



# Software Engineer

## The Opportunity

IBEX Innovations Limited is seeking an experienced Software Engineer who will be part of the software engineering and delivery team. The Software Engineer's chief responsibility is to focus on translating IBEX development code into high-quality software products for the medical X-ray imaging market and for supporting integration projects with leading medical imaging companies.

The ideal candidate will have several years commercial experience developing software; with a focus around speed optimization using parallel programming.

The position offers a unique opportunity for the right individual to convert ground-breaking innovations into high performance code for real and valuable applications in medical imaging.

## About IBEX®

IBEX is a technology business in the advanced stages of commercialisation of a patented X-ray detector technology for medical X-ray imaging markets. IBEX is focussed on one goal: to apply advanced physics modelling, statistics, and AI methods to extract the maximum amount of useful diagnostic information from every single X-ray. A vision to improve patient lives through earlier and more accurate diagnosis and to improve efficiency and reduce costs for health care providers everywhere.

IBEX is an equal opportunities employer. We believe that inclusion and diversity are key to the company's success and that people from diverse backgrounds bring unique experiences and fresh ideas to the company. We therefore positively encourage applications from people of all backgrounds regardless of sex, race, disability, age, gender reassignment, sexual orientation, marriage or civil partnership, pregnancy or maternity, religion or belief.

Based in modern offices on the NETPark Science Park in beautiful County Durham, IBEX currently employs 18 highly skilled staff including scientists, mathematicians, software engineers, and business professionals.

### The primary responsibilities of the role will be:

- Developing software using C++ on Windows using Microsoft Visual Studio 2019
- Translating and optimising algorithms and scientific processes developed in MATLAB to C++ code
- Creating high-quality software libraries and GUI applications with documentation
- Ensuring software quality complies with ISO 13485 and Medical Device Regulations Standards through relevant test strategies and code quality tools
- Software versioning and delivery using application lifecycle management tools such as GitHub, TFS and TeamCity

### Candidates must possess the following essential skills and experience:

- Minimum degree level qualification in a software engineering, computer science or applied mathematics discipline
- Commercial software development experience in a high technology environment
- Excellent C++ programming skills
- An understanding of modern software development methodologies, patterns and practices
- Experience of algorithmic coding, with a good working knowledge of geometry, vectors, matrices and statistics
- Experience in parallel programming, e.g., using GPUs (CUDA/OpenCL), or CPU multi-threading.
- A level of technical understanding that allows effective communication with the R&D team and parallel computing/HPC.
- Strong team skills.



# Software Engineer

## Additional skills and qualities which would be beneficial:

- Sound working knowledge of MATLAB or R
- Knowledge of image processing techniques
- Knowledge of tomography or 3D reconstruction techniques
- Previous experience of writing software or working within an FDA/IEC62304/ISO compliant framework
- Knowledge of speed and resource usage optimisation methods
- Experience working within an agile environment
- Have worked on collaborative/open source projects

## Location

NETPark Science Park, Sedgefield, County Durham

## Salary and Benefits:

Salary: Competitive salary based on experience.

Benefits: IBEX operates a flexible benefits scheme including pension and life insurance

Share Options: Share options are available following successful completion of a three-month probationary period.

Holidays: 25 days plus bank holidays

Working: A mix of home/office working is available.

Parking: Free

## Closing Date:

**Open**

Please note should sufficient applications be received IBEX reserve the right to close this vacancy at any time, we always encourage all interested applicants to apply at their earliest convenience to avoid disappointment.

## Data Protection and Equality:

As part of the application process, we will ask you to optionally provide some personal information which will assist us to meet our diversity and inclusion goals and ensure that underrepresented groups are fairly assessed. Only those involved in the recruitment process at IBEX will have access to this information and all personal information will be deleted from our systems should your application be unsuccessful.

Please do not hesitate to contact us if you would like to discuss any adjustments to our process which might help you demonstrate your strengths and capabilities.

Should you be successful at interview, we will ask you to complete a right to work checklist prior to commencing engagement with IBEX, as proof you are eligible to work in the UK.

**If you are interested in this position, please forward your CV and cover letter to:**  
[k.scott@ibexinnovations.co.uk](mailto:k.scott@ibexinnovations.co.uk)