

Project 18/40: Populating an “AgroMet DataCube” for crop pest modelling in sub-Saharan Africa

Company: Assimila Limited

Supervisor: Jon Styles

Location: Reading, UK

Company Description: Assimila is a specialist Earth observation applications development and consultancy company. We work with clients to identify how their needs for environmental information can be met using Earth Observation (EO) data. We work with Universities in the UK and abroad to incorporate the latest research into our work. We take a physical approach to EO data interpretation, using radiative transfer modelling and data assimilation techniques to derive bio-physical parameters describing the land surface and its vegetation cover. Our main application areas are agricultural monitoring and crop pests and diseases.

Project Description: Assimila is working with CAB International and King's College London to develop a system for modelling pest risk to crops in Sub-Saharan Africa. The project involves collating and processing EO data and combining it with meteorological information to drive models that predict the growth and spread of plant pests and diseases. Assimila is developing an operational system which will be launched in October 2018 in Zambia, Kenya and Ghana. The system includes an Agro-meteorological Data Cube (AMDC) which stores all the information required by the models. The purpose of this internship is to gather, process and format EO data needed to populate a demonstration version of the AMDC to be used for both marketing and system performance testing.

Applicant Specification: We are looking for a numerate candidate from a physics, geography, computer or environmental science background who has an understanding of the applications, processing and sources of Earth observation data.

Minimum Requirements: Understanding of and practical experience of handling Earth observation data, some coding experience, GIS

Preferred Additional Requirements: Python coding experience, use of QGIS

Further details:

8 weeks minimum fixed term contract to be agreed with successful candidate but nominally with a start date around 18 June 2018, when the SPIN Induction Day will be held at the Satellite Applications Catapult, Harwell. Salary is £1,500 per calendar month.



Closing Date for Applications: 17:00, Friday 8 June, 2018

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.

Apply here: <https://sa.catapult.org.uk/people/space-placements-industry-spin/>