

Combined remote sensing for wildlife management

Code: 20/35

Company: Omanos Analytics

Location: Glasgow, UK

Company Description:

Omanos Analytics is a space technology start-up delivering bespoke space data knowledge to support the narratives of communities across the globe, presenting data in tailored, accessible formats in order to reveal impact on local environments and communities. Selected by the UK Government's Satellite Applications Catapult for Business Sprint support in 2018, the company has provided support to communities from Guinea to Cambodia, working with a range of international NGOs on issues including forced displacement, destruction of livelihoods, and environmental degradation. Omanos' work has been used in a variety of contexts including to successfully ensure corporate accountability before the World Bank's private sector arbitration mechanism.

Project Description:

Assist with a feasibility project to scope use of combined remote sensing methodologies and machine learning algorithms for wildlife management applications. The feasibility study will develop a method for monitoring deer populations in Scotland to replace the current helicopter and ground-based survey methodologies, reducing the cost and environmental impact. The intern will:

- Work towards a feasibility project to investigate the use of satellite and UAV remote sensing data for wildlife management applications.
- Aid investigations into using machine learning algorithms trained on high resolution remote sensing imagery, including data labelling and algorithm research.

* Can be adapted to remote working if required by COVID-19 restrictions.

Applicant Specification:

Student (preferably postgraduate) of engineering, maths, physics, computer science or equivalent

Minimum Requirements:

- Experience and knowledge of machine learning applications, machine learning algorithms and the creation of training data.
- Excellent written and verbal communication skills.

- Enthusiasm for using satellite and UAV data to solve new problems and bringing this data to a wider audience.

Preferred Additional Requirements:

- Understanding of Earth observation and remote-sensing data analysis
- Experience with machine learning libraries in Python.
- Experience or familiarity with processing geotiff images or multispectral imaging data.

Further details:

8 weeks minimum fixed term contract to be agreed with successful candidate but nominally with a start date around 15 July 2020 to attend the SPIN Induction day hosted online by the Satellite Applications Catapult, and completion around September for the Showcase. Salary is £1,333 per calendar month gross.

Closing Date for Applications: 5pm Thursday 18 June

Applications should be made through the online form attaching a CV, before the closing date. Please note that elements of the form left incomplete will be deemed to render the application ineligible. They will be checked for eligibility and forwarded to the employer.