmentation (using AMIRA 5.3 semi-automatic blow tool) and 3D Cad Modeling (using Rhinoceros, Rapidform, MeshLab, SolidWorks 2010).

Main activities (2th Annual Activities: from 01.01.2012 to 31.12.2012): Development of a new methodology for balancing gradiometer at room temperature and design of a new laboratory Biosusceptometer for test and signal analysis.

01.05.2009 – 31.12.2010

Research Associate (Ph.D.St.) in *Radiation and Protection Service Area* at Dep. of Surgery of University of Verona, Italy for developing and functional improvement of a *Biosusceptometer* to measure at room temperature liver iron concentrations.
Main skill acquired:
- Water bag temperature automatic controlling system;
- Electromagnetic and Accelerometric measure and frequency domain signal analysis using MatLab;
- IIR Low-Pass Filtering (signal processing) in time domain;
- Development of a lock-in Amplifier using NI-LabVIEW 6.5 and MatLab;
- PCB designer and Advanced analysis of a low-noise and low-pass bio-amplifier using OrCAD PSpice and Layout;
- Gained experience in bio-magnetic sensor design, such as *axial gradiometer*.

01.05.2009 – 31.12.2010

Technical support Work in *EUTEKNE S.r.l.* at Comiso(RG), Italy for consulting and engineering activity.
Main skill acquired:
- Planning activities for new building of fuel service plants (MS Excel 2007 - MS Project);
- Technical support for design and development electrical plants (Bticino Tisystem 6.0 – AutoCAD 2006);
- Lighting security protection and electrical report.

01.08.2008 – 01.10.2008

Fellowship in Dep. of System, Electric, Electronic Engineering (DIEES) of University of Catania, Italy for a project of research in the sphere of bio-signal.
Main activities:
- Design(ORCAD PSpice and Layout), development and *in vivo* test(NI LabView 8.5) of insolated bio-amplifier;
- Induced current Measurement in a neuro-stimulator for Deep Brain Stimulation in the Parkinson's disease and simulated analysis with COMSOL Multiphisics 3.5.

SKILLS AND COMPETENCES

Technical skills	• Programming Language: ANSI C, Visual C++, Visual Basic 6.0 , Assembly for Microchip PIC and for TI DSP, C++ for Cypress PSoC; • Database: MS Access and MySQL. • Tool: Matlab, Labview, Orcad Pspice and Layout; • Electronic Oscilloscope and Signals Generator, NI LabView Signal generation and Acquisition, Programming Board; • Operative System: WINDOWS, MACOS, LINUX; • Scientific writing and communication • Signal processing (e.g. sound, EEG, ECG), Image processing (e.g. MATLAB, Amira 6.55, Photoshop, CorelDraw, Gimp)
Organizational skills	• Discipline • Self-confident and good communication talents; • Adaptation capabilities;
Social skills	• Team player and experience in collaborations • Open mind; • Ability to adapt to new environment • Dynamism; • Pliability; • Strong Determination to work for objectives.

LANGUAGES

Mother tongues:	Italian
Other language :	English
Reading skills	excellent
Writing skills	good
Verbal skills	good

ADDITIONAL INFORMATION

Available to transfer aborad.

PUBBLICATIONS

International Journals

Amarù, F.;Arena P.;Latteri, A.;Lombardo, D.;Mazzone, P.;Vagliasindi, G..*"Towards a wearable device for deep brain signals monitoring". Human System Interactions, 2009. - HSI '09. 2nd Conference,* **IEEE Conference Publications 2009**, 128 -131.doi:10.1109/HSI.2009.5090966

Merigo F, Benati D, Cristofoletti M, **Amarù F.,** Osculati F., Sbarbati A.*"Glucose transporter/T1R3-expressing cells in rat tracheal epithelium", **J Anat. 2012** Aug; 221(2):138-50.doi:10.1111/j.1469-7580.2012.01522.x. Epub 2012 May 29