

# Humanitarian Data Scientist

(To be based in the Centre for Humanitarian  
Data in The Hague, Netherlands)



This post is supported by the German Federal Foreign Office Humanitarian Assistance

<b>Job title:</b>	Data Scientist
<b>Hours:</b>	40hrs
<b>Location:</b>	MapAction's Office at the Centre for Humanitarian Data in The Hague, Netherlands
<b>Salary:</b>	€45,000 - €60,000
<b>Contract:</b>	This is a 12-month fixed term contract
<b>Responsible to:</b>	Technical Director, MapAction
<b>Works closely with:</b>	Head of Predictive Analytics Team at the Centre for Humanitarian Data

## MapAction

MapAction is a leading humanitarian mapping charity, registered in the UK. It deploys skilled volunteers to international humanitarian emergencies to map priority needs. This mapped information helps responders target their response effectively, contributing to saving lives and minimising suffering.

Since MapAction's beginnings in 2003, our team of skilled and dedicated volunteers has helped coordinate the response to over 90 different humanitarian crises including earthquakes, tsunamis, hurricanes, floods and conflict-related crises, and by supporting partners with building their own capacity at regional and national levels.

Our vision is for people to be more resilient to emergencies and for all those involved to be more effective, using technological advances in data management and geospatial analysis.

## Centre for Humanitarian Data

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) has a Centre for Humanitarian Data in The Hague, the Netherlands which is focused on increasing the use and impact of data in the humanitarian sector. The vision is to create a future where all people involved in a humanitarian emergency have access to the data they need, when and how they need it, to make responsible and informed decisions.

One area of emerging interest in the humanitarian sector is predictive analytics: asking "what will happen" in a particular humanitarian context and using machine learning and the application of statistical modelling to arrive at an answer. The Centre initiated its work on Predictive Analytics through the 2018 and 2019 Data Fellows Programme, and has continued to invest in this area through sustained research into the development of models related to different aspects of humanitarian response. In September 2019 the Centre created a new workstream for Predictive Analytics that will focus on three areas: modelling, peer review, and community building.

**Purpose:** The role will enable the development of MapAction's data science work and will act as a bridge to the Centre for Humanitarian Data.

The **objectives** of this post holder, based in The Hague but working for MapAction, are to: -

- Provide MapAction with data-based insights into humanitarian emergencies by learning from and integrating MapAction data flows with the Centre.
- Inform the Centre's data gathering, processing and analysis practices to meet the needs of early phase humanitarian response, drawing upon MapAction's extensive field experience.
- Seek new opportunities to add value to the data management and humanitarian response process.
- Provide surge Data Science capacity to the Centre when it is required.
- Develop the proposition of this role once familiarity with the workflow of the Centre's predictive analytics work is better understood

**Line management:** Technical Director MapAction

**Task management:** Head of Predictive Analytics team, Centre for Humanitarian Data

It is envisaged that meetings will take place periodically to ensure coordination of the activities of the postholder for MapAction and for the Centre.

## Profile

### Required

- Exceptional communication skills, in order to explain your work to people who do not understand the mechanics behind data analysis
- Years <2-5> experience in data analytics and statistical modelling (especially when applied to a spatial environment)
- Intermediate to advanced programming skills in Python (arcpy, gdal, geopandas, pandas, scikit-learn) and/or R
- Experience in database interrogation and analysis tools, such as Hadoop, SQL
- Data schema modelling, database design and management expertise and writing SQL queries within RDBMS
- Strong data editing, analysis and processing skills are required
- Experience in understanding partner needs and requirements, in particular working with non technical clients
- Experience in data visualisation
- Self-motivated and organised; adaptable, resilient and solution-orientated
- Good team player
- Eligibility to work in the EU.
- Committed to MapAction values and a willingness to work in partnership

### Desirable

- Proficiency in GIS and software development, or a related subject or equivalent professional experience
- Understanding of cloud concepts and SaaS
- Humanitarian knowledge/experience
- Languages (particularly French and Spanish)
- GPS expertise
- Experience of working in a project management context
- Graphic design
- Cartography
- Teaching, training or capacity building experience
- Experience in open source software
- Practical experience with one or more of these: GeoServer, PostgreSQL / PostGIS, OpenLayers, Leaflet, MapBox, QGIS Server, QGIS, GeoExt and/or ESRI ArcGIS Suite, MapServer, MapInfo, Google Earth
- Monitoring and evaluation experience

### **This role is a 12 month fixed term contract.**

- Must have the right to live and work in the Netherlands (MapAction is unable to consider candidates who do not already hold appropriate permissions).
- The job holder will be required to work from the offices in the Hague with regular travel to head office in Chinnor, UK and attendance to MapAction team training days through the year.
- Flexibility and willingness to work outside office hours including evening and weekends occasionally. In particular, training events will be scheduled for a weekend, once a month and this post may need to attend these events in the UK.

## **Equal Opportunities Policy**

MapAction is an Equal Opportunities employer. All employees have a personal responsibility to promote and support measures designed to create a working environment which is free from harassment or discrimination on the grounds of gender, marital status, family status, age, race, religion, disability, sexual orientation, membership of the Traveller community or HIV & AIDS status.

### **How to apply**

Please provide a covering letter and CV that sets out how you meet the required competencies for the role. All applications to be sent to [recruiting@mapaction.org](mailto:recruiting@mapaction.org).

Deadline for applications is Thursday 28<sup>th</sup> November 2019. Early application is encouraged as we will review applications throughout the advertising period and reserve the right to close the advert early.