





Federica De Rosa


PHD STUDENT IN AERONAUTICS AND SPACE ENGINEERING


 03/03/1999

Extremely motivated to develop my skills and grow professionally

Contacts

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 00157, Rome

Personal skills

Proactivity and enthusiasm, ability to plan and organize, eye for details, teamworking

Languages

Italian

English

Digital skills

- **Basic:** Office suite, knowledge of the main desktop operating systems (Windows, Linux, macOS)
- **Advanced:** Matlab, Python, C++, Ansys, LabCalc, LTspice, ROOT Data Analysis, Monte Carlo Simulations, Rhapsody, DOORS, SQL Server

Education

PHD IN AERONAUTICS AND SPACE ENGINEERING

Sapienza - University of Rome | november 2023 - present

Research topic: Innovative manufacturing processes for lightweight and advanced composites

MASTER DEGREE IN IN BIOMEDICAL ENGINEERING

Sapienza - University of Rome | october 2020 - march 2023

Main courses: industrial neurosciences, bio-electromagnetic interaction, image processing, testing of biomedical technologies, biomechanics, technological applications in surgery and diseases in a hospital environment

Thesis title: Development of the IOeRT treatment planning system: implementation and evaluation of the potential of the FLASH effect in the case of breast cancer

Final grade: 110/110 with honors

BACHELOR DEGREE IN CLINICAL ENGINEERING

Sapienza - University of Rome | september 2017 - october 2020

Main courses: technical physics, electromagnetic fields, electronics, deterministic and stochastic signals and data processing and biomedical signals, biomedical instrumentation, HVAC systems for healthcare facilities

Thesis title: Comparison of hemodynamics in a real aneurysm and the corresponding idealized model

Finale grade: 110/110

HIGH SCHOOL DIPLOMA: INDUSTRIAL TECHNICAL EXPERT - ELECTROTECHNICS AND AUTOMATION SPECIALIZATION

Industrial Technical Institute - Ettore Majorana | 2012 - 2017

Final grade: 100/100

Experience

SYSTEM ENGINEER | AIR & LAND DEFENCE, COMMAND AND CONTROL DIVISION

Leonardo S.p.A. | Capgemini Engineering | february 2023 - october 2023

Main activities: system/subsystem specification management (IBM DOORS) with related development of graphical interfaces, system development through the IBM Rhapsody MDD (Model-Driven Development) environment, integration and testing using MobaXterm (implementation of remote networking tools and Unix commands)

AEROSPACE DEFENCE & RAIL SYSTEM ENGINEERING ACADEMY

Capgemini Engineering | february 2023 - april 2023

Main courses:

- Focus on avionics, space and defense systems
- Requirements management (DOORS)
- Project, documents and review organization
- Integration, test and validation
- Environmental audits
- RAMS & ILS
- MILS 498, ARP 4754, DO254, DO178

MASTER THESIS STUDENT

Sapienza - University of Rome | september 2022 - march 2023

Research activities carried out in the Applied Radiation Physics Group (ARPG), focused on the development and optimization of Treatment Planning System (TPS) for Intraoperative electron Radiation Therapy (IOeRT)

LABORATORY OF TESTING OF BIOMEDICAL TECHNOLOGIES

Sapienza - University of Rome | march 2022 - june 2022

Main activities:

- Functional tests on an ultrasound scanner: checking the ultrasound image quality obtained from a calibration phantom by measuring depth and diameter
- Application of Health Technology Assessment (HTA): drafting of tender specifications (containing technical requirements) on the provision of three electrocardiographs

LABORATORY OF RADIATION PHYSICS APPLIED TO MEDICINE

Sapienza - University of Rome | march 2021 - june 2021

Main activities:

- Configuration and calibration of measuring instruments (oscilloscope, multimeter)
- Study of ^{22}Na decay
- Study of cosmic ray fluence intensity
- Analysis of fluence intensity distance-related

Conferences and certifications

DAY SEMINAR ON SPACE RADIATION PROTECTION

AIRP - Italian Radiation Protection Association | june 2023

8TH NATIONAL CONFERENCE: FORUM ON REGENERATIVE METHODS

ISS - Italian National Institute of Health | may 2022

EUROPEAN INFORMATICS PASSPORT - EIPASS 7 MODULES USER

Cassino | march 2017

P.L.C. IN INDUSTRIAL AUTOMATION

Industrial Technical Institute - Ettore Majorana | april - may 2016

CAMBRIDGE ENGLISH ENTRY LEVEL CERTIFICATE IN ESOL INTERNATIONAL (ENTRY 3)
(PRELIMINARY) LEVEL B1

Cassino | june 2016

STUDENT COUNCILS ACROSS EUROPE COMENIUS PROJECT 2012/2014 - LIFELONG
LEARNING PROGRAMME UE

Cassino - Matlock (UK) | march 2013

Additional information

DRIVING LICENSE B

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