

6 Month Software Engineer Internship

(IBESE0811)

PLEASE READ CAREFULLY BEFORE CONTINUING.

European Student Placement Agency, Ltd (ESPA UK) is a recruitment agency whose goal is to find high quality internships for European students in the UK. We work closely with our host companies to ensure the positions provide the candidates with a great experience, both professional and personal.

REQUIREMENTS: ESPA vacancies are open to all EU passport holders able to travel to the UK for an educational work placement, without the need for visa documents. You have to be a registered student and/or have Erasmus+ status to be eligible for our internships. Any student who is unsure of their situation should check with their university before applying. Non-EU students can also apply if they are studying in the EU and can get an Erasmus+ grant/status for the entire length of the internship.

BENEFITS: All ESPA's services are **free** for students and alumni. The benefits are:

- 1) Paid Accommodation.
- 2) Paid Utility Bills (electricity, gas, water and council tax) + Internet Access
- 3) Commuter travel to work (accommodation will be found within an acceptable commuting distance from the workplace, if that requires more than a sensible walk then a bus/train ticket will be provided).

This will be sourced and managed on your behalf by ESPA. These benefits have an approximate value of 700€-1000€ per month (depending on location).

There is no salary over and above the benefits offered, unless specifically stated.

To know more, please visit: www.espauk.com

The Host Company

The host company is dealing with commercialisation of X-ray imaging technology, that has its application in many different areas, from improving contrast and resolution in Flat Panel Detectors to restoring energy information for images. Detectors are beneficial for many different types of markets, Industrial imaging, Medical, Food inspection, just to name a few.

Role

The successful candidate will be working with the innovation team, helping to develop a range of technologies for medical, security and industrial inspection markets. The role will involve assisting with the algorithm development, building and running simulations of x-ray interactions, hands on experiments using x-ray equipment and data analysis.

Company is looking for a highly motivated individual who can quickly get up to speed with the technology and make positive contribution to the team. The candidate should have a strong background in programming and a good working knowledge of physics.

Duration

6 months

Location

Sedgefield, lovely little town in County Durham, North East part of England, UK.

Languages

English should be B2/C1.

Start date

January 2017.

Tasks

- Data analysis using Matlab
- Design of experiments
- Algorithm development Matlab and potentially C++
- Running x-ray simulations
- Modelling of x-ray interactions
- Presentation of results to members of the team

Personal Skills

Essential:

- Proficient in one programming language e.g. Matlab, R, C++, python, etc.
- Degree or working towards a degree in Physics, Engineering, Computer Science or other highly numerate subject.
- Excellent communication skills and good spoken English.
- Ability to work independently on own intuitive.
- Ability to design and run experiments.
- A strong grounding in mathematics.

Desirable:

- A knowledge of X-ray physics.
- Experience of Monte Carlo simulations (preferably GEANT4).
- Ability to build or design hardware for experiments, for example simple circuits, jigs, X-ray phantoms.
- A knowledge of Bayesian statistics.

How to apply

STEP 1) Please, register with us at http://www.espauk.com/students/register-with-us

STEP 2) Please, send an email to <u>portal32@espauk.com</u> with the reference code <u>IBESE0811</u> attaching your CV as a pdf file. A cover letter is always helpful.