

Assessment of the Suitability of Habitat Classification Systems for Classification using Remotely Sensed Datasets

Code: 20/17

Company: 2Excel Geo

Location: Sywell Aerodrome, Wellingborough Road, Sywell, Northamptonshire, NN6 0BN

Company Description:

2Excel Geo operate the only commercial hyperspectral airborne capability in the UK. Our airborne platform is equipped with scientific-grade hyperspectral and photogrammetric cameras able to collect imagery over large areas at high spatial and spectral resolution. In addition, the team also integrate remotely sensed data with machine learning and computer vision techniques to solve difficult environmental problems. The team also conducts field survey and ground validation work using a range of techniques including field spectroscopy. Previous work has covered a range of disciplines including agriculture, forestry and landscape management.

Project Description:

The SPIN project will be focused on assessing the suitability of three common habitat classification systems (NVC, Phase1 and UKHab) for the classification of habitat types from remotely sensed datasets. In particular the project will be focused on classifications performed using airborne hyperspectral imagery and multispectral datasets acquired via Sentinel-2 satellites. The project will be conducted in the context of the Nidderdale Area of Outstanding Natural Beauty and supported by Harrogate Borough Council.

Applicant Specification:

Currently studying

- Ecology, Conservation, Environmental Science, Biology, Geography, Natural Sciences (with an interest in remote sensing)
- OR**
- Mathematics, Physics, Computer Science (with an interest in environmental applications)

Minimum Requirements:

- Understanding of Remote Sensing Fundamentals
- Understanding/Experience of working with Geospatial Data

Preferred Additional Requirements:

- Experience of using remote sensing or GIS software (e.g. ENVI, ERDAS Imagine, ArcGIS, QGIS)
- Basic programming experience (Python, R or IDL)

Further details:

8 weeks fixed term contract to be agreed with successful candidate but nominally with a start date around 15 June 2020 to attend the SPIN Induction day at the Satellite Applications Catapult, and completion before Mid-September for the Showcase the following week. Salary is £1,500 per calendar month gross.

Closing Date for Applications: 5pm Tuesday 14 April

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.