

arpsoft 

Aerospace | Telecommunication | Industry

Our Mission is to provide High Quality Consulting Services for Space and Industry



A. Ardito
CEO & Founder



F. Barbaglio
Partner



S. Finocchiaro
Partner



M. Mattioli
Partner



T. Valci
Junior Engineer



S. Milani
Junior Engineer



A. Coppotelli
Junior Engineer

Arpsoft boasts a long-standing experience in deep space navigation and TT&C systems, consolidated in prestigious Italian and foreign institutions like NASA Jet Propulsion Laboratory, Sapienza University of Rome and INAF.

The company currently focuses its activities in two main domains: **Space** and **Industry**.

We provide consultancy and operational SW for Deep Space Tracking Systems, Satellite telecommunication and Radio Frequency Interference.

We support industry partners in the Industry 4.0 transition, providing smart solutions from the design to the deployment of ad hoc SW and HW products.

AREAS OF INTERESTS

Consultancy, Product Development & Maintenance, R&D activities built on structured SW development competences



TT&C

DeltaDOR, Ranging, Doppler
Telemetry & Command
DL Signal Processing
Antenna Arraying



Spectrum Management

RFI Analysis
FSS, MSS, EESS
FS, MS, Radars, Sensors
NGSO Constellation



Industry & Tech

High Precision Mech. Equip.
Radio Astronomy Automation
Custom Tech. Development
Smart Industry & IoT



Front End and Back End for Web and mobile Applications with custom APIs and visualization tools

Distributed systems management, cloud and private server deployment

Wide programming languages background (e.g.: c++, Python, Javascript, VB.net, LabVIEW, Matlab)

SPACE CONSULTANCY: ESA R&D STUDIES

Arpsoft can offer a 360 degrees consultancy service in the field of space engineering.

Different studies for the European Space Agency have been conducted through the years. Few examples below.

A vibrant image of a solar flare or coronal mass ejection from the Sun, with bright orange and yellow plasma and a central bright point of light.

RESCUe

ESA study aimed at improving the communication link during superior solar conjunction by means of innovative systems, coding techniques and modulation schemes.

A large white parabolic satellite dish antenna with a central feed structure, set against a dark background.

PROTOCOL

ESA study to prototype a correlator/combiner for deep space antenna array.

Follow up foreseen in the next 2-3 years with the new ESA Deep Space Antenna in New Norcia

A Mars lander on the surface of Mars, with a rover and various instruments, set against a hazy, orange-brown sky.

ECOMTEC

ESA study to use the Same Beam Interferometry for the descent of lander with the Exomars mission.

SPACE CONSULTANCY: PRODUCTS

**Arpsoft can offer an end-to-end SW production service in space engineering field:
from physical modeling to SW design, development, testing, deployment and after sale maintenance.**



RFIAT tool is being used by ESA for more than 30 years.

It can be used for spectrum management activities regarding satellite and terrestrial services across all frequency bands.

In 2019 a new enhanced version has been developed by Arpsoft and placed on the market.



Arpsoft is currently carrying out, under ESA contract, the development of a **new tool for the interference assessment** specifically tailored to handle the new **large constellation of NGSO satellites like STARLINK, ONEWEB, O3B and others.**



Advanced **web-based tool for link budget evaluation** currently under development within a contract with European Space Agency.

It is intended to become an **operational tool at ESOC** (European Space Operation Center) to support **mission design and operational activities.**

INDUSTRY, TECHNOLOGY, AUTOMATION ACTIVITIES: PRODUCTS

Arpsoft can offer an end-to-end high tech product service for industry and research field: from requirement definition, to SW design, implementation and after sale full range support



ssense[®]

www.ssense.info

Ssense project consists in the development of an IoT devices network for the analysis, monitor and control of critical industrial environments.

The devices, communicating over the LoraWAN protocol send autonomously to the cloud, through local gateways, environment measurements.

A web user interface provides the possibility to explore the network, visualize data and evaluate specific KPI as well as performance forecasting.



Design and development of custom smart applications to support industrial processes.

A set of micro-applications covering a full set industrial operations. Data from workers are collected by means of mobile applications, sent to remote servers, analyzed and exported in back-office with dedicated web applications.



shark-vis

Development of a control SW for SHARK-VIS instrument (developed by INAF) to be accommodated onto Large Binocular Telescope (LBT).

The control SW, fully developed in NI LabView and C++, is responsible for coordinating several mechanical, electronic and acquisition equipment for automatic setup and working operations.

CLIENTS & PARTNERS



BAE SYSTEMS



SAPIENZA
UNIVERSITÀ DI ROMA



Callisto



cnit consorzio nazionale
interuniversitario
per le telecomunicazioni



UCL
Université
catholique
de Louvain



atac

ROMA



GIS

**GESTIONE
INTEGRATA
SERVIZI**





Get in Touch

<https://www.arpsoft.it>

<https://www.rfiat.net>

arpsoft 

Via Stazione S. Pietro 65
00165 - Roma - Italy

 info@arpsoft.it

 +39 (06) 21127663

Via Giovanni Ventura 3
20134 - Milano - Italy

 +39 392 8585482