



2019-IPR-E-000-013234

**Data mining for reducing the risk of
technological incidents caused by natural
hazards**

Position for:

Trainee

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>

Short description of activity:

The TechRisk sector within the Technology Innovation in Security unit studies the impacts of natural hazards on hazardous industries and critical infrastructures to enhance the capacity of the EU and its international partners to manage the risks of technological accidents triggered by natural hazards (so-called Natech risk) by developing novel methodologies, tools and services for the identification, assessment and visualization of Natech risks, and through capacity building activities in the EU and beyond.

The successful candidate will, in close cooperation with the staff of the TechRisk sector, contribute to the collection and management of hazardous industry and incident data, which will be utilized to improve the Natech risk assessment capabilities of the EU's Rapid Natech Risk Assessment and Mapping system (RAPID-N) and its Natech incident database (eNATECH). He/she will help to analyze and aggregate industry- and critical infrastructure-related data (including from non-civilian assets) originating from various data sources by using data mining and extraction methods, including GIS analyses and geocoding. The successful candidate will also help to perform data-quality checks using

	<p>statistical methods and in-house analysis tools and make necessary adjustments to correct and improve the assembled data set.</p> <p><u>Qualifications:</u></p> <p><u>Essential:</u></p> <ul style="list-style-type: none"> • The candidate should have or should be close to attain a university degree in physics, engineering, or city planning. • Good analytical skills • Good knowledge of spoken and written English (Level B2) <p><u>Advantage:</u></p> <ul style="list-style-type: none"> • Familiarity with GIS, database systems and statistical computing • Familiarity with industrial facilities and critical-infrastructure systems • Programming experience (PHP, Python) <p><u>For general eligibility requirements, please read the rules governing the traineeship scheme of the JRC:</u></p> <p>https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/jrc-trainees</p>
Directorate Unit	E – "Space, Security and Migration" JRC.E.2
Duration	5 months
Preferred starting date	As soon as possible
JRC Site	Ispra
Country	Italy
<u>JRC contact details</u>	<p>For any technical problems with your application, please contact:</p> <p>HR-AMC8-RECRUITMENT-TOOLS-SUPPORT@ec.europa.eu</p>