

## EUROPEAN

### CURRICULUM VITAE FORMAT



### PERSONAL INFORMATION

Name Rosa Auriemma

Address

Telephone

Fax

E-mail

Nationality Italian

Occupation Field **Scientific Software Engineer**

Work experience

Dates (from – to) 09/10/2023-present

Name and address of employe Endurosat

Type of business or sector Satellite Imagery Data Quality Manager

Main activities and responsibilities Calibration technique, covering requirements, quality control, best practise, product validation, Cal Val Plan

Dates (from – to) 01/04/2022-30-08-2023

Name and address of employer Department of Computer, Control and Management Engineering (DIAG)

Type of business or sector research assistant

Main activities and responsibilities

ROSITA (ROver Spaziale ITAliano) is an educational program created in collaboration between ASI (Italian Space Agency) and DIAG (Department of Computer, Automatic and Management Engineering). The project aims to involve Italian schools in educational activities in the field of space technologies during 3 school years (2021/22, 2022/23 and 2023/24). In particular, schools will be included in educational activities for the construction and programming of a small four-wheel drive rover with variable axis, able to move on rough terrain such as those that can be found in the context of planetary exploration. The educational activities involve both teachers and students of the selected schools and will end with competitions between teams of students nationwide. The teams will have to simulate the control of a remote planetary exploration mission with the robot they built and programmed.

Dates (from – to) 01/10/2021-30/03/2022

Name and address of employer Rhea System Spa

Type of business or sector Sentinel-2 Data Processing Performance Engineering

Main activities and responsibilities

- Provide technical expertise in Sentinel 2 data calibration, data processing and product data quality domains to support maintenance in operations and define PDGS evolutions in this area
- Specify the evolution of the Sentinel-2 product specifications resulting from the various phases of operation or from the introduction of new requirements
- Support the definition of the evolution of hardware and software of S2 PDGS data processing
- Support the definition of the evolution of the Quality Control and Calibration (QCC) subsystem.
- Support the S2 PDGS Anomaly Management process in the investigation and resolution of anomalies of the S2 PDGS or Quality Control and Calibration (QCC) data processing subsystems
- Support validation of software / hardware / configuration changes before and after transfer to operations
- Develop demonstrators and prototypes as needed to support the above activities
- Support for IVV activities and reporting following maintenance and evolution activities
- Support the anomaly management process in relation to the performance problems of the data processing of the satellite product, up to the closure of the anomalies themselves; perform ad hoc processing and product analysis to support investigations
- Develop the prototype software as required to support the activities for the validation of Sentinel 2 products

Dates (from – to) 01/20/2020- 30/09 2021

Name and address of employer [Department of Computer, Control and Management Engineering \(DIAG\)](#)

Type of business or sector research assistant

Main activities and responsibilities

With a research grant at the DIAG I collaborate for the Bubbles project . The task is to develop a methodology to automatically compute

separation minima and methods for the Unmanned Aerial Systems (UAS) . My task is to analyze literature existing and to integrate Artificial Intelligence models and techniques to generate the trajectories. In addition I collaborate for the ESERO project for webinars on space topics

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| Dates (from – to)                    | 01/2019-01/2020  |
| Name and address of employer         | Università la Sapienza Rome  |
| Type of business or sector           | Scientific Software Engineer   |
| Main activities and responsibilities | <p>Design and creation of Web services for the ITALIAN OFFICE OF EUROPEAN SPACE RESOURCE EDUCATION OFFICE (ESERO).</p> <p>Member of the working group led by ESTEC for Education activities. Scope is to reduce barriers in using new technologies by running workshops with teachers and students. I focused on the use of Raspberry for Space applications (radio communication, contact with ISS, IP remote control from Internet or Mobile Phone...)</p> <p>Deputy of the Italian office for Claire (CONFEDERATION OF LABORATORIES FOR ARTIFICIAL INTELLIGENCE RESEARCH IN EUROPE). Built intelligence local market analysis and propose strategic partnership with regional stakeholders.</p> |
| Dates (from – to)                    | 01/10/2017 – 01/05/2018  |
| Name and address of employer         | Thales Service Toulouse France   |
| Type of business or sector           | Centre de Compétences DevOps&Secured Cloud   |
| Main activities and responsibilities | <p>After 3.5 years of maternity leave I will return to Thales in October 2017. In order to fit with new standard of excellence as well as Thales customer requirements, I took MOOC courses to get the SCRUM certification</p>   |
| Dates (from – to)                    | 2011-2014  |
| Name and address of employer         | Thales Service Toulouse France   |
| Type of business or sector           | Sentinel 2 Payload Data Ground Segment (PDGS)  |
| Main activities and responsibilities | <ul style="list-style-type: none"> <li>• Participation to the end to end design of the processing system</li> <li>• Responsible for the quality checks to be applied on the IPF (Instrument Processor Facility )</li> <li>• Participation in the drafting of the requirements for IPF and Data Quality</li> <li>• Responsible of the documentation of the on-line-quality-control (OLQC) process including its perimeters, interfaces and functional breakdown</li> <li>• Support to the definition of the logical and user product (xsd files)</li> <li>• Study and analysis of different products format :SAFE and Dimap</li> </ul>  |

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| Dates (from – to)                    | 2013-2014   |
| Name and address of employer         | Thales Service Toulouse France  |
| Type of business or sector           | Next Generation of user services for Earth Observation (NGEO)   |
| Main activities and responsibilities | <p>Participation to develop a “Controller Server component” to be used as a central repository for the configurations such as dataset definitions, browser layers and interferometry of the NGEO instance. In particular:</p> <ul style="list-style-type: none"> <li>▪ Redaction of the Detailed Design documents</li> <li>▪ Contribution to Test Data Set specification;</li> <li>▪ Redaction of the Test Plan Documents (SSTP and SSTR) of the Controller Server</li> <li>▪ Integration Installation Validation of the Controller Server</li> <li>▪ Technical notes, Minutes of Meetings, reports, review item discrepancies and problem reports within the scope of the work package;</li> <li>▪ Testing during the different sprints</li> </ul> |

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| Dates (from – to)                    | 02/2011 – 08/2011  |
| Name and address of employer         | Thales Service Toulouse France   |
| Type of business or sector           | Payload Data Ground Segment (PDGS)   |
| Main activities and responsibilities | <ul style="list-style-type: none"> <li>▪ Development in Eclipse RCP of a GUI to improve and simplify the installation and configuration of the data production</li> <li>▪ Integration of the interface ESA task table and Job Order</li> </ul> |

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| Dates (from – to)                    | August 2005-2010   |
| Name and address of employer         | Serco Consultant for European Space Agency (ESA, ESRIN) Rome Italy   |
| Type of business or sector           | Support to the ESA ground SEGMENT multi mission infrastructure (MMFI) Configuring/developing tools to analyze and store EO products from ESA satellites and third- party mission   |
| Main activities and responsibilities | <p>Develop, validate and install in an operational environment common and specific SW plug-in (JAVA) and graphical libraries (JAVA SWING) to manage satellite data (storage, quality) Develop and maintain up to date a satellite data viewer (JAVA)with standard image processing (format conversion, resize, crop, flip, join, resample) and advanced routines (BEAM, Jmagic) Conduct System testing on the specific SW applications in use for the ground segments operation, both locally in ESRIN and at remote receiving station</p> |

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| Dates (from – to) | August 2005-2010 |
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| Name and address of employer         | Serco Consultant for European Space Agency (ESA, ESRIN)<br>Rome Italy   |
| Type of business or sector           | ESA:Ground Segment Department   |
| Main activities and responsibilities | Participate to the collection of the image processing tools proposed into MASS project Implementing code (Java/IDL)<br>Installation of the COTS<br>Support to the evolution and maintenance of the service<br><br>Participation to the definition of the requirements Conduct Factory Acceptance Review<br>Manage review of the project documentation |

#### EDUCATION AND TRAINING

- Dates (from – to) 2000-2001
- Name and type of organization providing education and training Master Tecnologie Avanzate Dell' informazione e della Comunicazione" International Institute for Advanced Scientific Studies (IIASS) Vietri Salerno,Italy
- Principal subjects/occupational
  - Information Systems and Strategy
  - Enterprise Architecture Design
  - Introduction to the GIS
  - Neural network for machine learning
  - Professional Practice and Research Project
  - The stage was carried out at ESRIN with the following work:  
*3D representation of Earth Observation (EO) data and distribution through the web*
- Dates (from – to) 1993-1999
- Name and type of organization providing education and training Laurea Computer Science
- Principal subjects/occupational University of Salerno

#### PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE **Italian**

| OTHER LANGUAGE(S):   | <b>English</b> | <b>French</b> | <b>Spanish</b> |
|----------------------|----------------|---------------|----------------|
| <b>Understanding</b> | Good           | Fluent        | Basic          |
| <b>Speaking</b>      | Good           | Fluent        | Basic          |
| <b>Writing</b>       | Good           | Fluent        | Basic          |

COMPUTER SKILLS  
AND COMPETENCES

**Language**

Language: J2EE, javascript, IDL Shell Script  
Web Technologies Xml, XSD, Postman, Python

**WEB Technologies**

XML, XSD, JAVASCRIPT, ML

**OS**

Unix, Linux, Windows, MAC

**Tool**

Maven, Ant, Eclipse

**Methods**

SCRUM

ORGANIZATIONAL SKILLS  
AND COMPETENCES

Proactive approach to problem identification and resolution  
Capacity to work under pressure and tight deadline gained from my experience  
in solving issues in an operational environment

TECHNICAL SKILLS  
AND COMPETENCES

Problem solving and result approach derived from my activities in EO projects  
Ability to plan and report in proposed solutions  
Validation and tests procedures definition  
Manage technical aspects of projects according to ISO 9001 standard

ARTISTIC SKILLS  
AND COMPETENCES

Passionate of art in general (Literature, painting, theater, music, independent  
cinema) reviews of art articles on [auralcrave magazine](#)  
Self organized trips

**ADDITIONAL INFORMATION**

Marital life, 2 children (16 and 9 years)