

## Internship – Defining Sea State using Earth Observation

Posted: 25 May 2017  
Closing Date for Applications: *Remains open until position is filled*  
Research Centre: Marine and Renewable Energy Ireland (MaREI) Centre  
School: Environmental Research Institute (ERI)  
Organisation: University College Cork (UCC)  
Position Type: **Internship, Full-time (fixed term)**  
Position Duration: 3-4 months  
Salary: No salary paid for this position  
Expected start date: Anytime

### Internship Summary

Generally defined as the degree of turbulence at sea, Sea State in oceanography is usually derived from wave height, wave period, and wave power spectrum data. Sea State varies with time depending on wave variability, and long-term patterns and trends are often required to characterise marine areas and derive information useful for decision making studies.

The aim of this internship is to combine various sources of satellite Earth Observation (EO) products to derive a robust definition and spatiotemporally transferable product of ‘Sea State’ that is applicable to marine applications, including Marine Spatial Planning (MSP) and Marine Renewable Energy (MRE).

The successful candidate will spend a period of 3 months working with EO, GIS, MSP and MRE experts based at the new MaREI Centre facilities, in Ringaskiddy, County Cork, Ireland, under the supervision of Dr Eirini Politi. Information on the MaREI Research Centre and its facilities is available at the following URL: [www.marei.ie](http://www.marei.ie)

The Internship is divided into four main tasks:

- (a) Scoping EO data availability and creation of dedicated database,
- (b) Development of Sea State definition using EO,
- (c) Generation of long-term EO-based Sea State product, and
- (d) Final reporting and presentation of results to MaREI centre.

For more information, please contact Dr Eirini Politi using the contact details provided below.

### Skills Acquired During Internship

As an intern, you will be trained in the following skills:

- Knowledge of satellite Earth Observation data availability and utility
- Product derivation and ownership recording
- Metadata skills and INSPIRE compliancy
- Use of GIS for data handling and analysis
- Consultation and engagement of experts/users/stakeholders
- Discussion and presentation skills
- Report writing skills aligned to EU project templates
- Teamwork and collaboration towards shared targets, network building

- Working individually and time management
- Professional work conduct and workplace etiquette

### **Skills Required for the Internship**

To be able to successfully complete this internship, you should have:

- Basic experience with GIS (e.g. ArcGIS, QGIS)
- Basic knowledge of remote sensing data, products and missions
- Basic knowledge of statistics

The above should be demonstrated in your CV and cover letter.

### **Application process**

To apply for this internship, candidates should submit the following documents to Dr Politi using the contact details provided below:

- (1) Short cover letter (max. 1 page)
- (2) Curriculum Vitae (CV)
- (3) Confirmation that they will be covered by insurance for the duration of their stay in Ireland. *As a matter of policy, all Schools/Universities wishing to organise work placement/internships for students in MaREI/UCC should provide a Letter of Indemnity to UCC from their Insurer (not their Insurance Broker) in advance of the student's arrival on campus. This is standard practice and should not cause a problem for the school involved, or their Insurers.*
- (4) Confirmation in writing that they will be able to support themselves financially whilst in Ireland. Please note: These internships do not pay, so candidates need to ensure they have enough funds to cover their travel, accommodation, subsistence and any other personal expenses for the entire duration of their internship.

Brief online interviews will be organised with potential candidates to discuss the internship in more detail.

**For enquiries on this internship and to apply candidates should contact:**

Dr Eirini Politi  
EO and GIS Applications Group Leader  
E: [eirini.politi@ucc.ie](mailto:eirini.politi@ucc.ie)  
T: +353 (0)21 486 4339