

Project 18.27 - Geocento Cloud Masking of Optical Imagery

Company: Geocento

Supervisor: Graham Glanfield

Location: Harwell

Company Description: Geocento is a small and friendly, but ambitious company which is aiming to disrupt the space imaging business by aggregating and consolidating imagery of our planet from all available sources, and then selling imagery and derived business intelligence to multiple markets around the world, including agriculture, insurance, security and maritime operations. We are currently in the process of scaling up the ability of our business to respond to the range of business opportunities that we are encountering, and this proposed project will play an important role in contributing to this.

Project Description: A major challenge with regard to the use of optical imagery lies in being able to efficiently take into account cloud cover. Optical imagery of our planet is often obscured by cloud but existing processes for filtering out cloud-covered images of a location are very crude and can lead to a frustrating experience for users. While image suppliers often provide indications of cloud cover in relation to their images, they do not provide this for customer areas of interest which may cover just part of an image, nor do potential customers have a very good understanding of the likelihood of cloud cover for new image tasking or long term monitoring of a location. The project will involve the successful applicant in using a variety of cloud cover sources combined with some processing techniques to prototype and test a cloud evaluation scheme for users that will make the selection of optical imagery much more efficient, improving take-up and sales for the company.

Applicant Specification: We are looking for a numerate and analytical intern who is happy to implement and test algorithms and source datasets with the aim of creating a workable prototype service to address the above problem. The intern should be capable of working semi-independently, albeit with support (and interest) from the Geocento team. During the internship the intern will have the opportunity to develop knowledge on other aspects of the business and to be involved in broader discussions and ideas.

Minimum Requirements: the applicant should have obtained, or be currently studying for, a degree in Physics, Meteorology, Computer Science, Geography, GIS, Environmental/Earth Sciences or relevant discipline. Key is demonstrated ability and interest in algorithm development with an ability to carry out developments with some degree of initiative and independence.

Preferred Additional Requirements: Earth observation, image processing



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: 12:00, Tuesday 5 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/>