

JSNP 5.0

JOIN SATELLITE NAVIGATION PROGRAMME

SEPTEMBER 2022





This document describes the contents of **JSNP** training program for its 5th edition starting in: **September 2022.**

If you want to apply for the training, go to:
www.gnssacademy.com/apply



Eduardo Tapias

The Director



in



WELCOME TO THE JSNP 5.0 INTERNSHIP PROGRAM.

I'm thrilled to start the 5th edition already. So far, **75 engineers from 16 different countries all over the World, different ages of 20 to 50 years-old and multiple engineering backgrounds** have already successfully accomplished this traineeship and now working on key companies on the Space and SatNav related sector.

I still observe this thriving market in **exponential growth for the next years** with the development of the **safety critical and precise positioning systems for Drones or Autonomous Vehicles and other applications**, or the use of satellite navigation on the **missions to the Moon**.

The GNSS Academy is again eager to support the GNSS Market from its main asset: **Engineers**, building the **E2C** path between **Engineers seeking new job opportunities and the reference Companies demanding qualified profiles**, through this **JSNP Internship training Program**.

JOIN ME ABOARD THIS TRAINING ENDEAVOR !



JSNP ENGINEERS

JOIN **S**ATELLITE **N**AVIGATION **P**ROGRAM



A UNIQUE
INDUSTRIAL

ENGINEERING

TRAINING ON SPACE

ELEVATE YOUR STANDARDS



A 6-MONTHS TRAINEESHIP

ELEVATE YOUR STANDARDS



100% ONLINE

ACCESSIBLE

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JSNP is a 6-months Industrial Traineeship Program.

The most complete existent **training** on **GNSS**. It covers all concepts from the basics to the most advanced concepts in PNT Satellite Navigation positioning, plus additional resources.



The **Training includes** hands-on experiences with to the development of an end-to-end project following the European Space Projects Standards from the requirements analysis, architecture, design, implementation, coding and validation phases.

ELEVATE YOUR STANDARD



JSNP offers **engineers** either still students or more **experienced** engineers to boost their **career** on the **space** industry and apply for the different **open vacancies** in companies looking for **qualified engineers**.

ELEVATE YOUR STANDARDS

JSNP is carefully designed to boost engineers career
on the Space Sector of GNSS.



Engineer  Company

ELEVATE YOUR STANDARDS





BOOST

ENGINEERS
CAREERS ON
SPACE & NAV

ELEVATE YOUR STANDARDS



WORK AT
ESA SPACE
PROJECTS AND
MARKET
APPLICATIONS



IN PARALLEL TO
YOUR WORK
OR YOUR
DEGREE/MASTER



75

STUDENTS IN
4 EDITIONS

ELEVATE YOUR STANDARDS

NAVENGERS



75 ENGINEERS FROM 16 COUNTRIES



RUSSIA



WORKING FOR EUROPEAN KEY COMPANIES





THE 5th EDITION

STARTS IN

SEPTEMBER 2022

ELEVATE YOUR STANDARDS



THE PROGRAM CONTENTS



T. Karpis



THE BIG 4

ACADEMY
ELEVATE YOUR STANDARDS

The Big 4

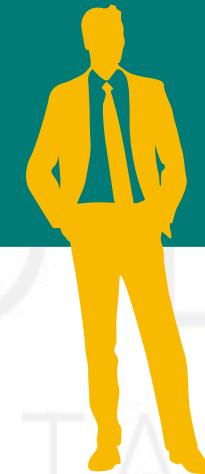
THEORY



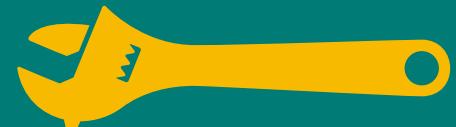
PROJECT



EXPERTS

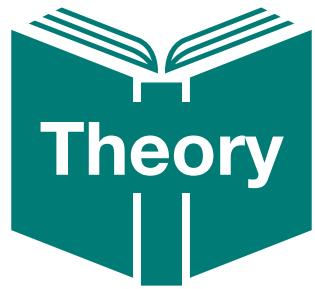


SUPPORT



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THEORY

ACADEMY
ELEVATE YOUR STANDARDS



4

BLOCKS

Of theory

ELEVATE YOUR STANDARDS

BLOCKS



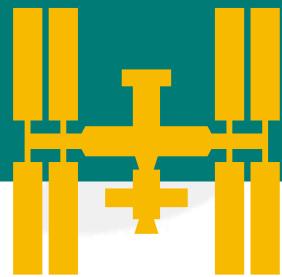
BLOCK I

BLOCK II

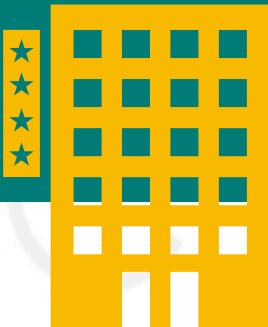
BLOCK III

BLOCK IV

BASICS



SYSTEM



SIGNALS



ADVANCED

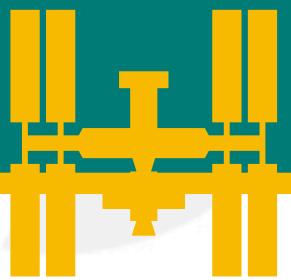


ELEVATE YOUR STANDARDS



BLOCK I

BASICS



BLOCK II

SYSTEM



BLOCK III

SIGNALS



BLOCK IV

ADVANCED

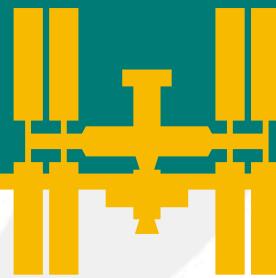


ELEVATE YOUR STANDARDS

BLOCK I



BASICS



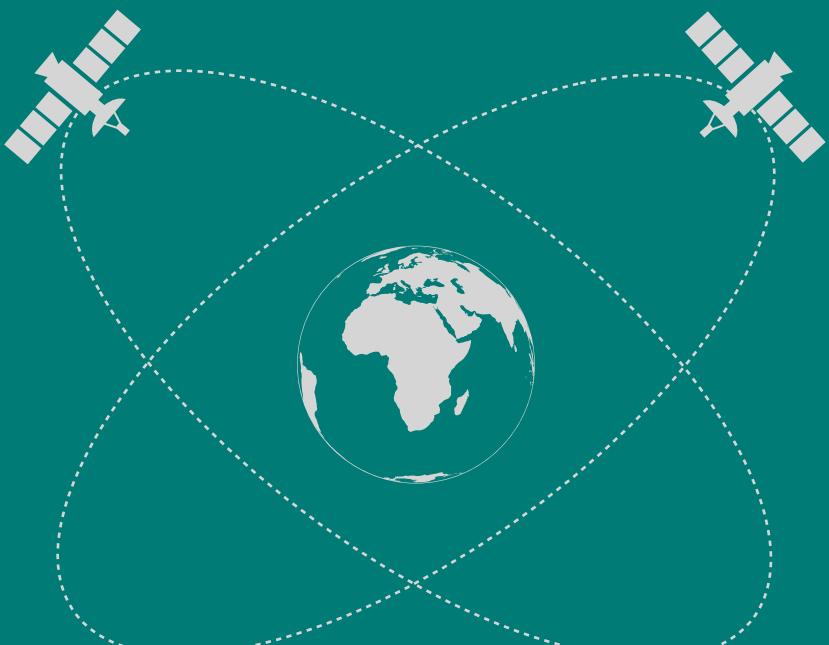
Block I deals with the GNSS fundamental concepts leading to acquire the main basis of understanding of GNSS, the different systems, the positioning equations, the main error contributors and its modeling, how to solve for the position and time, the estimation filters and also the SBAS fundamentals

ELEVATE YOUR STANDARDS

M1

Intro To GNSS Systems

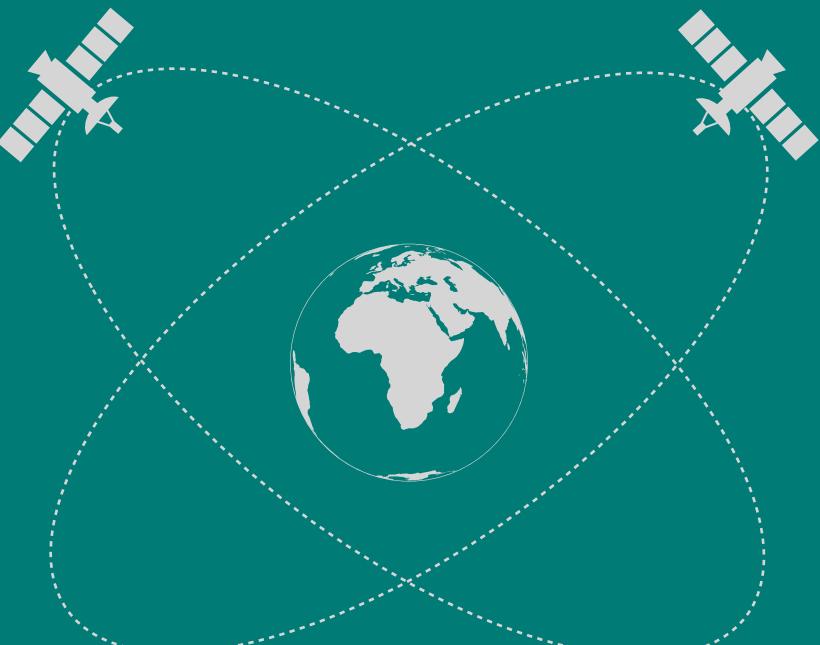
Acquire a global understanding of GNSS technology addressing all the different topics on GNSS in order to have a global overview about the different systems, constellations, type of orbits, signals and receivers, and performances targets



M2

GNSS Positioning Fundamentals

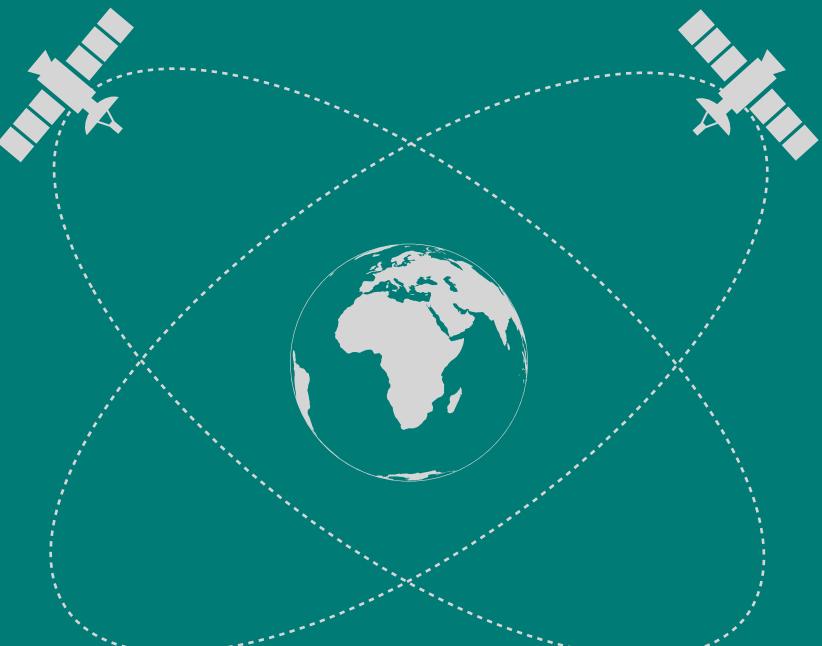
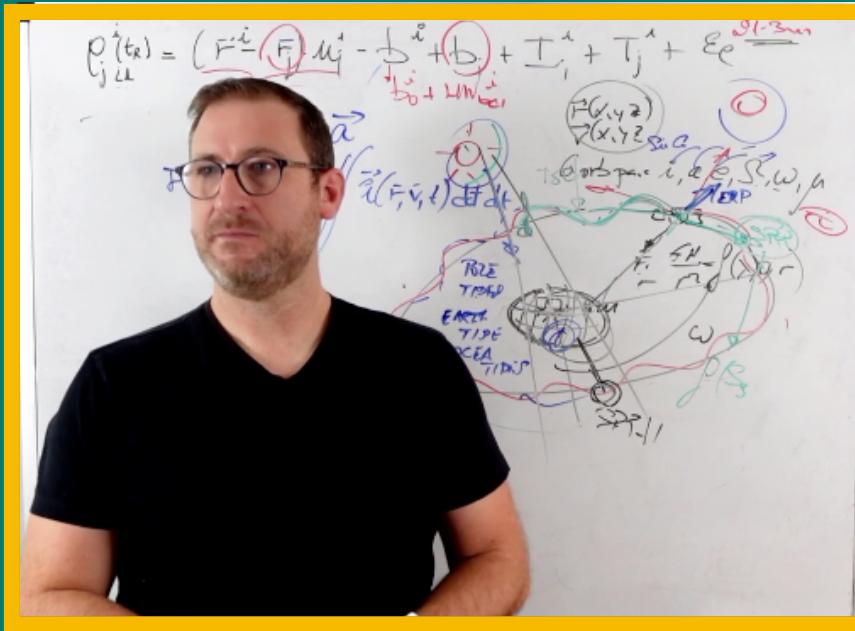
Learn the basics and fundamentals of the GNSS Positioning. Which are the main equations to solve for and the unknowns to estimate. The main observables estimated by a receiver and error sources magnitude orders



M3

Modeling Ranging Errors

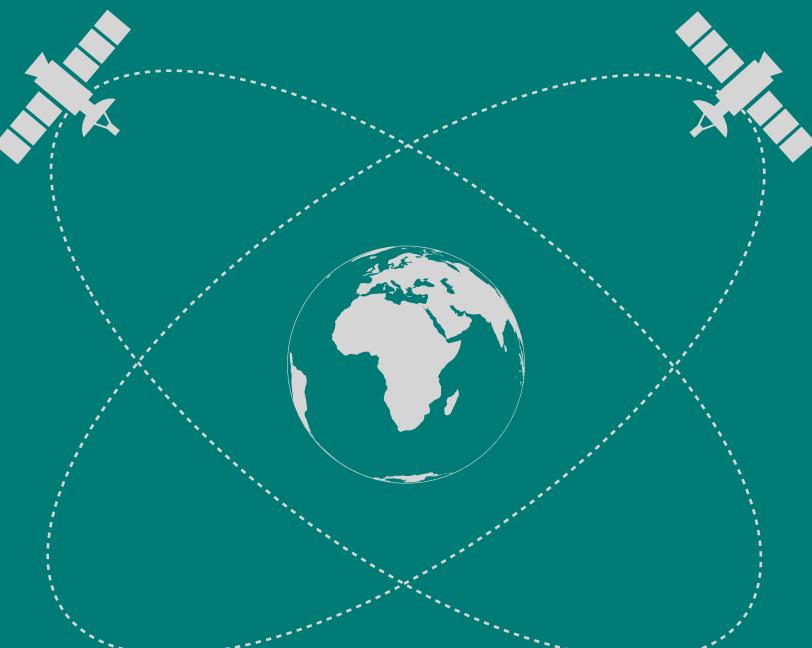
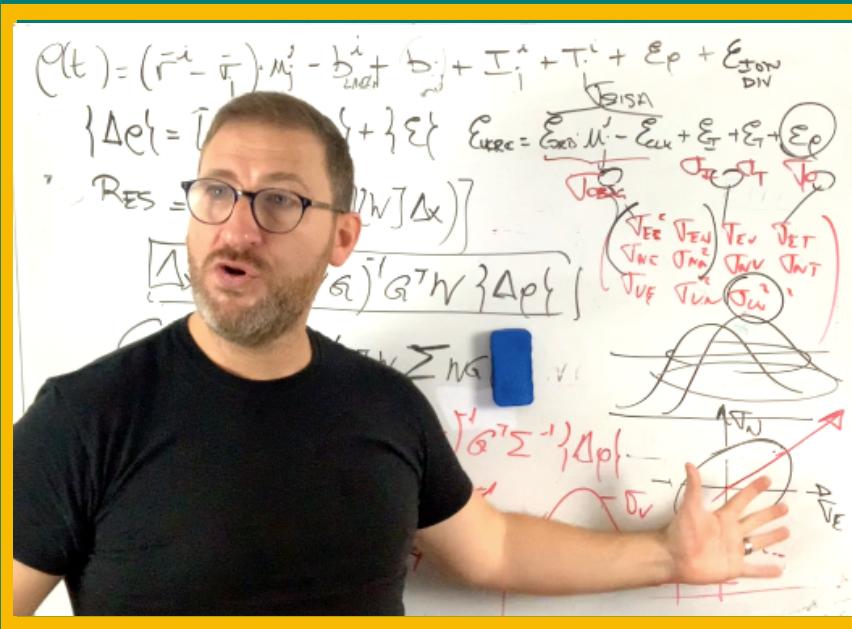
Dive deep onto the ranging error contributors by explaining the different techniques of correction, mitigation and modeling. These are the Satellite Orbit and Clock errors, Instrumental Biases the ionospheric error, the tropospheric error, the local effects: Multipath, Interferences and thermal noise.



M4

Solving PVT Equations using Filters !

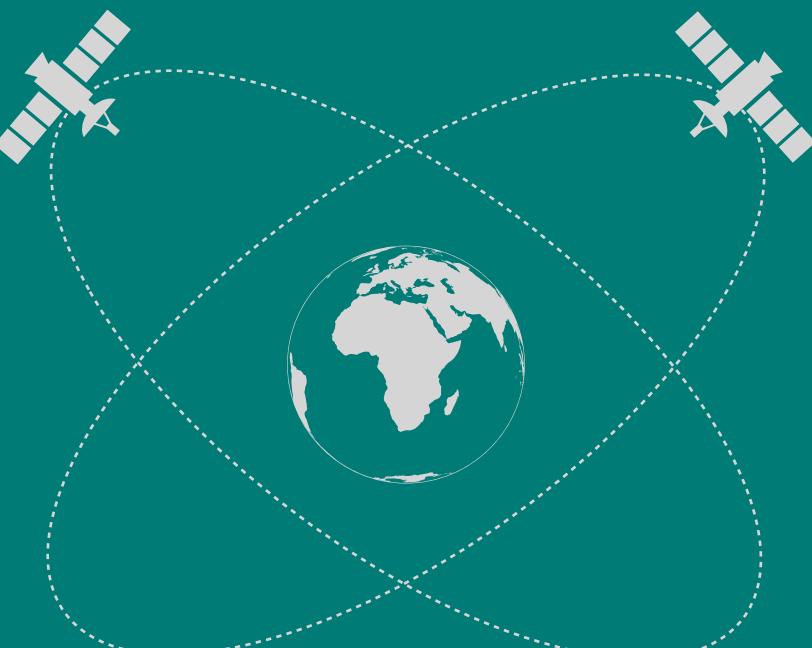
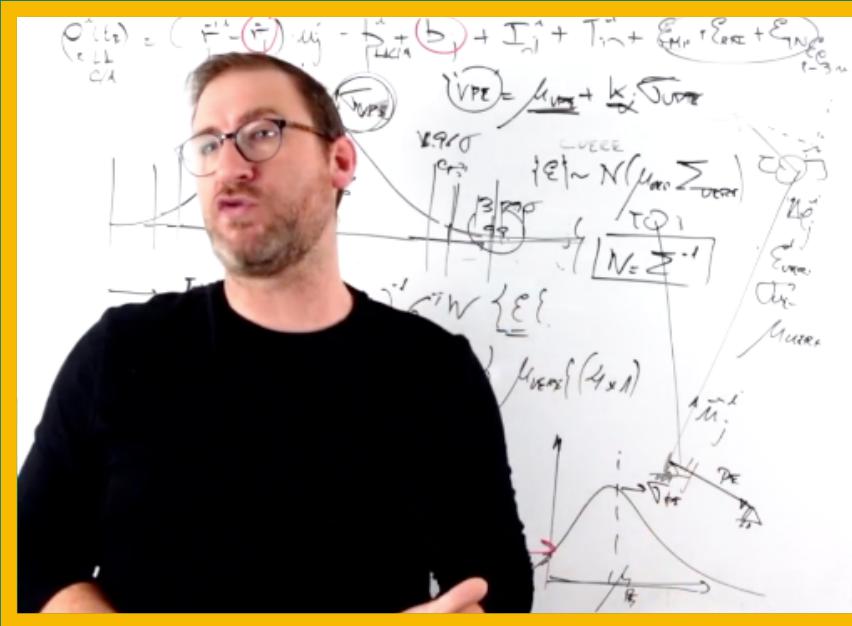
how a receiver solves for the positioning equations using estimation filters such as Least Squares or Weighted Least Square, and Kalman filtering. It covers the whole architecture of a positioning engine from the preprocessing to the final processing and iterative convergence and final expected position errors and covariance matrices.



M5

SBAS Positioning Fundamentals

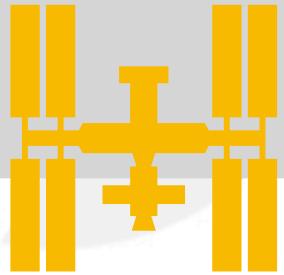
The principles of SBAS Positioning for Safety Critical Applications. Why and How a SBAS System (such EGNOS in Europe) is capable to meet the expected performance levels by Civil Aviation such as Accuracy, Integrity risk, Availability and continuity risk over the Service Coverage Area.





BLOCK I

BASICS



BLOCK II

SYSTEM



BLOCK III

SIGNALS



BLOCK IV

ADVANCED

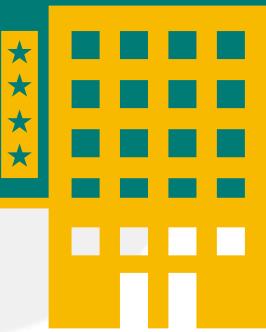


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BLOCK II



SYSTEM



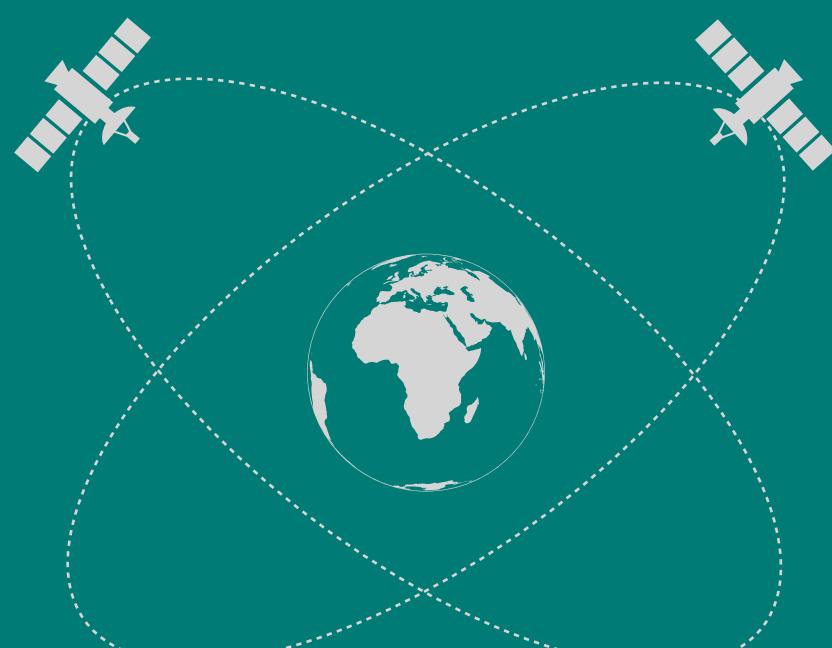
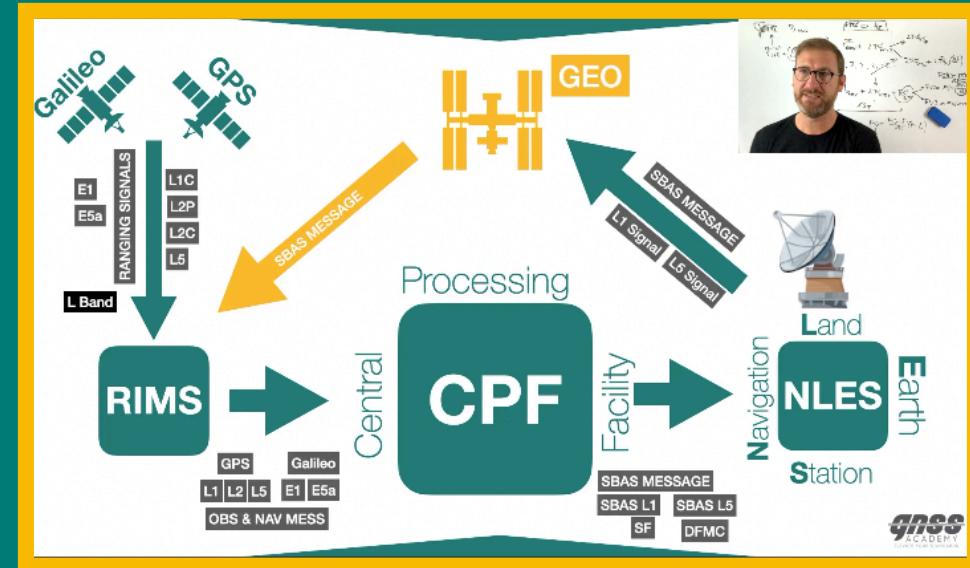
Block II deals with the GNSS systems architecture, design, facilities and algorithms embedded in the **Ground Segment** to build and disseminate the Signal-In-Space, either for a Global system as **Galileo** and a SBAS system as the European **EGNOS**.

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M6

EGNOS SYSTEM: The CPF

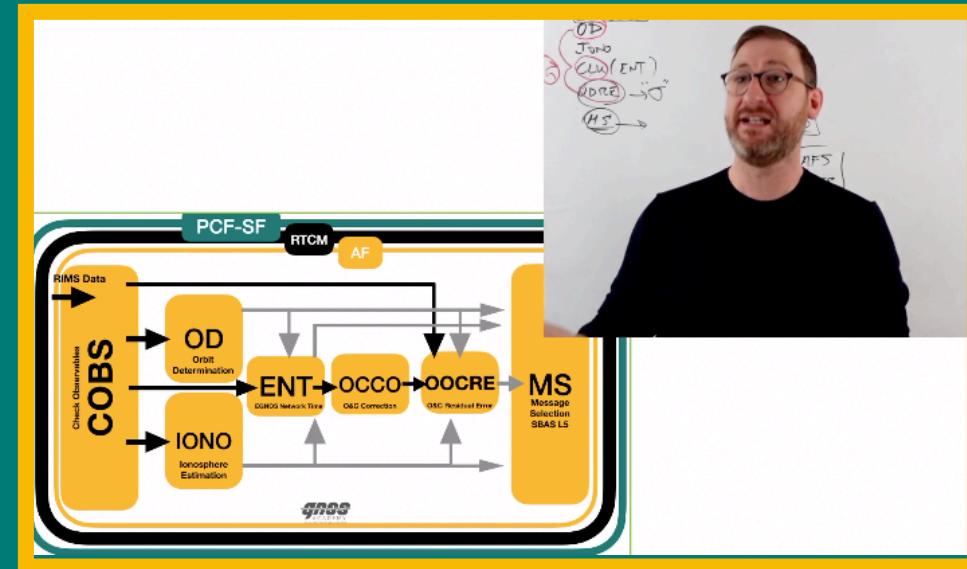
Learn the whole architect of EGNOS, as the European SBAS providing LPV200 Services over ECAC. The Space Segment and Ground Segment facilities with special mention to the CPF, as the Central Processing Facility and estimation algorithms.



M7

CPF ALGORITHMS PCF/ICF

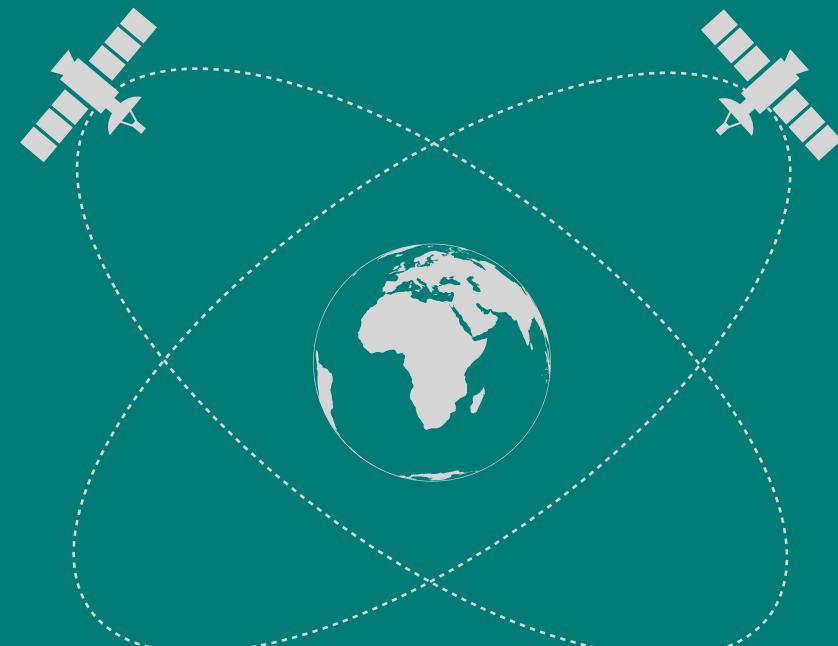
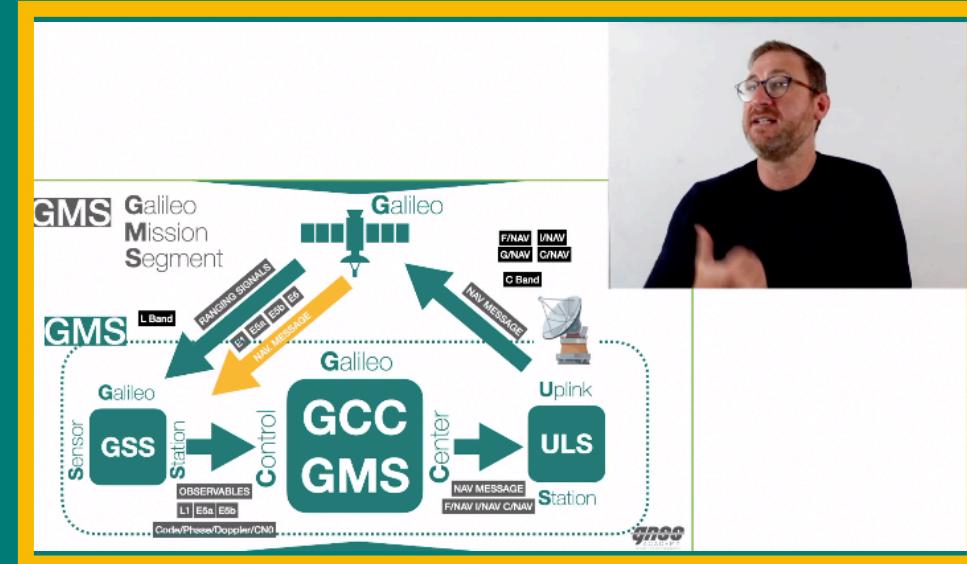
Deep dive into the different algorithms embedded within the CPF of EGNOS, from the preprocessing modules, orbit determination, clocks estimation, ionosphere estimation and the integrity algorithms including the bounds and safety monitors triggering the Alarms



M8

GALILEO SYSTEM: GMS

Learn about the Galileo System, the architecture, as the European GNSS, the Space Segments and Ground Segments with special detail into the GMS as the Ground Mission Segment in charge of generating the Galileo Navigation Messages for OS (F/NAV, I/NAV) and PRS (G/NAV). It also covers Galileo Signals and different Services.



M9

POD: PRECISE ORBIT DETERMINATION

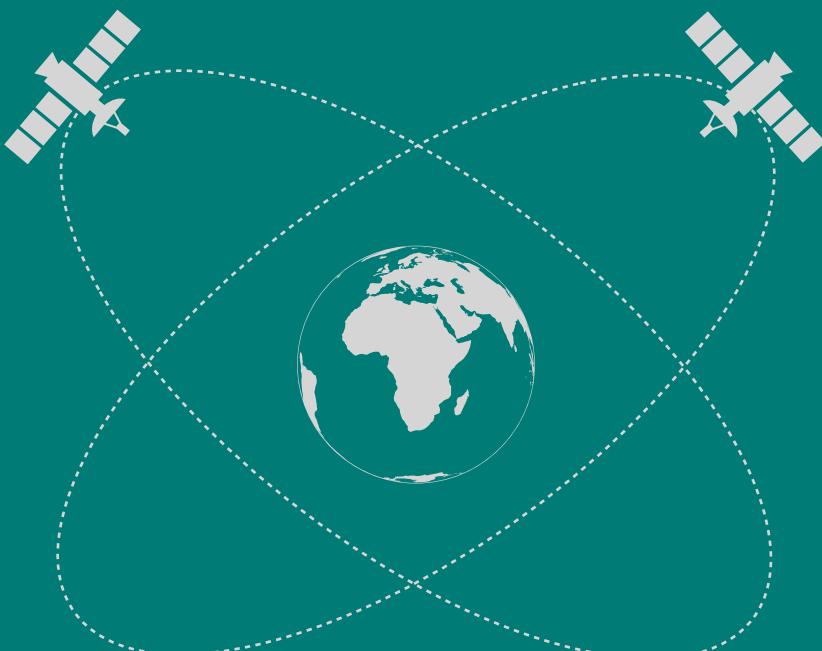
This module goes deeper inside the main principles of a Precise Orbit determination using a Network approach as we do in the EGNOS CPF and Galileo GMS OSPF facilities.

It covers the propagation models with perturbation forces, integration schemes, measurement modeling, equations and estimation using iterative WLSE filters.

The State Vector is composed of Static and Dynamic parameters

$$\rho_{j_{\text{ionosphere}}}^i = (\mathbf{r}^i - \mathbf{r}_j) \cdot \mathbf{u}_j^i - b_{j_{\text{DF}}}^i + b_{j_{\text{DP}}}^i + T_j^i + \epsilon_{\rho_{\text{ionosphere}}}$$
$$\Phi_{j_{\text{ionosphere}}}^i = (\mathbf{r}^i - \mathbf{r}_j) \cdot \mathbf{u}_j^i - b_{j_{\text{DF}}}^i + b_{j_{\text{DP}}}^i + T_j^i + N_{j_{\text{ionosphere}}}^i + \epsilon_{\Phi_{\text{ionosphere}}}$$

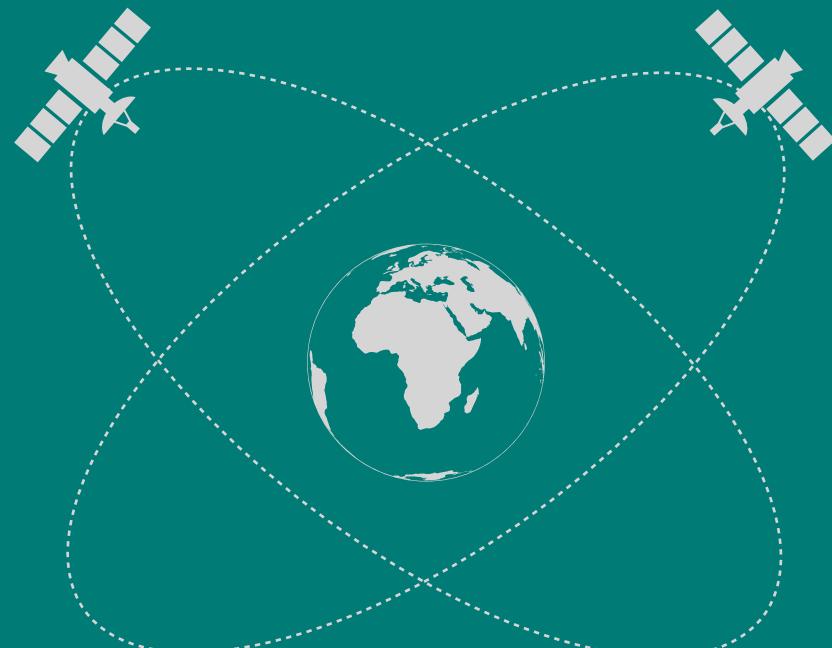
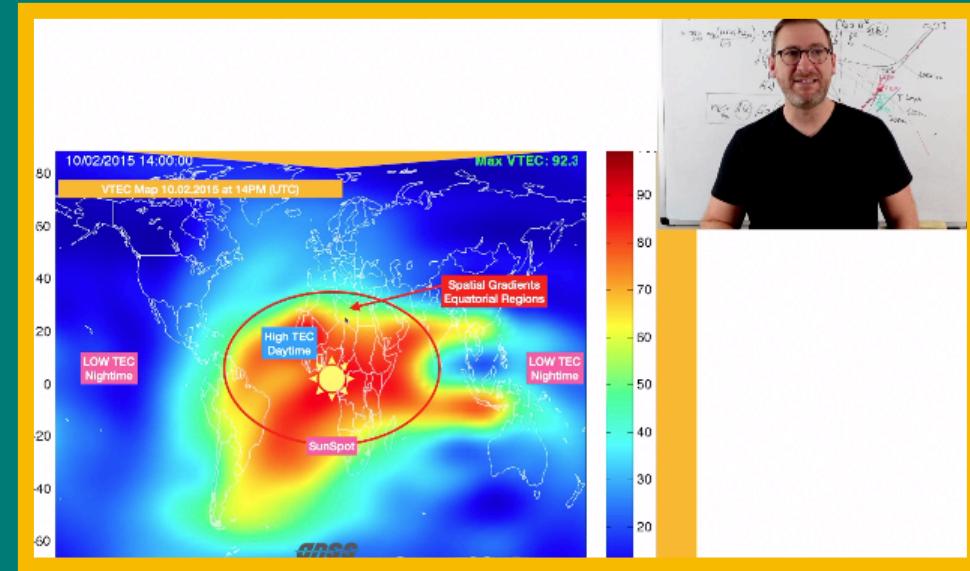
- Static Parameters to be estimated
 - Satellite Clocks (every sampling time, 300s)
 - Station Clocks (every sampling time, 300s)
 - Stations ZTD (Zenith Tropo Delays) (every 2hours)
 - Phase Ambiguities (as many as SV passes)
 - Some Station Coordinates (not in EGNOS)



M10

IONOSPHERE ON GNSS

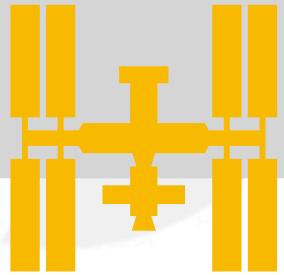
Learn about ionosphere and its impact on GNSS. Understanding of ionosphere, variability, dependencies, and different disturbances. It covers the way we correct, model and estimate ionosphere, and the main parameters to characterize the ionosphere activity and impact on GNSS Performances.





BLOCK I

BASICS



BLOCK II

SYSTEM



BLOCK III

SIGNALS



BLOCK IV

ADVANCED



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BLOCK III



SIGNALS



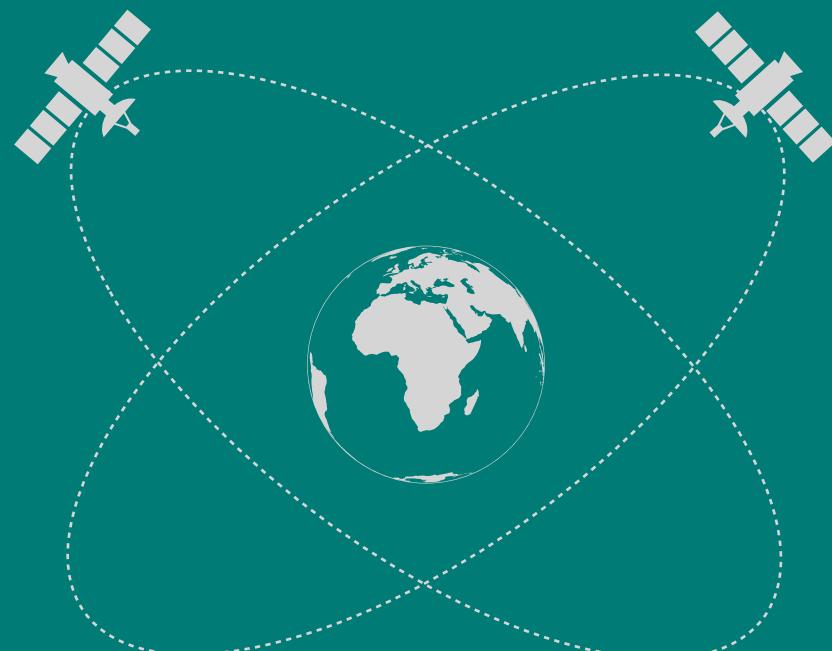
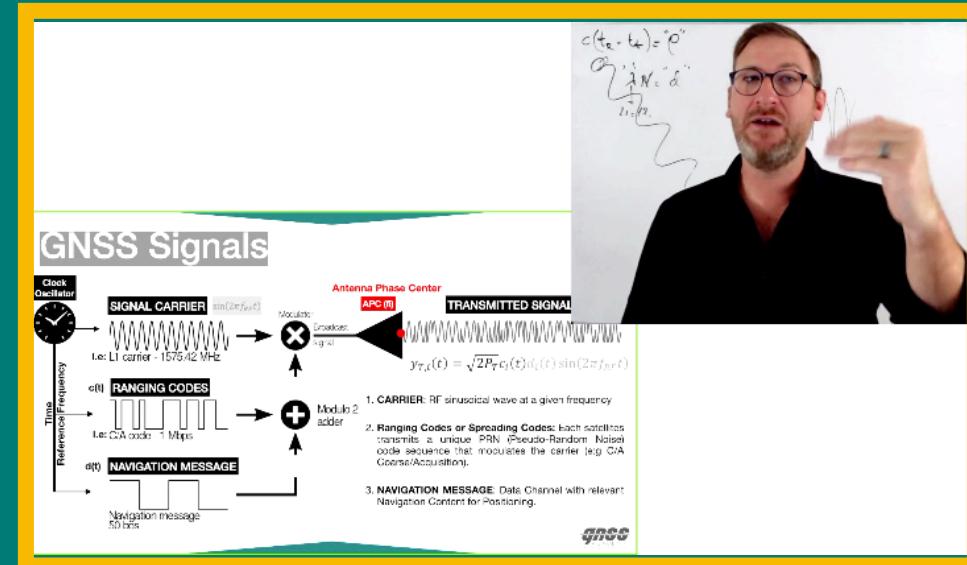
Block III deals with the GNSS signals processing from the transmission at satellite level to the reception at receiver level. How to estimate the main observables through all the RF chain, acquisition and tracking techniques and main performances impact

ELEVATE YOUR STANDARDS

M11

GNSS Signals Processing

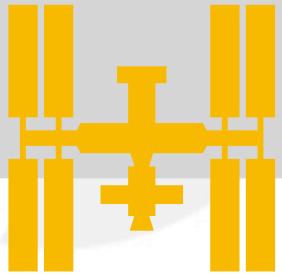
This is about GNSS Signals and its processing inside a receiver. It covers the signals definition and properties for current constellations. It goes along the whole receiver architecture, from the Antenna, RF Front End, Acquisition, Tracking and Nav. Demodulation and Observables computation, with the main performances assessment of tracking loops.





BLOCK I

BASICS



BLOCK II

SYSTEM



BLOCK III

SIGNALS



BLOCK IV

ADVANCED



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BLOCK IV



ADVANCED



Block IV deals with additional advanced positioning techniques such as the differential GNSS (DGPS or GBAS), precise positioning techniques with ambiguity resolution (RTK, PPP) and sensor fusion techniques (GNSS+INS).

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M12

Differential GNSS: DGNSS

Differential positioning techniques: DGNSS as one of the main code-based positioning technique based on the provision corrections information from a nearby base station. How to deal with Single Difference measurements on the estimation filters. It also covers the different implementations such as DPGS for Maritime or GBAS for Civil Aviation.

SYSTEM IMPLEMENTATION



DGPS Differential GPS

Local Area DGNSS 100 km
One Reference Station
Reaching m-level Accuracy
Maritime and Land Applications

GBAS Ground Based Augmentation Systems

Local Area DGNSS 40 km
One Reference Station
Redundant Monitoring Stations
Providing Integrity to Aviation

SBAS Satellite Based Augmentation System

Wide Area WADGNSS 1000 km
Several Reference Stations
Providing Integrity to Aviation
Future Maritime, Railway, 



PRECISE POSITIONING: RTK

DGNSS but precisely, RTK: Real Time Kinematics. A phase-based positioning using Double-Difference carrier phase ambiguity resolution techniques within a Kalman Filter. It covers the expected level of performance that can be reached using different baselines from a base and a rover

n DD (Double Differences)



$$\begin{matrix} \text{Two Rows less} & \left[2^*(\text{Nsats} - 1) \right] \\ \Delta\rho_R^{1\text{x}} \\ \Delta\phi_R^{1\text{x}} \\ \Delta\rho_R^{2\text{x}} \\ \Delta\phi_R^{2\text{x}} \\ \dots \\ \Delta\rho_R^{N\text{x}} \\ \Delta\phi_R^{N\text{x}} \end{matrix} = \begin{matrix} \left[2^*(\text{Nsats} - 1) \right] \times [3 + \text{Nsats} - 1] \\ -u_{x_0}^{1\text{x}} - u_{y_0}^{1\text{x}} - u_{z_0}^{1\text{x}} \\ -u_{x_0}^{1\text{x}} - u_{y_0}^{1\text{x}} - u_{z_0}^{1\text{x}} \\ -u_{x_0}^{2\text{x}} - u_{y_0}^{2\text{x}} - u_{z_0}^{2\text{x}} \\ -u_{x_0}^{2\text{x}} - u_{y_0}^{2\text{x}} - u_{z_0}^{2\text{x}} \\ \dots \\ -u_{x_0}^{N\text{x}} - u_{y_0}^{N\text{x}} - u_{z_0}^{N\text{x}} \\ -u_{x_0}^{N\text{x}} - u_{y_0}^{N\text{x}} - u_{z_0}^{N\text{x}} \end{matrix} \begin{matrix} 1 & 0 & 0 & 0 & 0 & \dots & 0 \\ 1 & 1 & 0 & 0 & 0 & \dots & 0 \\ 1 & 0 & 0 & 0 & 0 & \dots & 0 \\ 1 & 0 & 0 & 0 & 1 & \dots & 0 \\ 1 & 0 & 0 & 0 & 0 & \dots & 0 \\ 1 & 0 & 0 & 0 & 0 & \dots & 0 \\ 1 & 0 & 0 & 0 & 0 & \dots & 1 \end{matrix} \begin{matrix} \text{No Rcvr. Clock} \\ \Delta x_R \\ \Delta y_R \\ \Delta z_R \\ \Delta b_{RB} \\ \lambda \Delta N_{RB}^{1\text{x}} \\ \lambda \Delta N_{RB}^{2\text{x}} \\ \dots \\ \lambda \Delta N_{RB}^{N\text{x}} \end{matrix} + \begin{matrix} \epsilon_{\rho_R}^{1\text{x}} \\ \epsilon_{\phi_R}^{1\text{x}} \\ \epsilon_{\rho_R}^{2\text{x}} \\ \epsilon_{\phi_R}^{2\text{x}} \\ \dots \\ \epsilon_{\rho_R}^{N\text{x}} \\ \epsilon_{\phi_R}^{N\text{x}} \end{matrix}$$

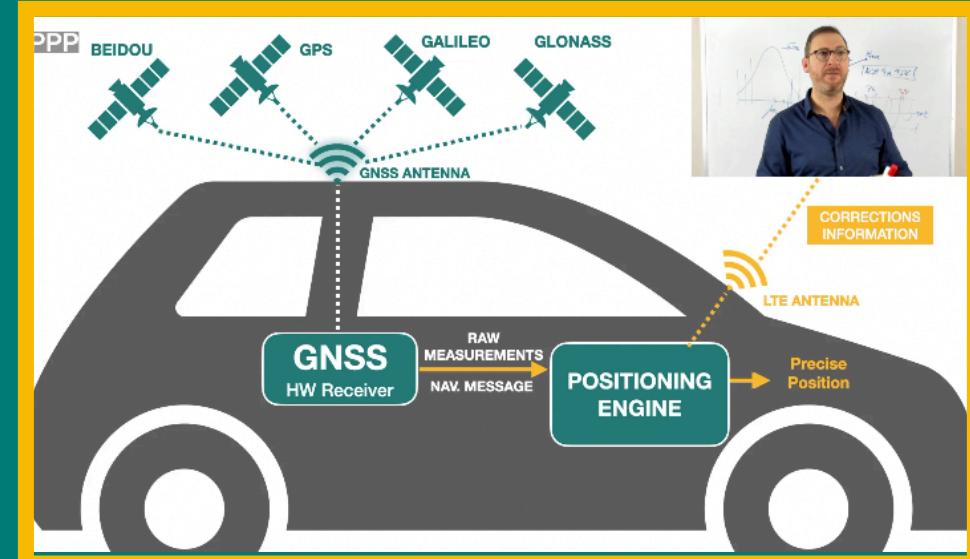
If DF, new equations can be added for the other signal frequencies.



M14

PRECISE POSITIONING: PPP

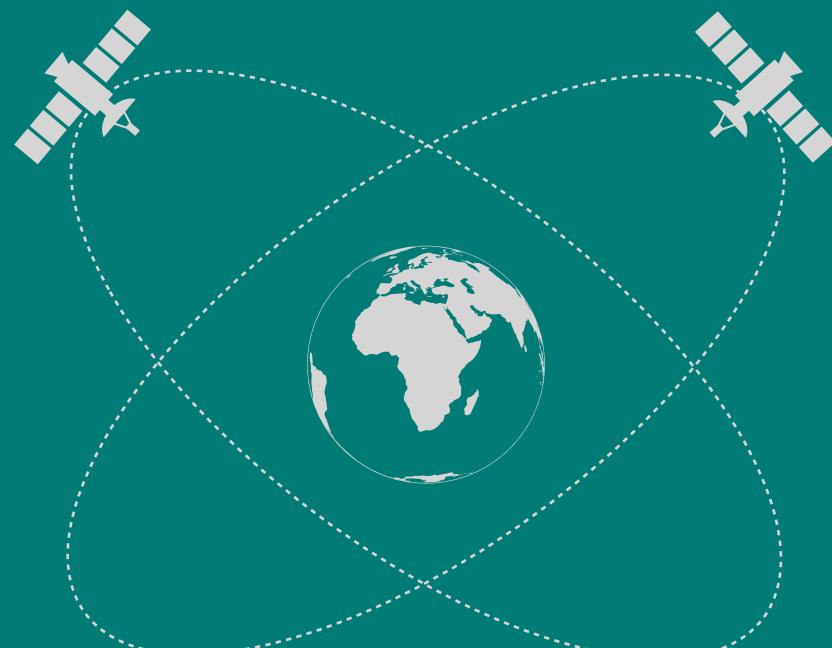
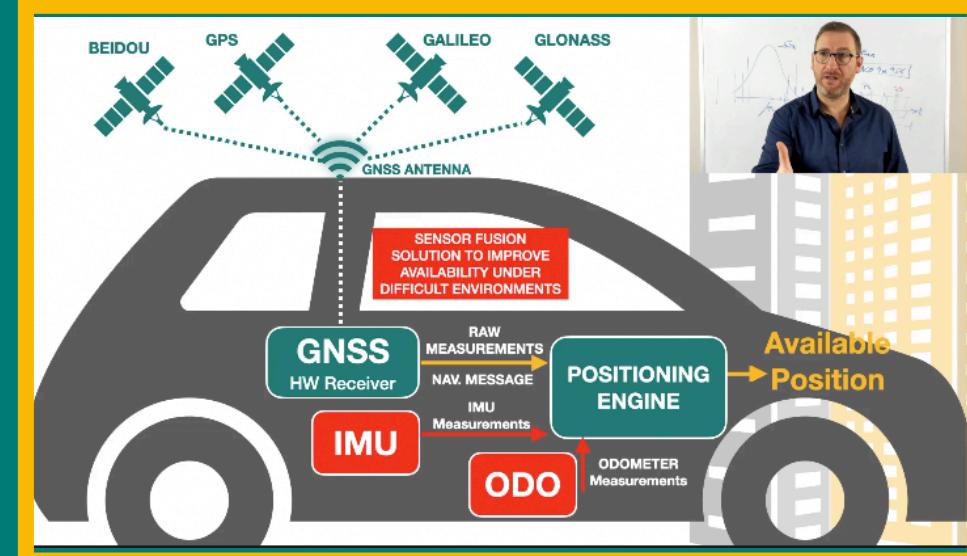
*Deep dive into the **Precise Positioning Point** techniques for those applications demanding cm-level accuracy such as autonomous cars. The use of precise products such as precise orbits, clocks, ionosphere etc necessary to estimate quick integer ambiguities through a Kaman filter.*

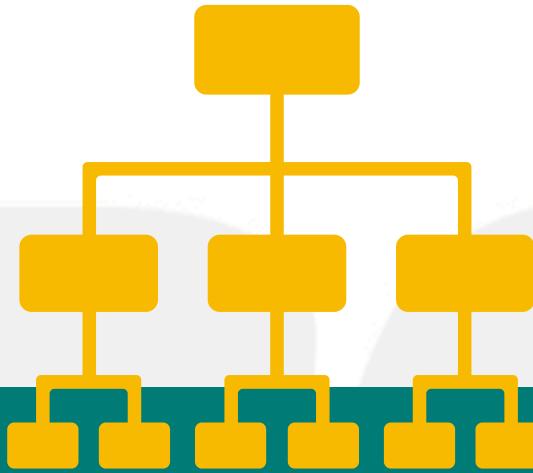


M15

SENSOR FUSION: GNSS+INS

This module goes inside the sensor fusion techniques to estimate a PVT positioning for those applications such as terrestrial or rail where a GNSS stand alone solution is not enough but need to be hybridized with other sensors such as IMU in order to achieve the required availability and continuity.





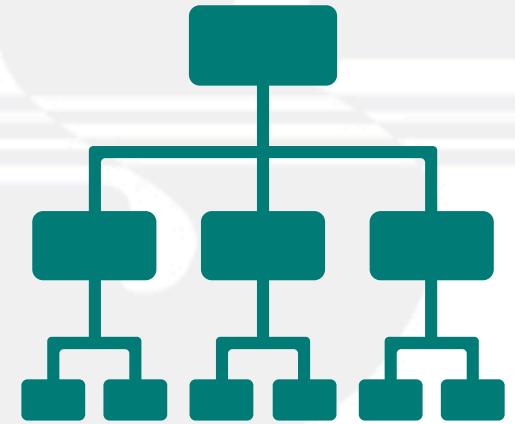
PROJECT

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WE GUIDE STUDENTS



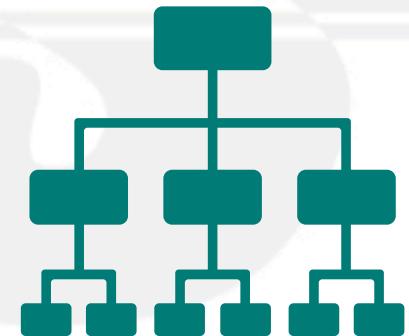
- To **Develop an end-to-end Project**
- Following Project **Standards** of **Space** Industry
- **Fitting** the current market needs
- **Accessible** from everywhere, **100% Online**.
- In **English** to boost the sector language
- In **parallel** to your current activities: **Work** or **Studies**
- **Using Python & Linux** as main programming languages.





THE PROJECT

- In the way **ESA and Space industry** expects you to do
- Decomposed in well defined and structured **Work Packages**
- Project **Schedule** and **Intermediate** Milestones
- From a Customer **High level Specifications**
- High level **Architecture**, **Design**, I/O interfaces
- **Algorithms** Definition and Processing **Models**
- **Validation** Approach with **reference** products
- **Delivery** of a final Deliverables for Acceptance



PROJECT



QA ACADEMY
ELEVATE YOUR STANDARDS

A large, faint watermark or background text that reads "QA ACADEMY ELEVATE YOUR STANDARDS".

PROJECT



INPUTS

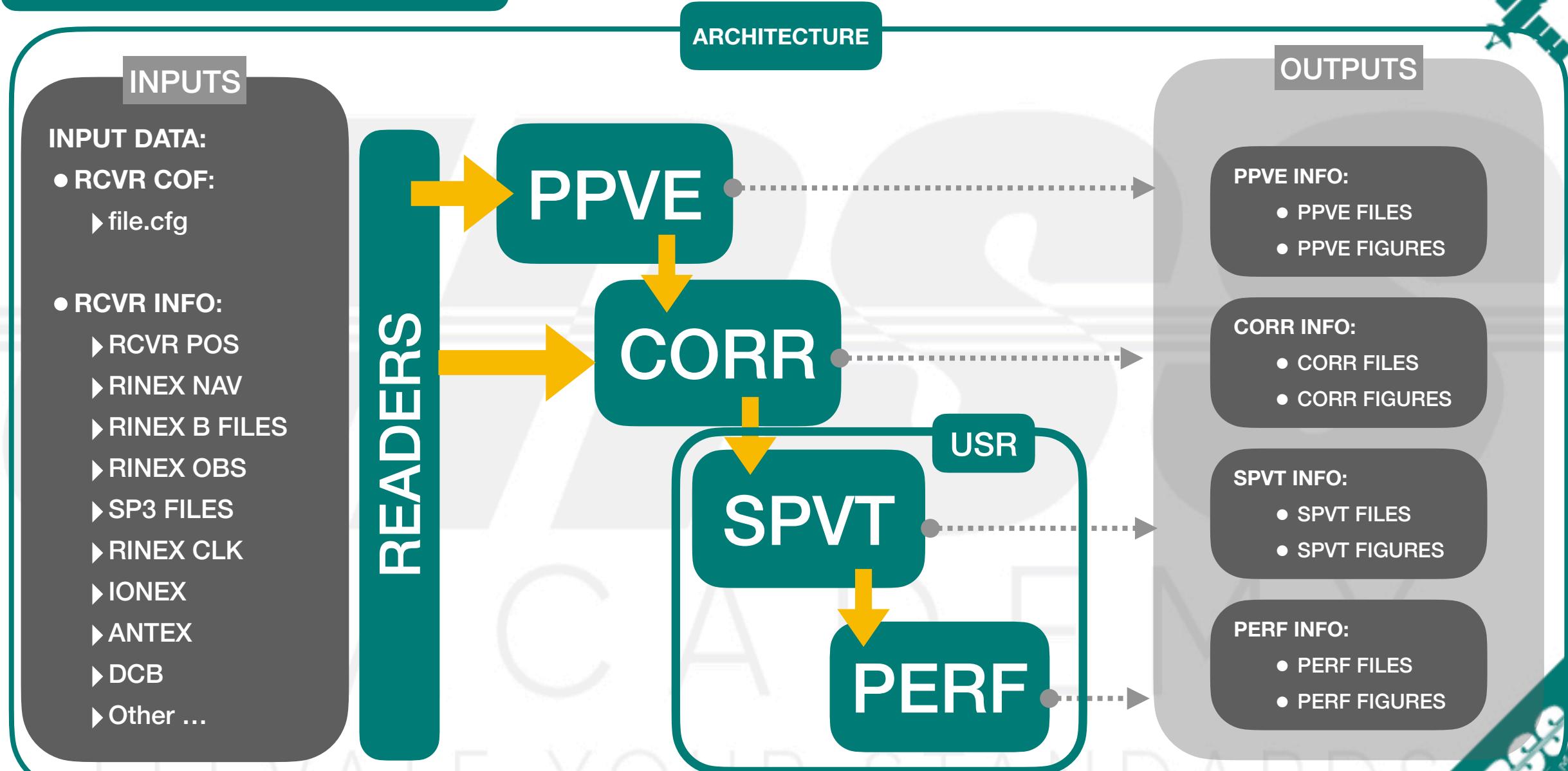


OUTPUTS

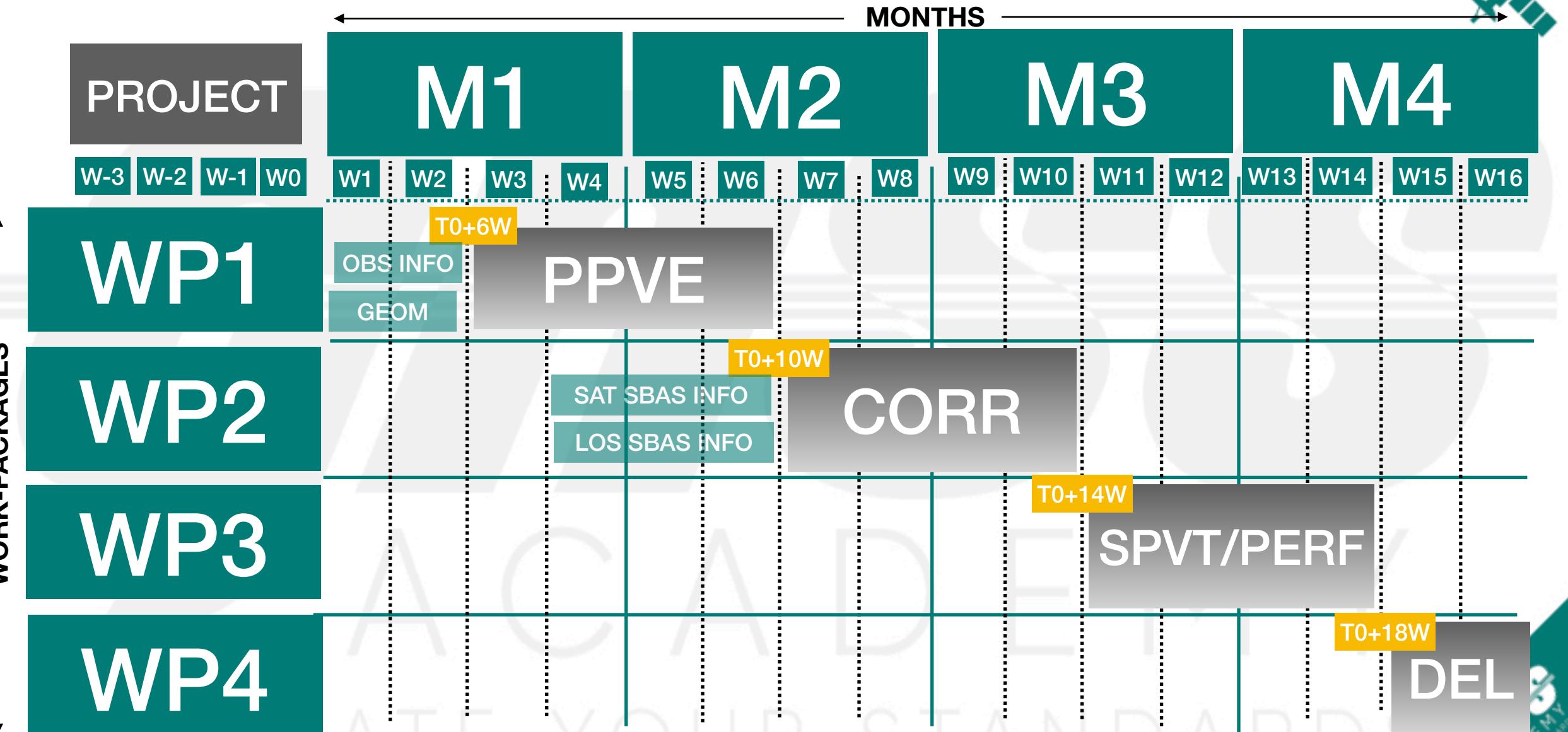
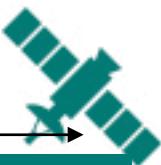
ELEVATE

ACADEMY
STANDARDS

Example of Architecture



WPx Allocations



Final Deliverables



- The **Student** shall deliver the following outputs:
 - TOOL Software Sources + Configuration files.
 - Scenario Execution Outputs: files and figures
 - A **Technical Note** containing:
 - ✓ Technical Understanding and Main Requirements
 - ✓ Architecture, Design & I/O Interfaces
 - ✓ Algorithms Definition and description.
 - ✓ Scenario Execution Parameters
 - ✓ Validation w.r.t the Reference
 - ✓ Main Conclusions
 - ✓ Recommendations and Way forward

PROJECTS

Some Projects

SERVUS

DEVELOPMENT OF A SERVICE VOLUME TOOL TO CHARACTERIZE AND MONITOR **SBAS DAILY PERFORMANCE FROM AN EGNOS/WAAS REAL DATA SIS CAMPAIGN**

PEPPUS

DEVELOPMENT OF THE USER PRECISE POSITIONING ENGINE (PPP) WITH AMBIGUITY RESOLUTION FOR A BI-FREQUENCY RECEIVER USING REAL ROVER DATA

PETRUS

DEVELOPMENT OF THE USER POSITIONING ENGINE OF A **SBAS MONO-FREQUENCY RECEIVER USING REAL DATA OVER DIFFERENT RECEIVERS ACROSS EUROPE**

GENMUS

DEVELOPMENT OF A RECEIVER RAW DATA SIMULATOR (CODE/ PHASE/SIGNALS) INCLUDING ORBIT PROPAGATION, CLOCKS, IONOSPHERE, TROPOSPHERE, AND LOCAL MODELS: MULTIPATH, NOISE AND THREATS





EXPERTS

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EXPERTS FROM KEY COMPANIES



- **Experts** will join during the program to give live technical talks on well-defined topics.
- **Companies** and **institutions** all over the World (EC, ESA, ADS, GMV, TAS ...)
- **Connect** with these companies and learn what they do and their future
- **Learn** about the engineers needs and get **positioned** on open vacancies



ineco

AIRBUS
DEFENCE & SPACE

ThalesAlenia
Space
a Thales / Leonardo company

gmv®

Leica
Geosystems

eesa

septentrio

SYNTONY
GNSS



R O K U B U N

EUSPA


ESTONIAN
INSTITUTE
OF
TECHNOLOGY

deimos
SPACE

UPC

Some of the Experts

Jaime FERNANDEZ



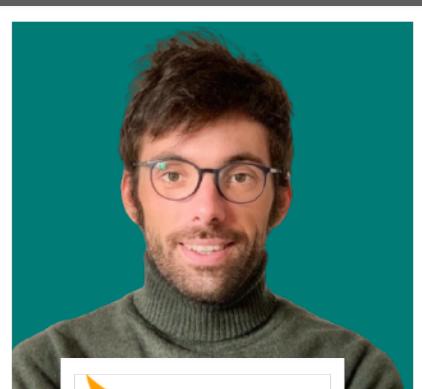
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Eric SENANT



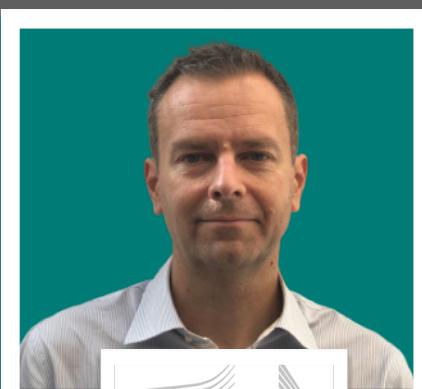
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Philippe BROCARD



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T NAVIGATION

Ignacio ALCANTARILLA



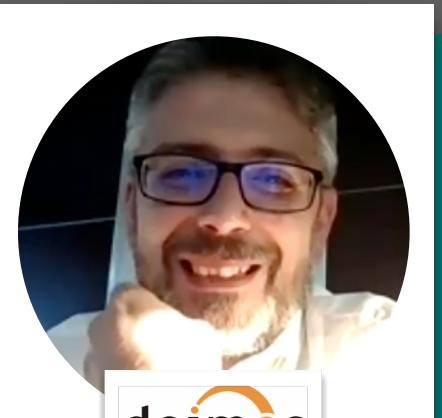
European
Commission

Ignacio FERNANDEZ



European
Commission

Manuel MARCOTE



deimos
SPACE

Irma Rodriguez



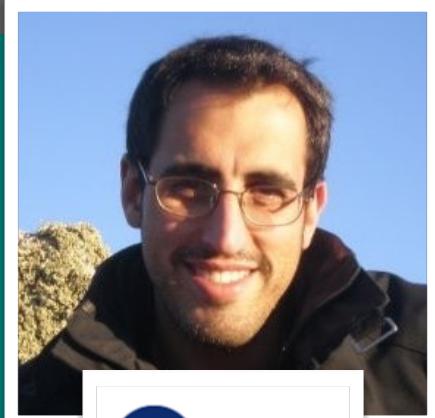
gmv®

Joaquin REYES



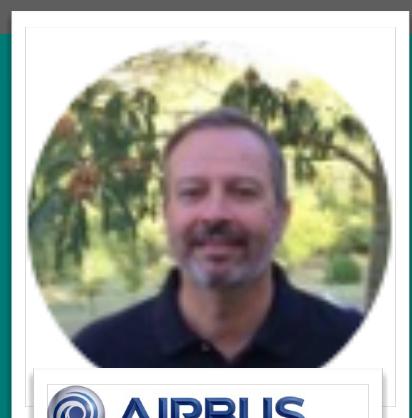
EUSPA
EU

Carlos LOPEZ



eesa

Franck BOURGELET



AIRBUS
DEFENCE & SPACE

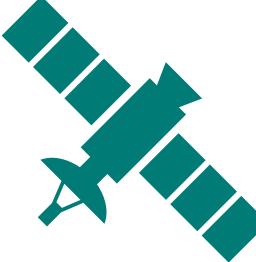


SUPPORT

ACADEMY
ELEVATE YOUR STANDARDS

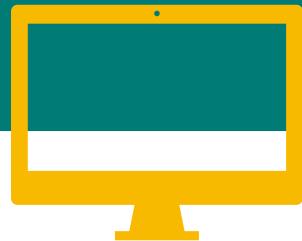


DAILY SUPPORT



Students Support is given during the whole program with :

LIVE CLASSES



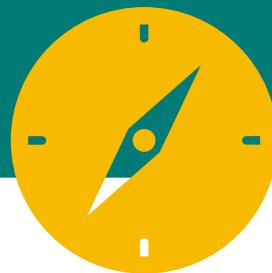
Live Weekly Classes to go deep inside the theoretical concepts with dynamic technical discussions and deeper explanations

HANDS ON WORKSHOPS



Workshops as hands on experience to learn about Python, Linux Scripts, Git, Machine Learning and GNSS with real data experimentation

PROJECT TUTORSHIPS



Our Tutors support students during live tutorships sessions to ensure the on-time and on-quality delivery of the project final outputs.

RESOURCES ACCESS

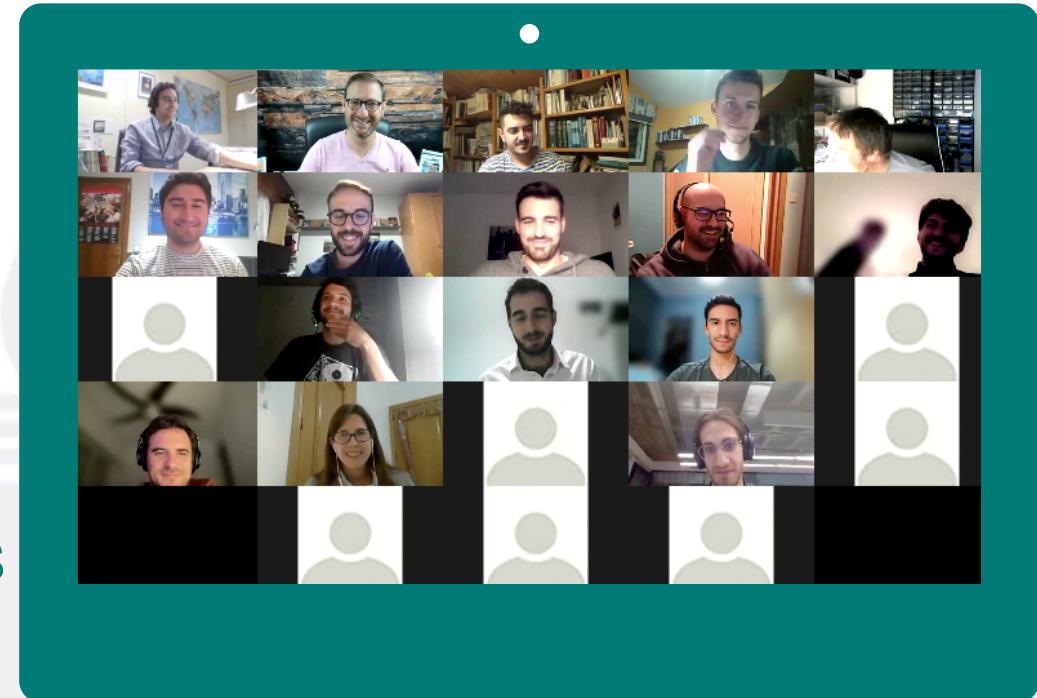


Access to Webinars, tutorials, tools, documentation, data, and all necessary resources to help students successfully accomplish the whole training.

Live Sessions



- **Live Weekly Classes 7PM (CET)**
- **Recorded and later accessible**
- **Deep dive** on theoretical Concepts
- **Dynamic** exchanges and interactions
- **Support Your Project Progress**
- **RePlay** with Real GNSS Receivers Data
- **Execute** free SW GNSS tools
- **Workshops** as hands on experience on Python, Linux Scrips,



SCHOOL ACCESS



- Access to our **virtual school** with all GNSS Resources
- All live sessions are **recorded** and **uploaded** at the school
- Access to all **resources**
 - Python Training
 - Git training
 - Linux training
 - Documents/books
 - Data Servers.
 - Public Webinars

www.gnssacademy.com/club

The screenshot shows a mobile device displaying the GNSS Academy website. On the left, a sidebar lists course modules: Modulo 1 (WARM-UP PRE-TRAINING), Modulo 2 (WELCOME JSNP2.0), Modulo 3 ([M0] - GNSS SYSTEMS), Modulo 4 ([M1] - GNSS FUNDAMENTALS), Modulo 5 ([M2] - ERROR SOURCES MODELING), Modulo 6 ([M3] - SOLVING PVT EQUATIONS), and Modulo 7 ([M4] - SBAS POSITIONING FUNDAMENTALS). Each module has a progress bar indicating completion. On the right, a large banner reads "JSNP 5.0 Welcome" with a play button icon and a small satellite icon.

PRIVATE WORKSPACE



→ A **Private workspace** to share and exchange questions on your work and technical progress...

→ **Communications** and interesting news, webinars, planning, classes ...

→ Share **open job vacancies in companies** to apply for them during the training...

The screenshot shows a Slack interface for the 'JSNP 3.0' workspace. The left sidebar lists various channels and direct messages. The main window is a conversation in the '#general_communications' channel. Key messages include:

- Eduardo Tapias (trainer) joined the channel on Monday, 21 June.
- Eduardo Tapias (trainer) renamed the channel from "général" to "general_communications" on Friday, 25 June.
- Horia Ghionoiu Martinez joined the channel along with 15 others on Friday, 25 June.
- Eduardo Tapias (trainer) posted a message on Today about a 'NAVENGERS' welcome party starting next Wednesday, 7th July.
- Eduardo Tapias (trainer) requested participants to prepare a 20-second pitch in English using their cell-phones in "HORIZONTAL MODE".
- A list of questions was provided:
 1. Who you are? (Name, Age, City, Country, Degree/Master)
 2. What's Your current situation as a student or as an engineer?
 3. Why did you join JSNP Program of GNSS Academy ?
- A note: "Who is gonna share the video here?" followed by a hands up emoji.

At the bottom, there is a message input field and a toolbar for rich text editing.

EVALUATION



- Evaluation **Tests**
- Every few weeks
- **Quiz**-types
- Challenge your **progress**
- Minimum required for **certification**.

The image shows a screenshot of a digital interface for a test module. On the left, there's a vertical navigation bar with a yellow folder icon labeled "Módulo 18 [TESTS]" and a "7 / 9" indicator. To the right of the bar is a large green speech bubble containing the word "TESTS" in white. A yellow progress bar with a grid pattern is positioned above the speech bubble. The main content area lists nine tests, each with a question mark icon and a checkmark or a question mark in a circle:

- TEST 1 - GNSS Systems
- TEST 2 - GNSS Fundamentals
- TEST 3 - Error Sources Modeling
- TEST 4 - Solving PVT Equations
- TEST 5 - SBAS Fundamentals
- TEST 6 - EGNOS System and CPF
- TEST7 - GALILEO SYSTEM
- TEST8 - Differential Positioning DGNSS
- TEST9 Precise Positioning: RTK/PPP



CERTIFICATION



T. Karpis



CERTIFICATE

GNSS ACADEMY CERTIFIES

\$FIRSTNAME \$LASTNAME

AS A GRADUATED **GNSS ENGINEER** AFTER HAVING SUCCESSFULLY ACCOMPLISHED THE INTERNSHIP PROGRAM - JSNP - WHERE SHE/HE HAS ACQUIRED ALL THE NECESSARY SKILLS ON GNSS THROUGH THE COMPLETE TRAINING AND THE SUCCESSFUL ON-TIME AND ON-QUALITY ACCEPTANCE OF THE END-TO-END PROJECT USING PYTHON PROGRAMMING



JSNP 5.0

JOIN SATELLITE NAVIGATION PROGRAM



ELEVATE YOUR STANDARDS

EDUARDO TAPIAS
- DIRECTOR OF GNSS ACADEMY -





NEXT TRAINING

PLANNING



T. Karpis

JSNP5.0 T0: 14.SEP.22

SEPT-22

	M	T	W	T	F	S	S
	29	30	31	1	2	3	4
	5	6	7	8	9	10	11
W1	1	START	14	15	16	17	18
W2	19	20	21	22	23	24	25
W3	26	27	28	29	30	1	2

OCT-22

	M	T	W	T	F	S	S
	26	27	28	29	30	1	2
	3	4	5	6	7	8	9
W4	10	11	12	13	14	15	16
W5	17	18	19	20	21	22	23
W6	24	25	26	27	28	29	30
W7							

NOV-22

	M	T	W	T	F	S	S
	31	1	2	3	4	5	6
W8	7	8	9	10	11	12	13
W9	14	15	16	17	18	19	20
W10	21	22	23	24	25	26	27
W11	28	29	30				
W12							

DEC-22

	M	T	W	T	F	S	S
	28	29	30	1	2	3	4
	5	6	7	8	9	10	11
W13	12	13	14	15	16	17	18
W14	19	20	21	22	23	24	25
W15	26	27	28	29	30	31	1
W16							

JAN-23

	M	T	W	T	F	S	S
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
W17	16	17	18	19	END CLASSES	22	
W18	23	24	25	26	27	28	29
W19	30	31	PROJECT DELIVERY				
W20							
W21							

FEB-23

	M	T	W	T	F	S	S
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
W22	20	21	22	23	24	25	26
W23	27	28	END OF SUPPORT				
W24							
W25							

PRE-TRAINING
Preliminary tasks

TRAINING
Theory Modules

SUPPORT CLASSES
Wednesdays 7PM (CET)

WORKSHOPS
Not all Thursdays

TUTORSHIPS
Not yet fixed

FINAL SUPPORT
Project delivery



HOW TO APPLY TO JSNP?



T. Karpis



The First Step !

Submit your application here:



www.gnssacademy.com/apply



Only your name, email and telephone number are requested at this stage.

If any technical issues while submitting, write us to:

training@gnssacademy.com



All the Steps to go through the selection process...

1. **Submit** your application to JSNP: www.gnssacademy.com/apply
2. You'll receive an automatic email with a **link to an application form**.
3. **Fill** carefully the **application** form. Take your time for the answers.
4. Your **answers** are carefully **reviewed** by all our **team**.
5. You'll be **called** for a **one-to-one video-interview** via ZOOM.

- All your questions will be answered during the interview -



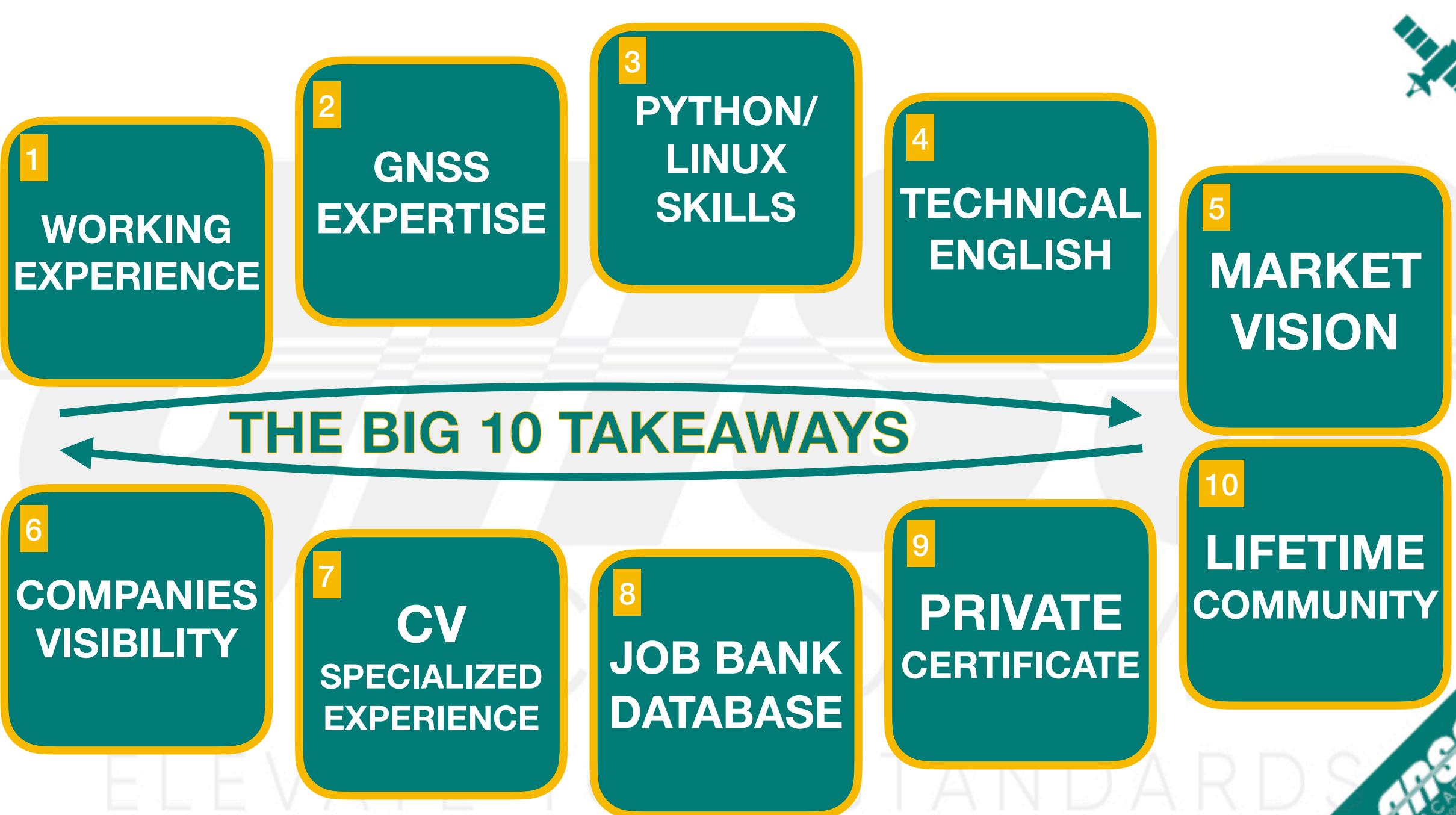
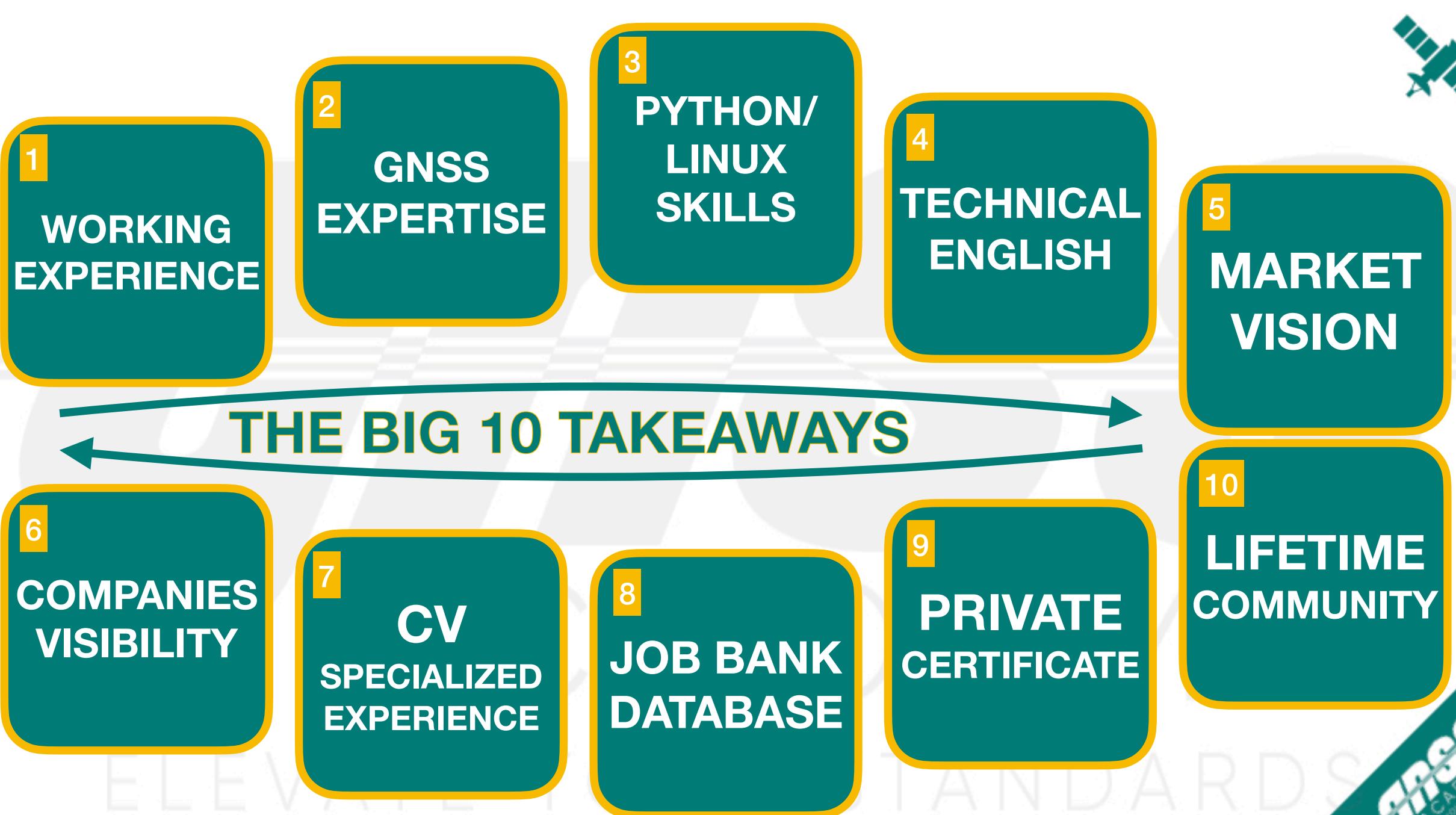
**WHAT YOU GET
THANKS TO JSNP**





THE BIG 10 TAKEAWAYS OF JSNP

ELEVATE YOUR STANDARDS





1

Working Experience

Developing a Real Project in Python



2

Deep GNSS Expertise

To start adding value into a company

ELEVATE YOUR STANDARDS



3

High Skills on Python and Linux

Thanks to all workshops and the project



4

English Technical Skills

The Entire Traineeship is in English



5

Wide GNSS Market Vision

Companies, Initiative, trends, perspectives



6

Visibility from Companies

Through Our Network, Social Media and experts talks



7

A Resume Outstanding

CV: Specialization + Experience + Expertise



8

Job Bank Database

Share your CV with Companies in the Sector



9

A Private Certificate

Acknowledged by different companies in the sector



10



A Community of Navengers

To support to each other beyond the traineeship



MEET OUR STUDENTS...

www.gnssacademy.com/navengers-in-youtube



T. Kaptur

NAVIEHUGERS

Click here



Alejandro R. - GNSS System Engineer at



Javier Gonzalez - GNSS Project Engineer at



Alejandro Rodriguez is a 28 years old aerospace engineer that was working on the aeronautical sector for a few years. He wanted to focus his career on Space Sector and he got a job opportunity right after JSNP to work in Airbus Defence and Space in Toulouse (France)

Javier Gonzalez is an aerospace engineer recently graduated that came into the GNSS world to understand the Precision Agriculture Concepts and now he is working at GMV NSL in Nottingham UK for Precise Positioning Projects

Andrés Perez - GNSS Research Engineer at  **Fraunhofer**

Miguel Ramirez - GNSS SW Engineer at  **INNOVATING SOLUTIONS**



 SPANISH

ENGLISH 



 SPANISH

ENGLISH 

Andrés Pérez is an Industrial Engineer from Galicia (Spain) already working at the satellite sector before JSNP. He wanted to move abroad and focus his career in GNSS. After JSNP, he got hired by the Fraunhofer Institute in Nuremberg, Germany, as GNSS Research Engineer designing the Galileo receiver for Governmental applications.

Miguel Ramirez was a student in telecommunications electronic systems from Malaga. He decided to join JSNP to focus his career at the GNSS sector. He got hired right after an expert class before finishing the degree as a Precise Position Algorithms Engineer at GMV.

ELEVATE YOUR STANDARD

Teresa Aparicio - GNSS SW Engineer at 



Rafael Felix - GNSS Galileo Engineer at 



Teresa Aparicio is an aerospace engineer that was an intern working on CFDs. After long time applying for GNSS vacancies, she decided to join JSNP, and she got hired during the training at GMV in Madrid to work as GNSS SW engineer for Defence-related Projects

Rafael Felix is an aerospace engineer with a Master on Space by the Politecnico de Milano. He struggled to find a job on the Space Industry. He was directly hired before ending JSNP Program by Deimos Space to go to ESA in ESTEC as contractor. Now He works on Galileo Second Generation Programme in the Netherlands.

**Adrián**Consulting |
10mo • Edited**Juan Ra**GNSS Software Engineer at GMV
1mo • EditedIt is an honor to say
due to my trainee atIt is been 5 months
environment and a
the world.

Cannot wait to put i

#GNSSAcademy #G
#Internship #Projec**Ángel**Project Manager & Embedded Systems Engineer en Abervian Energy Sol...
7mo • EditedFew months ago I made one of the most important decisions in my recent
#career . After attending a webinar from **Eduardo TAPIAS** about GNSS I
decided to enrol at the second edition of the Join Satellite Navigation Program.During the program I have learnt and work with the cutting-edge concepts
about GNSS industry, developed a tool to characterize EGNOS performances
over a service volume and actively participated in masterclasses and talks
with a lot of relevant profesionals in GNSS industry.But the program was not only about GNSS technical topics. I have been able to
improve my Python programming skills, Linux knowledge and English, as well.
And the most important, I am very very proud to be now part of the Navengers
community, great people willing to grow till the sky!**Fernando**1st
Flight Test Analysis Engineer - Ae
10mo • EditedAfter successfully completing my internship, I graduated as a GNSS Engineer. It has been six months already since I finished my trip to the **GNSS Academy**! It feels like an eternity now that I am fully integrated into the space sector.

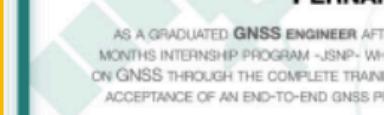
This certificate means much more than advanced training in GNSS technologies, it is a passport towards all my career opportunities.

**Sandra**Aerospace Engineer - A400M
8mo • Edited • Edited

Cannot miss the opportunity of sha

After 5 months of hard work and practice, I graduated as a GNSS Engineer from GNSS Academy.

Besides, I have sucessfully delivered a Python-based receiver location monitor and characterize the SBAS User Equipment (UE) receiver locations across the ECAC Interoperability and Continuity.

I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.I am very grateful to all the people involved in the course, to **Eduardo TAPIAS** for his guidance and support.**Gloria**Systems Engineer for GALILEO at Indra | C
10mo • EditedAfter successfully completing my internship, I graduated as a GNSS Engineer. It has been six months already since I finished my trip to the **GNSS Academy**! It feels like an eternity now that I am fully integrated into the space sector.

Today I would like to share with you my most recent achievement: I have graduated as a GNSS Engineer.

After these not only demanding but also rewarding months, I am very proud of what I have become.

We have got plenty of experience and we have grown as professionals.

Starting from knowing nothing about GNSS, we have incredibly increased our knowledge and skills.

Eduardo TAPIAS thank you for the opportunity I was given to be part of your community. I am particularly grateful to you for the theoretical and practical knowledge you have provided us to lay the foundations for our future careers.

I would like to thank Eduardo TAPIAS for his guidance and support throughout the program.

After several months of intense training and hard work, I graduated as a GNSS Engineer. This marks an important milestone in my professional development, as it provides me with the theoretical and practical knowledge required to start my career in the space industry.

I would like to thank Eduardo TAPIAS for his guidance and support throughout the program.

Thanks once again Eduardo TAPIAS for your commitment and dedication to the program.

**Alejandro**R&D GNSS Engineer at Airbus Defence & Space || MSc in Aerospace Eng...
25m • Edited • Edited

Dear network,

It has been a while since my last post as the previous months have been quite frenetic for me.

As you may know, six months ago I decided to enroll the JNSP3.0 programme dispensed by the **GNSS Academy** in order to launch my career in the space sector, and more precisely in the exciting world of the GNSS - Global Navigation Satellite based Systems. When I cast my mind back and I think of all the risks I have taken throughout the path, I cannot be more satisfied of my decision.Risks are essential to step up the career ladder and today I can proudly announce that all that effort has finally paid off. I have recently been hired by **Airbus Defence and Space** Toulouse to take on a position as a R&D GNSS Engineer. I could not be more grateful to all the people who has helped my to accomplish this dream, as well as to my new colleagues for trusting me for this job. I am ready and excited to face this new adventure.



Nebnoma Alexandre KABORE • 1st

CNS / ATM Expert | ICAO USOAP CMA Expert in ANS, LEG and ORG | M...

2d ...

I did GNSS courses before this Program because of my professional background in Aeronautical Telecommunications. So I was asking myself if it was worthy to enroll, but with our first interview you showed me your wide experiences in GNSS and SBAS engineering projects you involved. After this interview and without doubt I have decided to be one of your **#Navengers**. My previous GNSS courses were generic but your modules went deep and I learnt a lot on GNSS, SBAS, EGNOS, PPP, RTK... despite my time and family constraints. Thanks a lot to you **Eduardo TAPIAS** for what you did to make us **#Navengers**. Now SBAS Operations seem the area I am willing to involve in RIMS, MCC, NLES... site survey, installation, configuration, commissioning and maintenance.



María Romero • 1st

GNSS Trainee at GNSS Academy | Open to Job Opportunities

3d ...

It has been a truly incredible experience! We have grown personally and professionally.

Eduardo, thank you for your passion, dedication and thank you for being the beautiful person that you are 😊

Of course it is the beginning of something great. 🇨冒着 Go **#Navengers!** 🇨



David Diaz Rivas • 1st

Space Engineer, with degrees in Aerospace & Telecommunications Engi...

3d ...

It has been an unbeatable opportunity, for personal and professional growth.

Thank you for preparing this experience, for the theory that you have taught us, for the approximation to the real workd, for the experts you have brought to us and for your relaxed talks where we have talked about life and work.

I feel that this is the beginning of something big.



Miguel Ángel Muñoz de la Torre • 1st

Flight Dynamics and Operations Engineer at GMV

3d ...

I would say simply amazing. A life-changing experience, which I'm very glad to have participated in. Thank you for everything!! 🙌



Rami Othman • 1st

Engineer, PhD. Signal Processing

20h ...

I completely share your point of view **Nebnoma Alexandre KABORE** !! this is the most complete GNSS training! it covers almost all the GNSS related topics in a very detailed way! This training is also very beneficial for experienced engineers as well. Also the commitment of **Eduardo TAPIAS** during these months is just incredible!



Oscar Rodríguez Corps • 1st

Becario en Operaciones, red y TI en Telefónica

3d ...

Proud to be member of this first edition of the program!! It's been a pleasure to learn from you **Eduardo TAPIAS**, you've taught us much more than GNSS!!! Nice to have met these amazing **#Navengers** friends!! 😊🚗✈️🚀



Neus Revert Calabuig • 1st

GNSS Internship and training at GNSS Academy

3d ...

Thank you **Eduardo TAPIAS** for this opportunity!! This was a really good experience and it will be present in our future, personal and professional 😊👏



Fátima López Rojas • 1st

Ingeniería Aeroespacial

3d ...

It has been the best experience in my life without any doubt! 🇨冒着 THANK YOU 🎉

Alejandro [REDACTED]

Hi Navengers! I have some great news to share with you. Eduardo suggested me to break them to you before wednesday's class, but I wasn't ready yet.

During the past few weeks I have been doing some interviews with Airbus Defence & Space in Toulouse and they have finally hired me to work as a R&D GNSS Engineer. I will start on January 3rd if everything goes as expected

09:49

The goal of my message is not only to share the news with you, but also to encourage you. From my experience during the interviews, I can tell you that we are receiving a high-quality formation. Event though Airbus demanded more than 5 years of experience for the position, I managed to get in

09:50

So quite frankly, I truly believe that of all us have great chances to get in the sector

09:50

Miguel [REDACTED]

Hi, Navengers! I have some great news to share with you.

Last week I did an interview at GMV Aerospace and Defence SAU and finally they have hired me to work as a GNSS Telecommunications Engineer. So if everything goes well, I will soon start working in the GMV team.

12:38

Andrés [REDACTED]

Hello Navengers !! I have some great news that I want to share with all of you since last week they gave me the answer that I have passed the selection process at the Fraunhofer Institute in Germany !! 😊😊

I will start working in March as a GNSS researcher in the Galileo PRS service at the Fraunhofer IIS in Nuremberg! I also want to tell you what other colleagues have already said, the training that we have had at the Academy during this time is highly valued by both companies and research centers, so I also encourage you to apply to open GNSS positions now that a short time has passed since we finished our training. PD: They are looking for more people in this research institute, so if you think that if Germany can be a good destination for you, I encourage you to do it!

Nacho [REDACTED]

Hello guys! I want to share with you some good news! I had an interview with GMV last week, and they offered me a job! That means that I will be joining GMV in the upcoming weeks 😊😊

6:49 am

Ana [REDACTED]

Hi, I'm happy to share with all of you that I have just got a job opportunity at ESSP !

14:00

Congratulations Ana !

Antonio [REDACTED]

Hi fellow Navengers!! I hope you are enjoying this Friday night 😊

I want to share some exciting news with you! Back in October I did an interview with GMV and the result was positive. So after settling some affairs in my current place I will be joining them this next Monday, right after the end of JSNP 3.0. 3.0 we will see each other in the office 😊.

Neus [REDACTED]

Hola chicoss, como os dije el otro día voy a trabajar en el CTC de Santander, ya he dicho que sí y el miércoles que viene empiezo 😃😃 así que os espero por ahí 😃😃😃😃



Javier

I am going to sneakily announce that today was also my first day in GMV (currently remote to Madrid offices, waiting for the issuing of the VISA to work in NSL). Thanks to the strong training and experience of the academy, I have become a(nother) GMV Navenger and maybe we encounter shortly in any of the projects 😊. All I can say is to encourage you to apply, as our knowledge is widely appreciated in the sector companies. The standards have definitely elevated. 😊

12:58

Asude

Hi guys, I would like to share my happiness with you. I will be working for the Huawei Turkey R&D department in Istanbul, they offered me the position of Petal maps test engineer and I accepted 🎉🎉🎉

9:47 am

Juan Ra

Hi guys! 😊 Just wanted to share with you the final outcome of the interview I mentioned I had last class: they have offered me the job so I will be joining the GMV GNSS team at Madrid!!! 😁😁

11:47 am

Wonderful friday news that I wanted to share with you, I'm so glad!! 😁😁

11:47 am

Teresa

Hello, guys 😊 I just wanted to tell you about the interview I had with GMV two weeks ago. I got a job offer, so I'll be joining the company in a few weeks 😊😊😊

Maria Romero Gómez Martí

Bueno, estoy muy contenta y quería compartir con vosotros que me han cogido en GMV NSL y tras lo que dure el trámite me iré para Nottingham

4:31 pm

Albert

Hey guys, just to let you know that after some interviews I got a job offer to work in Trimble in Munich. I will start next month and I will be working in PPP and autonomous cars

Maria

Hi guys, I want to share with you some news...I am going to move to Germany to work in the control of EUMETSAT satellites.

Javier

Hi guys! I want to share with you that EUMETSAT has offered me to work with them as Maria Jose and Marti, but in different mission, in Darmstadt as well 🎉

11:02 am

Jaume

Hello everyone! I have also great news to share with you! Yesterday I did an interview at GMV for the position of GNSS Algorithms Engineer and today I received their call to tell me that they wanted to hire me!! 🙌🙌 I am still shaking hahaha. I also wanted to encourage you to apply for those positions that you like, we have really good chances to get in

★ 11:07 am

Carlos

Hello Navengers!! I have some great news that I want to share with all of you, recently i was hired as a satellite engineer in GMV so another one to the GMVs team!! I have to say that thanks to the training i was able to reach this position so i am very grateful for this, as other colleagues have already said the training is highly valued by the GNSS companies so I encourage you to post for vacancies! thank you very much Eduardo y Alberto! The work you are doing is amazing!

17:20



< 2 Esther

Hola Eduardo! Qué tal las vacaciones?? 😊 09:06

Mi vuelta ha sido movida... te traigo novedades!! Me han dicho que no de GMV para precise positioning, la entrevista que hice en el departamento de migue. La parte buena es que al parecer sigo en el otro proceso de GNSS engineer que yo eché, a ver por donde sale eso 09:07

pero mientras tanto.... me han contestado de ESSP!!! y me han dicho que siiiii 😱😱😱😱😱 (si te pudiera mandar un audio lo estaría haciendo super emocionada jaja) 09:08

no sé como será el trabajo y evidentemente hay que probar, pero me pinta bastante bien y la oferta ha sido absolutamente inmejorable, estoy en shock aún! 09:08

Madre mia, mil millones de gracias, te debo muchisimo!! voy a trabajar duro para estar al nivel, lo prometo 09:09

por temas de preaviso y demás... me incorporo el 17 de mayo, aún queda 09:09

pero estoy feliiiz 😱😱😱😱 jajajaj 09:09

< 1 Juan

Buenas Edu, que tal todo? 06:11

Nada solo quería decirte que hice ayer una entrevista con Airbus Alemania 06:12

Me han llamado hoy a las 9 para comentarme que cuentan conmigo 06:12

Tomaron la decisión en cuestión de horas..porque me entrevistaron a las 5/6 de la tarde y a las 8 ya les habían dado respuesta a la gente de orbital... 06:13

< 2 Neus P.

Hola Eduardo!!
Voy sin parar y aun no te había podido escribir, pero el lunes ya empecé en la ESSP 😊 y por ahora muy muy contenta, mi equipo son todos majisimos y muy trabajadores y mis jefes también un encanto. Me dan bastante flexibilidad y estoy muy contenta! Ya te iré contando cómo

David I.

Buenas chicos! He empezado hoy, todo muy bien aunque aún no me han asignado proyecto, la gente es muy maja y parece ser que voy a colaborar en varios proyectos de EGNOS y Galileo. Ya os iré contando!

< 2 Javier

Hola Edu, acabo de tener una entrevista con [REDACTED] para trabajar en el GSC 10:01

Me ha dicho que coincidisteis en GMV 10:01

Y un saludo de su parte ! 10:01

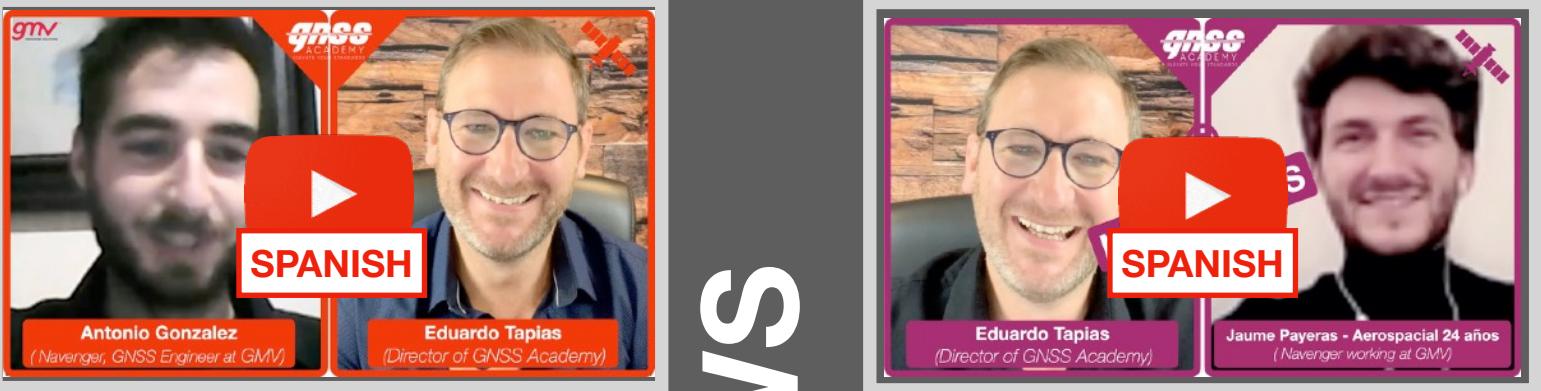
Me han llamado ahora mismo de que les ha gustado mi perfil y que me cogen para empezar a mediados - finales de enero 🙌🙌🙌🙌 12:00

< 1 Carlos

Mon 7 Feb

Hola Eduardo! Te escribo para contarte que al final me seleccionaron en GMV! Asique empiezo a trabajar con ellos el dia 21 de este mes! Solo queria darte las gracias por lo que hemos aprendido estos meses pasados y por lo que nos has ayudado para tomar algunas decisiones asique muchas gracias! Trabajare en el equipo de Belen asique muy contento! 12:25

INTERVIEWS



INTERVIEWS



FREQUENT QUESTIONS?

I am still a student in first years



- No better moment while still student to explore the market possibilities and start having a specialization so as to make the difference once the degree or Master will be finished.
- Get a clear privileged position thanks to a CV in front of any other classmate to later apply for open internships/Vacancies



Sergio Nuñez was our student in first degree of mechanical engineering. He successfully accomplished JSNP. he got working experience thanks to the project development .Now he is ending the degree and starting internships on the space sector.

I thought Space Sector was only for Aerospace Engineers



- Space Sector is for any engineer having a scientist mathematic basis: Aerospace, Telecommunications, Industrial, Electronics, Software, IT.
- Also for Mathematicians and Physicians.
- Maybe not suitable for other degrees such civil, chemistry, materials, environmental, ...



Daniel SENDINO is a mines engineer of 24 years old that decided to join JSNP in order to focus his career on GNSS. Now he pursues his studies by doing a Master in Torino, Italy.

I'd like to change the sector...



- Change of sector is something that many engineers wish.
- JSNP supports engineers wanting to change the sector and explore new possibilities.
- We evaluate the feasibility depending on the sector and experience



Angel Torres is a 30-years old Industrial and Robotics engineer that wanted to change the sector from the renovate energies to the GNSS. During the program he was hired by a start up working for the IOT Sector

I'd like to change the sector...



- Change of sector is something that many engineers wish.
- JSNP supports engineers wanting to change the sector and explore new possibilities.
- We evaluate the feasibility depending on the sector and experience



Albert Iglesias was an aerospace engineer of 31 years old working as a quality engineer at HP for a few years but he wanted to focus his career on the space. After JSNP he made several interviews, he had several options and he decided to join Trimble in Munich to work as a GNSS Engineer on Autonomous Cars

I already learned GNSS at University



- This is the perfect situation to deep dive into GNSS from the basis acquired during University.
- A industrial perspective following Space Standards.
- Reducing the gap between theoretical knowledge and the expected skills at a company



Rami Othman is a telecommunications engineer of 30 years old from Tunisia studying signal processing in France. During JSNP program he got hired at one start-up on space communications in Luxembourg.

I already Work on GNSS Projects



- GNSS Companies (such as Airbus) integrate their employees into this training
- GNSS Sector is huge with different activity fields
- An opportunity to boost on engineers GNSS
- Build a professional Network for future opportunities

This program is also suitable for engineers in GNSS companies. Companies proposed their engineers to follow this program in parallel to their work.

Sebastien G. Claire B. and Olivier L. Are 3 engineers working as System Engineers on Galileo and EGNOS V3 program at Airbus Defence & Space France and Germany with poor experience on GNSS.

Airbus trusted on JSNP to boost their expertise on GNSS.



I don't have time now, I'll do it later



- JSNP is designed to be followed in parallel either while Studying or Working
- None of our students dedicate 100% of the time.
- Effort will depend on your level on Python to develop the project ..
- Average Estimation time is about roughly 10 hours/week



David Diaz is an aerospace and telecommunications engineer that was doing a Master and working at Isdesat as satellite operator while doing JSNP. Today David works on Galileo Projects at Airbus Defence and Space in Munich (Germany)

I don't Have Any Knowledge in Python



- This must be a **reason** to do it,
NOT a **limitation or a constraint**
- Space sector demands programming skills in **Python**.
- **Tutors** are there to **guide you and** support you with the project implementation.
- No **need to have any knowledge on Python**, only the eagerness to learn it.



Gloria Lamela is an aerospace engineer from Cadiz, Spain. She was ending her degree and the final project using Matlab, when she joined JSNP. No Knowledge on Python at all but she successfully finished with high level. Now she works at Indra Space in Barcelone as Galileo Project Engineer

I'm not so Young !



- We had engineers of 42, 45 and 50 years old.
- If you have a background on a technology and you feel you need GNSS skills in order to grab future opportunities, this is also your right place and moment
- Do not leave your age be a constraint to boost your career



Gerson Araujo is an electronic and production engineer from Peru, he is 42 years old. After JSNP he started working as an GNSS external consultant for EUROCONTROL on SBAS projects

Does JSNP guarantee me the access to the Job Market ?



- The Answer is « **YES but** » ... JSNP is NOT Miraculous.
- **MARKET** is open and growing Worldwide
- There is a **LACK** of well prepared engineers worldwide
- **COMPANIES** have open vacancies with difficulties to hire.
- **JSNP** is the **Vehicle** to have a privileged position to boost your career and get job (if you apply for it).
- **JSNP** needs the « **PETROL** » YOUR COMMITMENT TO SUCCESSFULLY ACCOMPLISH IT



STUDENTS TALK ABOUT EDUARDO, THE DIRECTOR

Click here

SPANISH





David Diaz Rivas

Space Engineer, with degrees in Aerospace & Telecommunications Engineer.

« Eduardo is one of the most inspiring engineers I have ever met. He is capable of transmitting all his passion for the GNSS world. As a trainee, I have had the opportunity to experience his hard work and motivation. He has an incredible knowledge of GNSS, and he knows perfectly how to transmit it. Eduardo always ensures that all the basic concepts have been understood, explaining them with a different point of view if needed, which demonstrates an incredible command of them.

Furthermore, he is a model to follow not only in his professional career but also in his personal life. He has a special point of view of life and how personal and professional worlds have to be merged. Eduardo is a close person who is always full of energy and good vibes. »



Miguel Ángel Muñoz de la Torre

Flight Dynamics and Operations Engineer at GMV

« Eduardo has been my mentor in the JSNP of GNSS Academy, and I have nothing but good words about him. Since we met he has always tried to help me, not only in technical issues, in which he has demonstrated to be a real expert on GNSS, but also in my personal life. Nowadays, it is difficult to find someone who pursues his dreams like him, encouraging everyone to do the same.

Regarding the training, Eduardo shows his passion during the lessons and tries to keep you focused on the important things. His personal experiences make each session different and more interesting.

I do recommend to have a talk with him, then I am sure you will want to learn more from such a great expert. »



María Romero

GNSS Trainee at GNSS Academy

« I had the pleasure to meet Eduardo when I joined the GNSS Academy Satellite Program as a Navenger. Eduardo is a great professional and passionate about the GNSS sector. He has a charisma that allows him to transmit his knowledge in a natural and wise way. These months of training he was always aware of our evolution and quite dedicated to our learning.

Personally, he is optimistic and inspiring person, always motivating us to improve and learn new things. Furthermore, he is passionate about life, is constantly evolving, is quite energetic, dedicated and enthusiastic.

When I joined on this challenge I never thought that in addition to discovering a promising and exciting sector, I would get to know such a close, reliable, exceptional and authentic person.

He has not only been a teacher, but a mentor, a friend and a role model. I'm delighted »



Fátima López Rojas

Aerospace Engineer || Project Engineer at GECI Group || Internship GNSS Academy

« I have had the pleasure of having Eduardo as a trainer and supervisor in the GNSS Academy's JNSP program. Eduardo as a trainer is a person with an unbeatable ability to pass on his knowledge, especially to people starting from almost zero in the GNSS world. He is not only an excellent transmitter of knowledge, On a personal level, Eduardo is a persevering, patient person who knows how to listen to problems, whether they are related to the professional or academic world, offering you his help at all times and giving you the tools to solve them.

He has always been supporting and motivating me at all times, to achieve the right personal and professional/ academic balance.

Thank you Eduardo for that great patience that characterizes you, the professionalism, capacity to transmit and that great heart that you have that makes you an excellent trainer, generating without doubt success in all your students.

THANK YOU »



Oscar Rodríguez Corps

Network Service Intern at Telefónica



Eduardo is one of the most passionate persons I have worked with. I have learnt lots of concepts about GNSS sector with him. Since the first moment you see him, you realize he really knows what he's saying in each moment and it's very motivating!

However, what makes him really special is his passion. He loves what he does and you feel it. He is very kind and is always able to help you in case you don't understand some complex concepts, and he will explain you the same as many times as necessary. Eduardo has a great ability to transmit and motivate at the same time, and it is not very easy to find. I have learnt from him much more than GNSS concepts, with him you learn a lifestyle!

Thanks



Neus Revert Calabuig

GNSS Internship and training at GNSS Academy

Eduardo was my trainer as part of the JSNP Internship Program at GNSS Academy. On the professional side, he is a really good teacher because he tried to share with us his knowledge, reaffirming him as an expert in GNSS. And, on the personal side, he is a wonderful person. He knows how to get the best out of everyone, and he is always ready to help you. Thanks for his knowledge, time, empathy, help, effort, and personal and professional dedication,... which helps us to get better and to attain our goals.



Andrés Pérez de la Peña · 1st
GNSS Systems Engineer Trainee | Performance Analysis Galileo and EGNOS System | Superior Industrial Engineer & MSc Aerospace @ GNSS Academy

« I had the opportunity to share with Eduardo as a mentor 5 months in the JSNP intensive GNSS training program with a final project focused on the analysis of the EGNOS system, and the high quality of the training helped me find a job at the German research institute, Fraunhofer IIS, as a GNSS researcher.

Eduardo has a deep knowledge of the Satellite Navigation industry, having worked in the main European space navigation programs such as EGNOS and Galileo, and being one of the reference people in the GNSS space sector in Europe. He has been a continuous source of inspiration and motivation during my training at the GNSS Academy, being a very charismatic person, showing great leadership skills and a positive mindset when facing new challenges.

Above all, he has always shown me his support and trust, helping me in this short time to grow both personally and professionally, being very grateful to him since he has helped me focus my professional career in the GNSS sector and the space industry ».



Àngel Torres Ruiz · 1st
Project Manager & Embedded Systems Engineer en Abervian Energy Solutions | Energy Engineering E...

Few months ago I made one of the most important decisions in my recent #career . After attending a webinar from Eduardo TAPIAS about GNSS I decided to enroll at the second edition of the Join Satellite Navigation Program.

During the program I have learnt and work with the cutting-edge concepts about GNSS industry, developed a tool to characterize EGNOS performances over a service volume and actively participated in masterclasses and talks with a lot of relevant professionals in GNSS industry.

But the program was not only about GNSS technical topics. I have been able to improve my Python programming skills, Linux knowledge and English, as well. And the most important, I am very very proud to be now part of the Navengers community, great people willing to grow till the sky!



Teresa Aparicio
Navigation Engineer at GMV

I first met Eduardo while I still was in doubt whether GNSS would become my professional career path. I was lucky enough to join the GNSS training he provides. Not only was I able to learn so many concepts about GNSS, but was also taught in an unconventional teaching way. He both ensures everything is understood correctly and instils in others his passion on GNSS, which also extends to anything he does. That is why I would consider Eduardo one of the best teachers I have ever had. His sympathy, enthusiasm and expertise are the qualities I would highlight, but he certainly showed to have way more in the short time I got to meet him. Definitely, a person worth getting to know.



Sandra Castro Arjona
Aerospace Engineer - A400M MRO Retrofit
System Engineer

« Eduardo was my mentor during my 5-month internship in the GNSS Academy. He is an inspiring and motivating person and I only have words of thanks to him.

Eduardo works with such powerful energy that makes everyone be focused on the topic and do their best. It was a pleasure to have the opportunity of learning from you. I want to keep enjoying with your professional achievements and I hope we can work together again. I wish you all the best in your career! »



Luis Bennasar Cuartero
GNSS Trainee at GNSS Academy

As a University Student finishing my Degree, I was lucky enough to bump into Eduardo Tapias, for 6 months of intensive training. The amount of passion he evokes into every single matter is outstanding.

I was accustomed to a very different learning dynamic, and it still took very little time for me to realise the potential of knowledge and methods I was learning so in depth.

It is fair to say, all the new aspirations I now have as a future engineer are all thanks to him, from work environment to personal lifestyle.

All I can say is that; it has been an absolute pleasure!



Miguel Lázaro Dapena
R&D Engineer

Eduardo Tapias was my teacher for 5 months during my GNSS internship program. Had been a pleasure to learn with him, passionate and full of energy, for me, the most important things.

GNSS-EGNOS lover, a book to be read. Before doing his program I did not know very much about GNSS, now, I feel really confortable talking about the topic. Great job Eduardo. If he can help you, he will not hesitate to do it.

Wish you the best in your career Eduardo.



Nebnoma Alexandre KABORE

CNS / ATM Expert | ICAO USOAP CMA Expert in ANS, LEG and ORG | MSc. Telecom Eng.

« Eduardo used to be my Trainer and Mentor in JSNP of GNSS Academy where he shared his passion and enthusiasm for GNSS with me and other trainees.

With his background as a GNSS Expert with hands-on experience, it was easy for him to explain and transmit knowledge using real-life examples to illustrate all concepts.

I am lucky to meet Eduardo and have him as a trainer and mentor during this internship. His passion, dedication, commitment, and hardworking inspire me.

Thank you, Eduardo! »



Miguel Ortiz Rejon

M. Sc. in Astronautics and Space Engineering - Cranfield University || GNSS Trainee at GNSS Academy || FutureLeaders - ThePowerMBA

« I have been Eduardo's trainee during the JSNP internship program at the GNSS Academy. During the training period, I have had the privilege of learning from an expert. Because I consider Eduardo an expert, but not only in technical aspects, but also in personal relationships, taking care of people who had some difficulty in following the course properly, an expert in transmitting passion and interest in his work, an expert in promoting teamwork between your team members, and many other things that are undoubtedly highly regarded within the space industry and that I could be listing for eternity. For all this, I recommend Eduardo as a technician, teacher, friend, boss or mentor.

I wish you the best Eduardo. »





Gloria Lamela

GNSS Trainee at GNSS Academy | Aerospace Engineering Student

« I have been studying all my life until now, but nobody had transmitted and taught me before with the enthusiasm that Eduardo has. Not only his passion for the subject, but also how he wants you to get involved and learn everything he is explaining.

As a student of his, his lessons were completely different from what I was used to and I can say with certainty that they were anything but boring. My colleagues and I were able to participate and discuss, always being dynamics and knowledge the key to their program.

When I met him, I realized that being a part of his program was a risk worth taking. I can't help but say that my energy and motivation in engineering have grown even more since I crossed him.

I am very proud to have met Eduardo and more so when I did. I cannot thank him enough for all the growth that I have developed with him and how this network of which we are part is taking us to the best of ourselves »



Daniel Sendino

Mobility | Batteries | GNSS • Bachelor's Degree in Mining Engineering | ETSIME | UPM

« I saw Eduardo for the first time in a webinar where his vibrating energy and passion has been amazing me ever since. He is the kind of person I would like to have as a peer, partner, friend or whatever relation I can imagine as the level of confidence he delivers reflects on others. Speaking as one of his fellow trainees, this level of confidence enabled me to expand my horizons professionally in the GNSS field, but also to acquire and better relevant soft skills. Having the opportunity to observe and learn from his attitude has been the most valuable thing I gained from Eduardo, as he has truly mastered how to accomplish a balanced and exciting life personally and professionally. »





Adrián González Figuerola

Consulting | Business Management | Aerospace
Engineer | Data Analytics | GNSS Engineer

« *The first time I met Eduardo was when I had the interview to join the GNSS Academy. Eduardo gave me the impression of being enthusiastic, perseverant and an outstanding professional. It was a pleasure to learn from him taking into account he is an expert of the GNSS world. The way he taught his experience and knowledge was bidirectional and really interactive. I do recommend to join GNSS Academy, there is nobody better for learning from. »*



María Esther Aranda Romasanta
Aeronautical Engineer

« *I came across Eduardo by chance a year ago. I had heard about his academy and wanted to be trained in GNSS. What I didn't imagine was how much I would learn from him.*

Eduardo is a special person. He has the ability to fight untiringly for his ambitions and to encourage others to do so. He manages to transmit his enthusiasm and motivate you until he brings out all the good in you. In 5 minutes talking to him you realize that not only is he passionate about his profession, but he is also tremendously generous and offers his time and help to help you achieve your goals.

As a teacher, he manages to focus your attention on the important things, and his extensive knowledge makes every class a fun, enriching and exciting experience. I have nothing but words of thanks for all that he has given me over the last months » .



INDUSTRY



T. Karpis



Ignacio Alcantarilla · 1st

EGNOS Project Officer at the European Commission



Ignacio Fernández Hernández

European Commission



« After more than 20 years knowing Eduardo in the GNSS field, it still surprises me his passion and willingness to undertake new challenges.

Eduardo is able to re-invent himself after excelling in one field, be it at a large company, a newly created company or its own company !!!.

He reminds me of the "If" poem by Rudyard Kipling: « ...If you can make one heap of all your winnings; and risk it on one turn of pitch-and-toss, and lose, and start again at your beginnings; and never breathe a word about your loss...» but in the case of Eduardo without having lost a thing.

Eduardo knows what he wants and is authentic and that, we don't see everyday. »



« I have known Eduardo for more than 20 years. He is very knowledgeable in GNSS, particularly in GNSS performance analysis. He has a lot of hands-on experience in both EGNOS and Galileo, where we coincided years ago.

He is also very entrepreneurial. He started up a venture in GNSS (in his case, in the field of training and education), and is deservedly succeeding. He also cares a lot for the people working around him and for his students. But above all, Eduardo stands out for his unique enthusiasm, energy and commitment in everything he does!

I highly recommend Eduardo. I'm glad to have participated in the last years in the GNSS Academy he founded and hope to continue doing so. »





Didier Flament
EGNOS Program Manager at
ESA



« Eduardo has always demonstrated high levels of energy, competence, creativity and passion. Without forgetting the human qualities and high sense of team spirit, he showed during these years. His experience and know-how accumulated over all these years on GNSS System Engineering in general and on EGNOS performance and algorithm design are extremely valuable and his departure is de facto an issue for EGNOS V3. »



CARLOS LOPEZ DE
ECHAZARRETA
EGNOS System Engineer at
European Space Agency



« Eduardo is one of those rare talented professionals who has the will to arrive to a win-win situation between customer/client. He has always had an active attitude, proposing new requirements and challenging the customer's ones so to understand their underneath need. I consider this as a very valuable attitude that helps to define a good-quality end product. He has a very strong background on GNSS, both for algorithm and system level. I look forward to meeting him again in a future project »





jean-christophe LEVY
Cryptosat Project Manager
chez Thales Alenia Space

ThalesAlenia Space
A Thales / Finmeccanica Company

« Eduardo is a passionate person. As soon as he gets involved in something, he puts all his energy, competence, creativity and passion into it. He is an extremely focused person who pays great attention to the meaning of his job. His past experience speaks for him; he has met several challenges with great success such as leaving Spain for France, quitting GMV for Thales, discarding the comfort of a big company for the challenge of a start-up.

Each time he has proved to be both technically and humanely extremely valuable. I do strongly wish that we will someday have the opportunity to work again together.



Franck HADDAD
EGNOS Project Design
Authority chez Thales Alenia Space

ThalesAlenia Space
A Thales / Finmeccanica Company

Eduardo is a great talent in GNSS world with its strong contribution to European major projects in the domain: Galileo and EGNOS. GNSS academy will be a real opportunity for engineers to enter GNSS world thanks to a coach like you. Companies will take clear benefits from such new trained talents.



xavier berenguer
EGNOS System Engineer
chez THALES ALENIA SPACE

« Eduardo became a technical reference in the GNSS domain. Beyond his good technical skills in applied mathematics, he also has strong analysis capacity and pragmatism allowing to quickly find simple solutions to the daily problematics. His sense of relationships together with a true interest to understand and satisfy the clients allowing him to gain the confidence of the Space Agency (ESA), and thus to actively contribute to the program success. »



Philippe Lemeu
Directeur des opérations/
Director of operations -

« As Galileo consortium manager and EGNOS program director in Thales Alenia Space, I had the opportunity during many years to work with Eduardo. Eduardo has a very strong knowledge in Navigation by satellite domain as well as a strong network with all major navigation actors like ESA, ESSP, GSA, industry He is engaged, accountable and able to think out of the box. His soft skills are outstanding with a good communication skill and a real active listening skill. He is also able to explain hard concepts using simple words. He is for me a good example of what all the engineers should be and it was a real pleasure to work with him. »



Eric Robert

Airbus Defense and Space
Technical Office



Franck Bourgeolet

Bid Manager chez Airbus
Defence and Space



« Eduardo worked with me for many years on the European GNSS projects Galileo and EGNOS. Beyond excellent technical skills and GNSS knowledge, his transnational culture and his natural ability to cooperate and exchange with teams have allowed him to become a pillar of the projects taking responsibilities and leadership when necessary. »



« Eduardo Tapias is a genuine GNSS expert. I had the chance to work with Eduardo when I was the Galileo GMS (Galileo Mission Segment) Engineering Manager from 2013 to 2016. Eduardo was in charge of work packages related to Galileo Performance assessment.

Eduardo is a high GNSS profile. In addition to these hard skills, he is kind, open-minded and keen to share his knowledge. It was a pleasure to work with him. »



Eric Senant

Principal GNSS Systems
Engineer, Senior
Engineering Manager, RF,
GNSS and Signal
Processing Expert

Z O
O X

« I have worked with Eduardo over the past 10 years within 3 different companies, Thales Alenia Space, Airbus Defence & Space working on EGNOS and Galileo programs in Toulouse (France) and now at Swift Navigation in San Francisco (California) for autonomous vehicles applications.

Among his qualities, and beyond his sympathy, I would highlight:

- His indisputable expertise in GNSS performance and integrity, in particular on EGNOS where he was distinguished by an Award by ESA
- His overall system vision, from the understanding of the applicable specifications and standards to the design and implementation
- His knowledge of the European space and GNSS industries as an insider, and their major stakeholders: everyone knows Eduardo
- His ability to quickly and easily understand complex concepts and extract the essentials
- His extraordinary ability to communicate naturally and with the same enthusiasm with anyone, regardless of their level of responsibility
- His passion for transmitting, sharing, convincing, bringing together, organizing ... definitely a natural leader.

This is why I was not surprised by the creation of the GNSS Academy as the logical continuation of his career, and I encourage those student engineers to develop their career at the thriving Space Sector of GNSS through to Eduardo's training programs and his connections with companies in Europe and out of Europe »



Myriam FOUCRAS

Ingénieur de Recherche
(traitement du signal GNSS,
radar et optique)



« Eduardo is a recognized technical expert in the field and has a big network, so it is a chance to be able to benefit from his knowledge and share his enthusiasm and passion. For a young graduate, training by an expert in the field can only be a great chance. The GNSS sector is very powerful, in France, Europe, the United States, all over the world, so it's clearly a sector where there are and where there will be a lot of opportunities. »

ETHAN FAYAZ BACARD

Software Engineer -
Specializing in Python and
C/C++



« Eduardo was my boss at ABBIA as the technical director of the company. I appreciated so much his work as a manager. Eduardo helped me to do things that I thought they were technically Impossible. All team and myself really learned a lot thanks to Eduardo's training to become experts on GNSS Sector. Eduardo always pushed the team to deliver On time a On Quality Software Product to our main customers »



Zineb El fathi

Test and Validation Engineer
at ABBIA GNSS Technologies



« Eduardo is one of the best people I have ever worked with. He have great skills and profound expertise of GNSS systems. I first met Eduardo in 2017, he was my internship supervisor. His ability to communicate effectively his knowledge helped me to succeed in my internship at ABBIA GNSS Technologies. He had the vision to see the benefits and the passion to turn that into measurable results. A year after, I joined the company and Eduardo became my director. He showed a high level of leadership and was a valuable contributor to the PEACE project. He is a reliable person and I will always hold him in the highest esteem »



CONCLUDING



T. Karpis

JSNP is for Engineers wanting to:



- ★ **BOOST** your professional career with an outstanding CV
- ★ **GROW** as an engineer and get ready to add value in company
- ★ **WORK** on ESA International Space Programs
- ★ **DIVE DEEP** in Drones or Autonomous Cars Positioning **Technology**
- ★ **WORK** on international and Multicultural environments.
- ★ **HAVE** the possibility to **LIVE abroad** and speak different languages ...
- ★ **CONTRIBUTE** to make the Earth a better Place through your footprint
- ★ **MAKE part** of Our Lifetime **NAVengers** Community ...

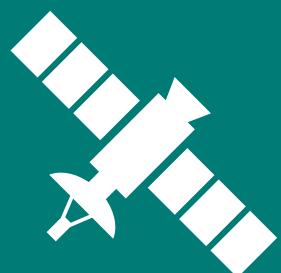


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DO IT **ALONE**



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Further Questions ?

Asks Us Write Us Call Us

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