THE POST

College/Service:	**College of Engineering, Mathematics and Physical Sciences.**
Post:	**Lecturer (Education and Research) in Autonomous Systems and Robotics**
Reference No:	**P62248**
Grade:	**F**
Reporting to:	**Dean of College**

The above full time post is available from the 1st September 2018 until 31st December 2019 in the College of Engineering, Mathematics and Physical Sciences.

This job is part of the Marine-i project involving the University of Exeter, Cornwall Development Company, the Cornwall College Group, Cornwall Marine Network, the Offshore Renewable Energy Catapult and Plymouth University. It is funded through the European Regional Development Fund and forms part of the European Strategic Investment Framework for Cornwall & the Isles of Scilly.

As the maritime world moves rapidly towards robotics and autonomy, this represents a significant growth opportunity for technology businesses and marine supply chain companies in Cornwall and the Isles of Scilly. This Marine-i post is aimed to deliver research, development and innovation contributing to the commercial advancement of autonomous systems within Cornwall and the Isles of Scilly.

Job Description

Main duties and accountabilities

1. To fulfil research and administration duties as a lecturer in Autonomous Systems and Robotics.

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2. To extend the research profile of offshore renewable energy and related areas, especially in the area of conceptual mathematical approaches bringing together machine learning algorithms, artificial intelligence, and heuristic optimization algorithms for the optimal design and operation.

3. To enhance business collaboration and develop strategic activities that aid in future research activities with industry.

4. Attracting and supervising post doctorate researchers and postgraduate research students

5. To collaborate with colleagues both within the College and the University of Exeter as a whole in order to develop and support offshore renewable energy research programmes and the College's research programme.

6. To contribute to the general operation of the College as a member of its academic team.

Research

1. To conduct independent research and act as principal investigator and project leader, and in so doing:

   Enhance the College's international reputation through research publications of appropriate quantity and quality, and contribute to worldwide debate at national and international conferences, and

   Win research earnings through carefully prepared and successful grant applications as well as identifying potential income-generating programmes and collaborative partnerships.

2. To supervise research projects, managing any dedicated research staff and postgraduate research students, and provide the mentorship to enable staff and students to develop their skills and academic careers.

3. To help promote a collegiate working atmosphere and stimulating environment that will attract further research staff of the highest quality as well as good postgraduate research students.

4. To contribute to the further and ongoing development of marine technology research at Exeter, especially the area of offshore renewable energy and offshore reliability.

Teaching

To support mainly postgraduate courses/training to appropriate academic standards such that:

1. Knowledge acquired from research translates to teaching
2. Students are challenged but also tutored and supported with individual care
3. Teaching and learning techniques are innovative and inspiring
4. Students are supervised appropriately
5. Assessment criteria are appropriate, and fairly applied with results fed back to students appropriately
6. Module content is continuously reviewed to identify areas for improvement

General

To contribute to the overall general and academic management in the College by undertaking activities that may be required such as:

1. Developing overall academic content and structure of modules with colleagues
2. Developing ideas for generating income and promoting both the College in general and Engineering in particular marine biology.
3. Supporting admissions processes and procedures
4. Supporting examinations processes and procedures
5. Contributing to the work of College committees
6. Contributing to accreditation and quality control processes
7. Contributing to strategic planning

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility.

Person Specification

The successful applicant will have an independent research programme that will strengthen and complement the existing team at the University. He/she will be able to demonstrate the following qualities and characteristics:

1. PhD or equivalent in Offshore Renewable Energy or Autonomous Systems and Robotics.
2. Sufficient knowledge in machine learning algorithms, artificial intelligence, or heuristic optimization algorithms to support and develop research programmes
3. A strong record in attracting research funding, or demonstrable potential to attract such funding.
4. Teamwork skills to work in collaboration with existing group members
5. An active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the University and externally with other educational bodies, professional institutions and employers
6. The attitude and ability to engage in continuous professional development
7. The aptitude to develop familiarity with a variety of strategies to promote and assess learning
8. Enthusiasm for delivering undergraduate programmes

Terms & Conditions
Our Terms and Conditions of Employment can be viewed here.

Further Information
Please see our website for further information on working at the University of Exeter.