# Job-offer for a Junior Scientist

> Our research doesn't stop with writing a paper

## Your job

You are a biomathematician, data scientist, environmental engineer, epidemiologist or health geographer with a passion for mathematical or spatial modeling of diseases or disease vector populations. In addition to understanding problems, you are also interested in providing solutions that help bridge the gap between research and decision making.

As a junior researcher, you will join an international R&D team in an innovative Belgian SME based in Zoersel (Antwerpen). You will contribute to the company's contract research with the private sector and competitive public funding research grants. You report to the head of the R&D department.

## About us

Avia-GIS NV (www.avia-gis.com) is a Belgian SME founded in 2001 that specializes in risk mapping as a basis for the development of tailored spatial decision support systems (SDSS) and software packages applied to public-, animal- and crop health in general and integrated disease and pest management (IPM) in particular. To achieve this, we combine optimised spatial field sampling strategies with mathematical and spatio-temporal modelling approaches using predictive co-variates obtained from (but not limited to) satellite imagery, drones, local wireless sensor networks and weather forecasts. Ongoing contracted research activities include:

- Mapping and forecasting dengue epidemics globally to support the planning of large scale-clinical trials
- Developing tick population dynamics models to assess the feasibility of deploying advanced control methods against invasive ticks in Africa
- Developing a mosquito weather forecast to support the marketing and just in time delivery of mosquito repellents in Spain and Portugal
- Use our mosquito population dynamics model to test how new molecules may contribute to reduce the risk of spread of heartworm in dogs in USA
- Use long time series of vector-borne disease data in pets to support the marketing of preventive and curative drugs in dogs in Germany and surrounding countries
- Assess how monitoring viral circulation in mosquitoes may replace the use of (often unavailable) public health data to monitor the spread of dengue epidemics in the Caribbean

## Your duties and responsibilities

As part of the R&D team you will:

- Support acquired R&D projects
- Contribute to new project applications
- Contribute to building international network
- Support interns and students
- Provide scientific support for existing software packages

## Your Skills & Experience

### Minimum Requirements

MSc in biomathematics, data science, environmental engineering, epidemiology, health geography or related scientific discipline

Having an open mind and a strong desire to learn
Being a team player
Being able to work independently
Willing to travel

### Core Competency Requirements

Strong knowledge of GIS
Experience with QGIS
Experience with 'R'
Proficient in English

### Preferred Competency Requirements

Experience in mathematical modelling
Experience in spatial modelling
Experience in Python, C# or F#
Experience with SQL or No-SQL
Second professional language

## We offer

A full-time position in an innovative growing company
A pleasant working environment in an open office shared with a dynamic international team
An attractive salary and benefits
A health insurance plan
Car or other mobility package that fits your needs
Personalised capacity building plan
Growth trajectory within the company

## How to apply for this role

To apply please send your CV and a motivation letter to:

Guy HENDRICKX, CEO
ghendrickx@avia-gis.com

Cedric MARSBOOM, CTO
cmarsboom@avia-gis.com

Looking forward to your application!