

PERSONAL INFORMATION

Fabio De Angelis



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Sex Male | Date of birth 20/03/1976 | Nationality Italian | Driving Licence B

By an electronic and software development background, I have experienced the need for improvement of the product development process – from requirement specifications to system test execution.

I have been responsible for developing and maintaining firmware and tools for qualified software development in embedded software.

Being a developer, tester and internal auditor, lately focus has been on system design of medical device LIAC with focus on CE marking of device design and manufacturing in compliance with:

- Medical Device Directive 2007/47/EC (IEC 60601 3rd edition)
- Medical Electrical Equipment Safety (IEC 60601-1)
- Medical Electrical Equipment particular requirements for EMC (IEC 60601-2-1)
- Application of Risk Management (ISO 14971)
- Usability (IEC 62366)
- Software Development Lifecycle (IEC 62304)

WORK EXPERIENCE

EGSolutions SpA
www.egsolutions.com
(August 2019)

R&D Engineer

- Product Development
- Product Lifecycle

Sordina IORT Technologies
SpA
www.soiort.com
(2015)

R&D Engineer

- Project Manager for the development of the new version of LIAC control unit for compliance with third edition of IEC 60601.
- Software development from requirements to validation.

(2013-2014)

R&D Engineer

- Employed in the R&D department as electronic designer for the design and developing of the electron accelerator for IORT, LIAC-S.
- Development of the HMI with focus to usability and safety.
- Design, at system level, the hardware of the control unit, motion system, cooling system and tuning system.
- Development of the control firmware for the microprocessor modules of the LIAC-S device.
- FDA 510K submission for LIAC-S
- Commissioning of first LIAC-S in Saudi Arabia
- Execution of EMC Test with CFDA inspector in NEMKO Labs for LIAC device

(2009)

System design, development and testing of an industrial electron accelerator.

- System design of a fixed electron accelerator developed in collaboration with physics department of Messina. The system was designed to allow hospital waste sterilisation.
- Installation and commissioning of the sterilisation plant.

(2008 - 2012)

Regulatory, manuals and Training

- Manuals, technical notes and documentation writing for FDA 510K submission.
- Trainer for third party service engineers.

(2006-2008)

Circuit design, development and testing

- Microcontrollers programming and computer-based software;
- interfacing with technicians and mechanic engineers for system development;
- Development of control electronic and firmware for a double conversion in line UPS.
- Development of a SCR driver for cooling fans control.
- Development of a power driver for a variable bending magnet. Firmware and Software was developed for remote control.
- Firmware development for LIAC control (Microchip Assembly and C18).

(2006) **Service and Installation Manager**

- Responsible for LIAC site preparation and installation.
- Guard of field problems from service and installation engineers.

Simitecno srl
www.simitecno.it
(2005)

System developer

- Working in the R&D department "theory and practice of knowledge" ENEA's research group.
- The aim of the project was to develop an hardware system, for environmental control, based on the new "emulative olocontrol" paradigm.
- During this project a frame grabber was designed and developed to grab image from a PAL camera.
- An hardware edge detecting module was also designed and developed.

TELSI srl
http://www.telsisrl.it
(2005)

Prototyping and testing

- During this period I learned laboratory instruments like oscilloscope, function generator, Spectrum analyzer and Network analyzer.
- I participated to development of a transmission line and varicap tunable filter, performing simulation with Microwave Office, development of a prototype PCB and testing of the prototype.

EDUCATION AND TRAINING

Software AGILE and SCRUM
(6/2020)

Software development with AGILE and SCRUM. Training performed by [Agile42](#)

Software Requirements for
Medical Device – EU and US
(3/2013)

Medical Device Software Training programme at [Donawa Lifescience Consulting Srl](#), Rome, Italy.

Electronic Engineering Degree
(10/1995 – 10/2004)

Electronic Engineering, microelectronic, final mark 100/100 cum laude, University of Rome "Tor Vergata".

Scholarship winner in 2002 and 2003.

The Thesis, "Chaotic Circuit analysis for audio watermarking", presents a chaotic signal based watermarking system applied to audio signal fingerprinting.

Some state of the art circuit topologies were analyzed for generation and coherent recovery of chaotic signals.

An innovative steganography algorithm was developed for embedding a chaotic watermark in audio signals.

13th ITSS
(7/2003)

International Travelling Summer School in optoelectronics and microwave, Technische Universität Darmstadt (Frankfurt, Germany).

Diploma
(9/1991 - 7/1995)

Scientific Diploma (58/60).

High school "Liceo Scientifico Cavanis" (Rome)

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Spanish	A1	A1	A1	A1	A1

Job-related skills

- Technology: RF (power) electronics, analog electronics, EMC, ESD and electrical safety.
- Software development: performing and guiding of audits, document management, approvals and markings, Software life cycle management.
- Test and measurement: setup of measurement procedures, calibration procedures and labs, familiar with RF test equipment and high power RF transmitter applications.
- Application of components: finding the best possible solutions for the application of mixed signal, High Voltage and RF electronic components (IC's and peripheral circuits).

Computer skills

Electronic CAD Orcad, Pspice, Microware Office, Mplab, Matlab
Programming C++ (QT), Tcl/Tk, Assembly (PIC micro) MapleV, Matlab, PHP, HTML, CSS, Javascript
Word Processor Latex, Word, Excel, Ultraedit
Graphic CorelDraw, Gimp, Solid Edge