



Ystumtec Ltd.

Software Internship

Pant y chwarel, Ystumtuen, Ceredigion, SY23 3AF, UK

February 8, 2021

Ystumtec is a small company based near Aberystwyth that provides a range of research organisations (academic, regulatory and industrial) with custom-built equipment and systems. We design and build electronic and electromechanical systems for a range of application areas including livestock tracking, fisheries monitoring, greenhouse observation and specialist lab equipment.

The opportunity

We are able to offer a 9 month contract commencing as soon as possible after your exams finish and with the possibility of extension. You would primarily be able to work from home, although you would also be expected to spend time at our workshop when initially testing and setting up systems. Whilst the workshop is not in Aberystwyth it is within walking distance (200m) of the bus stop in Ponterwyd, so a car is not required.

The work

This role is primarily within a project working on Python software to be run on Raspberry Pi based cameras used for monitoring the number, species, size and location of crabs and lobsters caught on small fishing vessels. You would be working as part of a small team using Python as the main implementation language. Ideally you would already be comfortable working in a Linux environment and be able to contribute to tasks such as setting up web servers and code repositories and building simple websites.

As part of the team you would be expected and encouraged to contribute to a number of aspects of the work depending upon your experience and skills. You will be helped and guided with whichever aspects you are assigned to, although we expect and encourage independent working when possible and appropriate. The main activities available would be:

Python coding: this would be building on, refining and packaging existing code as well as producing new parts of the system. The system uses OpenCV and TensorFlow,

so some understanding of the purposes of these systems would be advantageous but not essential.

Web development: this would be building on and refining a simple standalone system to be run on the cameras to provide access to data and camera configuration parameters.

Testing: you would be expected to develop a methodical testing regime to be run both on the code that you produce and on the complete system. Should you wish, there will be opportunities to contribute to testing in-the-field as the cameras are installed on fishing boats.

Documentation: you will be expected to write and maintain basic documentation to support the systems that you work on.

GSM communications: the cameras have the ability to connect to the cell phone network and we require software to be built to allow the devices to transfer data to the customers' servers. This will require some communication and collaboration with the customers' IT departments.

Other projects: there are a number of other projects which you may also be asked to contribute to including thermal cameras and GPS tracking systems.

Learning on the job: we will encourage you to develop an understanding of the other aspects of the work that we do as it helps to produce better products and to develop your skill-set for the future. This could include electronics design and manufacture and mechanical engineering skills and techniques.

Pay and conditions

You would initially be contracted for 9 months and paid £1,200 per month with the possibility to extend the contract through summer 2022 if appropriate work is available.

Whilst we are happy to be flexible about working hours we would expect you to be available for work and meetings from 9am to 5pm on weekdays. You will receive pension contributions and paid holiday on a pro-rata basis (4 weeks per annum plus bank holidays).

Contact

Please send your CV and a covering letter by email to Mark Neal using the email address: info@ystumtec.co.uk. Applications will be assessed as they are received, so please apply early.