Newcastle University PhD Studentship award

**Title**
Cost-effective Monitoring of Offshore Environments

**Value of award**
100% of International tuition fees paid

**Number of awards**
1

**Start date and duration**
September 2019 for 3 years

**Application closing date**
8th February 2019

**Overview**
This project is motivated in the light of the following facts:

Fact 1 – Currently, about 90% of world trade is carried via maritime transport. It can be said that without maritime transport, the import and export of the majority of affordable food and goods would not be possible. Consequently, more than half of the world would starve and many important production and social activities have to freeze;

Fact 2 – Nowadays, approximate 30% of world oil and gas production comes from offshore and it will continue to increase in the future. For some countries, the offshore oil & gas industry plays a vital role in the national economy. For example, the offshore oil & gas industry in the UK contributes about 2.5% of GDP and supports 370,000 jobs;

Fact 3 – Different from traditional fossil fuels, offshore renewable energy, such as wind, tides and waves, are naturally replenished. Therefore, they are increasingly seen as a sustainable means of reducing carbon emission and overcome climate change.

Apparently, these industries are important for maintaining a healthy, prosperous and sustainable modern society. However, the safety of the production of these industries is challenged by unreliable offshore environments. The wrong prediction to offshore environments may lead to significant loss to these industries. Therefore, it is very important and of significance to correctly understand the changes in offshore environment, thus providing guidance to the safe transport and productions offshore. The aim of this project is to attain such a purpose through developing cost-effective offshore environment monitoring techniques.

**Sponsor**
Faculty of Science Agriculture and Engineering and Chinese Scholarship Council (CSC)

**Name of supervisor(s)**
Dr Wenxian Yang, Professor Zhenhong Li, Dr Wen Xiao
Eligibility Criteria
- You must be a citizen and permanent resident of the People's Republic of China at the time of application;
- You must have good knowledge and skills in deep learning;
- You must have experience of image processing and data analysis;
- You are expected to have knowledge of remote sensing technology;
- You are expected to be a team worker with good communication skills.

How to apply
You must apply through the University’s online postgraduate application system. [Apply here.](#) To do this please ‘Create a new account’. All relevant fields marked with a red asterisk must to be completed.

The following information will help us to process your application. You will need to:
- Insert the programme code 8070F in the programme of study section
- Select **PhD Marine Technology (full time) - Marine Technology (Engineering)** as the programme of study
- Insert the studentship code CSC1804 in the studentship/partnership reference field
- Attach a covering letter and CV. The covering letter must state the title of the studentship, quote reference code CSC1804 and state how your interests and experience relate to the project
- Attach degree transcripts and certificates and, if English is not your first language, a copy of your English language qualifications

Contact
Dr Wenxian Yang
School of Engineering, Newcastle University
Tel: +44(0) 191 208 6171
Email: wenxian.yang@newcastle.ac.uk