

### Listen to the ocean

## **Software Development and Image Processing Support Post**

Salary: £17,339 p.a.

5 x 1 Year Placements starting July 2015

Closing Date: 1200hrs on Friday 17th April 2015



PML has exciting opportunities for five individuals to work on Software Development & Image Processing within its Earth Observation Group. The Earth Observation Group, comprising of 30 researchers, boasts extensive experience in processing data and imagery from aircraft and a variety of satellite ocean colour and temperature instruments for marine scientist both in the UK and Internationally. PML is an independent and impartial research centre, and is a delivery partner of the National Environment Research Council (NERC) National Capability research.

### **Experience & Eligibility:**

You will:

- Currently be undertaking an undergraduate degree that has a considerable computing component,
- Have strong skills and interests in programming ideally: Python, C or Javascript in a Linux environment.
- Want a one year industrial placement as part of your degree

#### The Role:

If successful you will work with or assist in development and improvement of:

- Data processing and distribution systems (primarily scripting in Python, Perl or shell);
- Image analysis software, particularly for the automation of aircraft and satellite data analysis (using C, Linux, Python and the Interactive Data Language IDL);
- User-friendly GUIs for the software (using web technologies, Python and Java);
- Web sites and database software development (using PHP, Javascript, XML, PostgreSQL, ...);
- Advanced 2D and 3D web-based visualisation systems for intuitive use and analysis of big data using

Javascript/Node, including libs such as OpenLayers and D3, HTML5/WebGL and Python;

- Image processing in support of environmental research, e.g. NEODAAS service;
- Pre- and post-processing software packages such as visualisation tools and data analysis software, particularly for satellite and airborne LiDAR/hyperspectral data.

If successful at interview you will have a dedicated Linux workstation; additional facilities include other Linux workstations, ~140-node Linux Grid Engine/Open Grid Scheduler cluster and ~2.5 petabytes disk space.

Successful candidates will benefit from training in remote sensing and image analysis as well as the opportunity to develop personal interests in computing within the overall context of the group's activities.

One of the positions will be offered within PML Applications, the subsidiary of PML which facilitates the application of PML's research.

PML offers an active student life with many social opportunities and in particular marine sports. Plymouth itself has many cultural and social amenities, whilst its proximity to Dartmoor and Cornwall offers great scope for outdoor pursuits.

To apply you will need to provide a cover letter detailing the reasons for your interest in this opportunity as well as a full CV and 2 references (One of which must be from your University Supervisor)

# Interviews will take place on Thursday 7<sup>th</sup> & Friday 8<sup>th</sup> May 2015

Please note: You will be asked to complete a programming exercise as part of the interview process

Please send applications (including module marks) by post/e-mail to:

Elizabeth Hamilton-Matthews Human Resources Group Plymouth Marine Laboratory Prospect Place, West Hoe, Plymouth PL1 3DH

E-mail:<u>vacancies@pml.ac.uk</u>

Tel: 01752 633100

For further information on the Earth Observation Group: <a href="http://rsg.pml.ac.uk">http://rsg.pml.ac.uk</a>