| SENIOR GEOSPATIAL SCIENTIST | |
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| **Company** | **METRICSAT** |
| **Work Location** | **Luxembourg** |
| **Employment Type** | **CDI** |

## About METRICSAT

METRICSAT is a Luxembourg-based company developing a product, an environmental intelligence platform for financial institutions. The product uses satellite and other environmental data to assess risks at asset and portfolio level.

We are developing an economic loss module that connects environmental hazards, asset vulnerability and monetary consequences. Geospatial asset characterization and vulnerability modelling are central to this work.

## The role

We are seeking a Senior Geospatial Scientist with exceptional skills in geospatial analysis and application development to lead asset vulnerability modelling.

You will use Earth observation, GIS and complementary datasets to identify asset characteristics that influence damage susceptibility. You will develop validated methods and scalable geospatial applications that connect these characteristics to the products's existing hazard analytics.

You will collaborate with our Senior Physical Risk Scientist, Senior Economic Loss Modeller and Software Developers.

## Responsibilities

- Derive vulnerability relevant indicators from satellite imagery, terrain models, building footprints, land cover and other spatial datasets.
- Develop and calibrate hazard-specific vulnerability models in collaboration with physical risk and economic loss specialists.
- Build geospatial applications and automated workflows for asset assessment, spatial matching and vulnerability analysis.
- Validate inferred asset characteristics and vulnerability outputs against independent observations or reference datasets.
- Quantify uncertainty and identify gaps in geographical, hazard and asset coverage.
- Work with developers to integrate reproducible geospatial methods into the product.
- Documentation

## Essential Experience and Skills

- Demonstrated experience delivering advanced geospatial applications or analytical systems.
- Advanced Python skills and practical experience with tools such as GDAL, Rasterio, GeoPandas, Shapely and spatial databases such as PostGIS.
- Experience processing large geospatial datasets through automated, reproducible workflows.
- A relevant qualification in geospatial science, remote sensing, geography, engineering, environmental science or related discipline, or equivalent professional experience.

## Desirable Experience

- Developing vulnerability or damage functions for environmental hazards.

## Benefits

- Competitive salary
- An independent role with a supportive and diverse work environment
- Possibility of stock option.
- Work-life balance

## How to Apply

Please send your CV and a short explanation of your relevant experience to contact@metricsat.com . Include an example of a geospatial application or vulnerability modelling project, describing your contribution, the datasets used and how the results were validated. Public portfolios, publications or code samples are welcome.

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