



The original redbrick university and a member of the Russell Group

# Faculty of Science and Engineering





This post is part funded by the European Regional Development Fund 2014 – 2020 through the Interreg Atlantic Area Programme

Area: School of Environmental Sciences, Geography and Planning

Job Ref: 058186

**Location: Central Campus** 

Grade: G6

Salary: £31,503 pa

**Working Hours: Full time** 

Tenure: Short term contract until 31st July 2023

Online application > Shortlisting > Interview Process > Job Offer





Campus located in the heart of the vibrant city of Liverpool with excellent facilities





Outstanding development opportunities through our Academy







# **Role overview and University context:**

This post is part of the InterReg Atlantic Area NEPTUNUS project which addresses Water-Energy-Seafood Nexus: Eco-innovation and Circular Economy Strategies in the Atlantic Area <a href="https://neptunus-project.eu/">https://neptunus-project.eu/</a>

The main role of the Liverpool partner has been looking at weather disruptions to the fishing industry and to a lesser extent longer term climate change.

A grant extension allows the creation of a short-term PDRA post. The project ends on 31st July 2023.

# **Responsibilities & Duties:**

Based on the city centre campus. Hybrid working is possible with discussion.

The focus of this post is identifying currently publicly available weather forecast products e.g. <a href="https://charts.ecmwf.int/">https://charts.ecmwf.int/</a> that could be used for short-term planning by the UK fishing industry.

Most of these charts come with little explanation to help non-experts interpret and use them, so the post would be assessing the forecasts and writing simple to use manual/guide for a selection of chart types.

We will be using both short range deterministic forecast products and medium range ensemble prediction products. We may look at some extended forecast product use if time allows.

A number of these charts have Jupyter notebooks written in Python <a href="https://github.com/ecmwf/notebook-examples">https://github.com/ecmwf/notebook-examples</a> to allow some level of customization, the use of this would be a key part of the development of the chart use; see also <a href="https://confluence.ecmwf.int/display/FCST/Changes+on+web+charts+application">https://confluence.ecmwf.int/display/FCST/Changes+on+web+charts+application</a> and

https://events.ecmwf.int/event/296/contributions/3248/attachments/1883/3385/UEF2022\_Vuckovic\_pdf

Most of the targeted forecast areas will be coastal and marine (focusing on key Atlantic fishing areas and landing ports), we do have a use case of an aquaculture facility in the centre of Ireland.





We may also assess the use of the COPERNICUS Climate data store https://cds.climate.copernicus.eu/

You will be expected to produce a user manual probably linked with a website showing examples and as time allows to undertake some community outreach to the forecast users.

As part of the role, you will be expected to attend meetings online and in person. This post may involve some short two-to-three-day trips both in the UK and EU.

You will be expected to contribute to report writing activities.

You will be expected to contribute to the wider NEPTUNUS team in Liverpool and interact as required with other project partners.

You will report directly to Professor Andy Morse.

Undertake other duties commensurate with the grade as required.

## **Skills & requirements**

You need to be able to use a Jupyter notebook environment and be competent in using Python; although most of role here will be modifying existing code.

Have a PhD in a relevant discipline.

Previous background in data analysis and data presentation would be required.

Basic web page skills / manual writing skills would be good. As would some prior experience of video presentations for instructional use.

Prior knowledge of weather and weather forecasting systems would be an advantage but not essential

Previous report writing and paper writing experience.

Previous public outreach experience is desirable.

You will need to be self-motivated and be able to get up and running quickly.

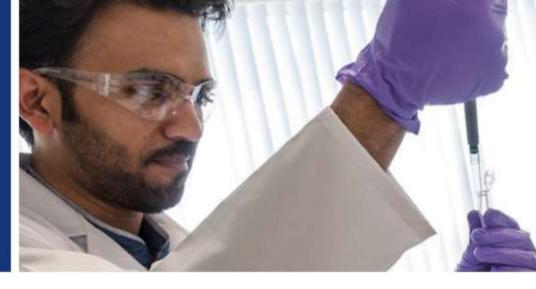




# In addition to the above, all University of Liverpool staff are required to:

- Adhere to all University policies and procedures, completing all obligatory training and induction modules, including Equality & Diversity and Health & Safety.
- Respect confidentiality: all confidential information should be kept in confidence and not released to unauthorised persons.
- Participate in the University's Professional Development Review scheme and take a proactive approach to own professional development.
- Demonstrate customer service excellence in dealing with all stakeholders.
- Embody and uphold the University's Vision and Values.





	Essential Criteria	Desirable Criteria
Experience		
1.1	Expertise in data analysis and data presentation	Experience of working with gridded weather model outputs
1.2	Previous project working experience	Public and stakeholder outreach
1.3	Basic web page production skills	
1.4	Report writing	
Education, Qualifications and Training		
2.1	Degree in relevant areas e.g. climate science, environmental science, ocean and earth sciences	Use of weather forecasting system products and knowledge of weather processes
2.2	Knowledge of data analysis software	Prior knowledge of weather processes and weather forecasting systems
2.3	Good knowledge of MS Office	Experience of working in a LINUX/UNIX environment
Skills, General and Special Knowledge		
3.1	Working in a Jupyter or similar notebook environment	Using Jupyter notebooks as a training tool
3.2	Use of Python	Use of Python at an intermediate level
3.3	Basic web page skills	Video production for training/ Panotype
3.4	Knowledge and use of at least one large data repository	Experience of Copernicus climate data store
Personal Attributes and Circumstances		
4.1	Self-motivated	Motivating others
4.2	Team player	Experience in research team leadership
4.3	Self-starter	Evidence of picking up ideas and techniques quickly





Established in 1881, we are an internationally renowned Russell Group university recognised for our high-quality teaching and research. We are consistently ranked as one of the best Universities both nationally and globally, and the majority of our research is rated world leading or internationally excellent. Find out more <u>here</u>.

#### **Our Areas**

When you work at the University of Liverpool you are more than just your job role. You are a crucial part of our mission to improve lives on a local, national and international scale. Click on the relevant links below for more information on area you will be working in.

Faculty – Science and Engineering
School of Environmental Sciences, Geography and Planning
Area - Research

#### **Why Work Here**

We recognise, appreciate and celebrate the incredible work our staff do every day. As well as generous terms and conditions, we offer a range of enviable benefits and provide support for colleague's wellbeing and development. Discover more <u>here</u>.

## Moving from abroad

As a global institute, we welcome applicants from all nationalities, moving from a different country can be challenging and we would like to help as much as we can, we have put together some information on eligibility to work documentation, accommodation, schools, healthcare, life in Liverpool and the UK as well as other practical information. Discover more <u>here</u>

#### **Our Staff**

Whether it be their friendly colleagues, supportive managers or our outstanding facilities, our staff can explain better than anyone what it is like to work for us and why they enjoy their role. See what they have to say <u>here</u>.





The University of Liverpool is committed to being an inclusive employer. We welcome applications from everyone regardless of age, gender, ethnicity, sexual orientation, faith or disability.

## **Contacting us**

Shortlisting and interview arrangements are the responsibility of the recruiting department. Please call example on 0151 0618 or email: <a href="mailto:soeshr@liverpool.ac.uk">soeshr@liverpool.ac.uk</a>.

## **Application process**

Our e-recruitment system enables you to register for an online account, where you can view, copy and edit your applications. Set up your account <u>here</u>.

Once you submit your application you will receive an automatic email acknowledgment. You can view your application any time by clicking into the application history section of your account.

## **Job Description**

After the closing date this job description will be removed from our website. Should you wish to refer to this information at a later date please ensure you save a copy of this document.

#### Right to work

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working with us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it. The UKVI have an interactive tool allowing you to immediately see if vacancies are eligible for a Skilled Worker visa. You will need to know the SOC code for the role, our most used SOC codes can be found <a href="here">here</a>, if none of these apply to this role, there are more codes on the eligibility checker. The skilled worker eligibility checker can be found on <a href="GOV.UK">GOV.UK</a>.





### **Disabilities and alternative formats**

If you have any other requirements which will help you access the application or interview process or employment opportunities at the University, or if you require copies of documentation in alternative formats, please email: <a href="mailto:jobs@liverpool.ac.uk">jobs@liverpool.ac.uk</a> or telephone 0151 794 6771.

# **Outcome of your application**

The recruiting department will endeavour to respond to each application. However, if you have not heard within six weeks of the closing date, please take it that your application has not been successful on this occasion.

















