

## Simone Puglia

Electronic Engineering



**Address** Leiden (NL)

**Date of birth** 03/1988

**Place of birth** Aosta (Italy)

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## Personal Statement

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I am currently working as Search and Rescue Engineer, supporting ESA for the SAR/Galileo activities in the ESTEC site in the Netherlands.

At work, colleagues would describe me as a positive and reliable person who can offer a good attitude in teamwork organization and problem-solving.

I am currently looking forward to improving my existing skills, learn more, and take on new opportunities.

## Work Experience

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**02/2013–Now**      **Thales Alenia Space**  
Torino - Italy - [thalesgroup.com](http://thalesgroup.com)

### **2018–Now**      **Galileo SAR Engineer**

SAR Engineer in the Galileo System Engineering Technical Assistance (SETA) team, responsible for the definition and the coordination of system validation test campaigns, SAR/Galileo performance verification and to support ESA in the engineering activities for Search and Rescue and MEOSAR architecture evolution.

#### *Project assignments and test campaigns*

**06/2019 - Cospas-Sarsat JC33 (assignment)**

Qatar, Doha – [cospas-sarsat.int](http://cospas-sarsat.int)

SAR/Galileo Return Link Service live demonstration at Cospas-Sarsat Joint Committee (JC33).

**04-05/2019 - CNES, Galileo Control Center (test campaign)**

France, Toulouse – [cnes.fr](http://cnes.fr); Italy, Fucino and Germany, Oberpfaffenhofen - [gsc-europa.eu](http://gsc-europa.eu)

RLSP Integration, Functional Verification, and Performance Validation test campaigns.

As test director, I planned the test campaign and coordinated the team deployed in the different sites in the frame of the test execution. I was also responsible for the results verification and the final performance assessment.

**04-05 and 11-12/2018 - ESA Redu (ESEC) (test campaign)**

Belgium, Redu - [esa.int/esec](http://esa.int/esec)

SAR Repeater In-Orbit Test campaign for the Galileo L9 and L10 satellites. I successfully performed the SAR IOT for the SAR payload on-board of the newest 8 Galileo satellites, launched in 2017 and 2018.

In this role, I have achieved a deep knowledge of SAR Forward and Return Link infrastructure and cooperate with several parties (e.g. Cospas-Sarsat, GSA and the European Commission) involved in the SAR system and segment.

### **2016-2018 BepiColombo AIT Engineer**

Functional Test Engineer in charge for the Platform and Data Management System (DMS) related electrical integration and functional verification of BepiColombo MPO (Mercury Planetary Orbiter) and MTM (Mercury Transfer Module).

#### *Project test campaigns*

##### **05/2018 – 07/2018 - CSG / CNES**

French Guyana, 97387 Kourou Cedex– [www.cnes-csg.fr](http://www.cnes-csg.fr)

Bepicolombo launch campaign preparation activities and countdown rehearsal.

##### **08/2016 – 01/2018 - ESTEC**

The Netherlands, Keplerlaan 1, 2201 AZ Noordwijk– <http://www.esa.int>

MPO, MTM and MMO (Mercury Magnetospheric Orbiter) electrical integration, functional validation and environmental testing .

### **2013-2016 Exomars 2016 EGSE/Functional Test Engineer**

EGSE (Electrical Ground Support Equipment) and Data Handling Functional Test Engineer responsible for ExoMars project (On Board Computer data management, science and optical payloads functional verification).

#### *Project test campaigns*

##### **02/11/2015 – 12/11/2015 - QinetiQ**

United Kingdom, Victor Way, Farnborough GU14 0LX– <http://www.qinetiq.com>

Radio Frequency PROXIMITY-1 communication compatibility test campaign between ESA EDM lander and Mars Express ESA orbiter.

##### **07/2015 – 08/2015 - Lockheed Martin**

USA, 12999 W. Deer Creek Canyon Road, Littleton, CO 80127 – <http://www.lockheedmartin.com>

Radio Frequency PROXIMITY-1 communication compatibility test campaign between ESA EDM lander and MRO, Odyssey and Maven NASA orbiters.

##### **03/2015 – 12/2015 - Thales Alenia Space France**

France, 5 Allée des Gabians, 06150 Cannes – <http://www.thalesgroup.com>

Acoustic, Vibration and Thermal Balance / Thermal Vacuum environmental tests of the EDM lander representing the launch and the cruise phase of the mission.

### **2014 Orion MPCV EGSE Engineer**

I actively contributed to the MPCV (Multi-Purpose Crew Vehicle) project for the definition of requirements and specifications for Thermal Control Subsystem EGSE suppliers. I was in charge to reflect the engineering TCS architecture of the vehicle in the ground support equipment used for testing the subsystem as part of the avionic test bench.

**12/2018 - Now**      **Whizzle Smart-Mobility**  
Leiden, the Netherlands - [whizzle.me](http://whizzle.me)

Whizzle is a car-pooling mobile app which connects real-time users and commuters to local business. I am contributing in my spare time as responsible for the technical aspects of the project.

*What I am doing*

- Back-end architecture definition and design, in compliance with the GDPR requirements.
- Development of the Android/iOS prototype app
- Study and definition of cross-routing matches algorithm

**05/2015-08/2016**      **WaSaBi e-health Startup**

*Turin, Italy*

WaSaBi (Wearable Speech Buddy) is a wearable electronic device able to analyse the speech and help the treatment of stuttering, cluttering and dysphonia.

*What I did*

- Development of a Bluetooth 4 based iOS app (Swift)
- Development of desktop software for device setup and control (C#)
- Study and definition of DSP algorithms (C++ ) for embedded board firmware

**03/2012-09/2012**      **Polytechnic of Turin and Sky Technology**

*Turin, Italy* - <http://www.skytechnology.it>

Development of a radiation tolerant FPGA based routing system for nano-satellites, able to interconnect a general purpose processor to on board peripherals.

## **Education and Qualifications**

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**2010-2012**      **Master's Degree in "Electronic Engineering" (Electronic Systems)**

Politecnico di Torino – Italy (Turin) – <http://www.polito.it>

Thesis title: "TAMTAMS: a web based tool for CMOS process-to-system design space exploration".  
Supervisor Prof. *Gianluca Piccinini*.

**2007-2010**      **Bachelor's Degree in "Electronic Engineering"**

Politecnico di Torino – Italy (Turin) – <http://www.polito.it>

Thesis title: "Custom remote controlled dynamic load for ARAMIS nano-satellite power bus testing".  
Supervisor Prof. *Claudio Sansoè*

## Skills

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### Professional know-how

- SAR/Galileo Repeaters RF performance parameters
- MEOSAR interoperability requirements
- Industry's RFDs and RFWs review
- Cospas-Sarsat documents review and technical paper preparation
- Participation to Cospas-Sarsat JC, EWG and CWG (Expert and Correspondence Working Groups)
- Test planning and coordination
- Requirement evolution and coverage verification
- Support for system NCR at NRBs
- Equipment and space-craft units procurement
- EMC system testing
- Functional verification

### Computer and Software

Matlab, Simulink  
DSP algorithms (C++)  
Python, Bash, Tcl/Tk  
PHP, SQL  
C/C++, Java, Swift  
Cybersecurity techniques



### Methods and Tools

LEAN Manufacturing  
Agile development  
NCTS NCRs Tracking System  
Atlassian Jira



### Languages

Italian (mother language)  
English (B2/C1)  
French (B2)  
Dutch (A1)



### Personal

Team leading  
Energetic work attitude  
Flexible  
Punctual



## Additional Information and Interests

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- Driving license
- Lifeguard patent
- Swimming, skiing, climbing
- Music recording, guitar playing