### Development of Innovative Satellite Navigation Applications

#### Position for:

Trainee (1 position)

As the science and knowledge service of the Commission, the mission of Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: [http://www.jrc.ec.europa.eu](http://www.jrc.ec.europa.eu)

**Short description of activity:**

Within the JRC, the Technology Innovation in Security Unit's mission is to increase European competitiveness and resilience by research in technologies, standardization and harmonization to enhance the protection of European networked infrastructures, to prevent hazards in industrial installations and also to maximize the benefits of space for society and economy.

The successful candidate will join a team that is supporting the implementation, adoption and market uptake of the EU satellite navigation programmes Galileo and EGNOS. Among other activities, the team undertakes numerous technical studies and also facilitates the laboratory testing of innovative navigation platforms, developed in the frame of R&D actions under the H2020 programme.

The focus of the project to be developed is the development of novel and synergistic applications of satellite navigation (i.e., meteorology, remote sensing, monitoring of large infrastructures, ...), with a particular emphasis on those based on Galileo. The trainee will be asked to support the experimental validation of the techniques, participating in laboratory testing and data collection campaigns. The applicant will be asked to exploit GNSS signals using low costs devices (e.g., evaluation kits of mass-market receivers or smartphones), which will require
the ability to get acquainted with advanced navigation algorithms.

By the end of the traineeship, the trainee will have obtained a good understanding of advanced satellite navigation techniques and algorithms, and data processing, with the opportunity to work in a state-of-the-art laboratory in a highly motivated and active scientific team.

Qualifications:

Essential:

The candidate should have or should be close to have a:

- University degree in the field of electrical, computer Science or Geosciences
- Background in computer science with a good knowledge of writing code in R, Python or Matlab.
- Experience in signal processing, telecommunications or remote sensing
- Good analytical skills
- Good knowledge of spoken and written English (level B2)

Advantage:

- Knowledge of remote sensing concepts, data analysis skills
- Experience in processing and analysis of GNSS signals and observations.
- Ability to develop and write scripts/software.

For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:


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<tr>
<th>Directorate / Unit</th>
<th>E. Space, Security and Migration E.2</th>
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<tbody>
<tr>
<td>Indicative duration</td>
<td>5 months</td>
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<tr>
<td>Preferred starting date</td>
<td>1st October 2020</td>
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<tr>
<td>JRC Site</td>
<td>Ispra</td>
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<tr>
<td>Country</td>
<td>Italy</td>
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For any technical problems with your application, please contact:

HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu