



3DLP Biomedical Engineer – Job Description

About 3D LifePrints and Our Future

Our work began in designing and providing 3D printed limb prosthetics for amputees in Kenya. It has since grown into providing medical 3D printing products and services for key UK & European hospitals and universities. We partner with clinicians, healthcare providers and academics to identify new applications of 3D technologies and provide a variety of patient specific 3D printed products to reduce operational costs and enhance patient care. The products include anatomical models, surgical guides, implants and simulators specializing in a variety of surgical disciplines including: Orthopaedic, Cranio-maxilla facial, Cardiology and Paediatric.

3D LifePrints is currently the only company in the UK that offers hospitals the opportunity of setting up an embedded commercial 3D printing facility. Using our embedded services, hospitals experience the dual advantage of avoiding capex investment in the hardware, software and talent necessary to set up a 3D printing facility, while benefitting from having the service immediately available in-house for close working and quick turnaround for best patient outcomes.

Over the last five years, we have developed embedded 3D printing facilities within Alder Hey Hospital in Liverpool, Wrightington Hospital near Manchester and Nuffield Orthopaedic Centre in Oxford. Our latest embedded hub, based in Leeds Infirmary, will be opening in April this year. More are planned both in the UK and in mainland Europe, with further Hubs to open in the USA.

Can you deliver great service in our new hub?

3D LifePrints is searching for a new Biomedical Engineer to help us handle the increase in demand for our services in the UK. Meeting this demand requires someone with a unique blend of skills, all of which are essential to ensure the clinicians we work with, and their patients, receive the best service from us.

Your anatomical knowledge should be substantial enough to comprehend medical scans and build incredibly accurate representative models. Your segmentation skills should be able to handle complex scans and image interference. Your proficiency with 3D printing technology would see you comfortable working with, and repairing if necessary, anything from a simple desktop printer to more advanced 3D

technology. Your communication skills would enable you to work side by side with clinicians of all levels and departments, while your project management ability would ensure all projects are delivered on time.

We need someone who can work independently to deliver a wide range of patient specific anatomical models, surgical guides and other medical devices to the high standard required by clinicians and regulatory bodies. At the same time, you would be able to work smoothly with our other hub engineers across the country as demand required.

Essential responsibilities

- Using off-the-shelf medical segmentation software applications, extracting areas of interest from medical images to create 3D models for client projects
- Developing custom 3D models using standard CAD modelling software applications
- Collaborate closely with clinicians to design the exact models and devices required
- Printing of medical devices on a range of 3D printers in different materials
- Conducting post-processing and finishing of devices
- Maintaining and repairing your hubs 3D printers as and when required
- Developing new business opportunities within the hub hospital and other surrounding regional institutions
- Project managing a high number of device orders from different clinicians and institutions
- Representing 3D LifePrints at industry events
- Networking locally and nationally

Experience/skills

- At least 1 year's experience of professional level biomedical engineering or other engineering / medical background (essential)
- A high level of anatomical knowledge (essential)
- Prior experience in medical segmentation using standard off-the-shelf medical segmentation software applications (essential)
- 3D printing experience and technical ability (preferred but not essential)
- Superb communication skills and ability to work closely with clinicians
- Strong project management ability

Location

For the first 3 months, the candidate will be based in our Oxford hub while they undergo training and supervision with our Head of Engineering. Temporary accommodation costs (e.g. AirBnB) during this period will be covered by the company.

After this period, the role is most likely to be based either in North London or Oxford (TBC). We do seek candidates with the flexibility to relocate to a new city for this role.

Please note that this role may involve travel around the region to visit satellite hospitals or institutions such as universities.

Travel to national and international conferences and industry events may also be expected as part of your role as Biomedical Engineer.

Working around Covid-19

Typically, our biomedical engineer roles are hospital based, in one of our embedded hubs. A key part of the work involves meeting clinicians from different departments in the host hospital and those surrounding.

Understandably, Covid-19 measures over the last year have meant meetings are now carried out virtually for the most part, as we comply with each trust's safety measures and ensure all our staff are as safe as possible while the pandemic continues.

We hope that as the vaccination rollout continues, we will be able to return to our normal working ways and travel levels by the end of the year.

Salary

Competitive salary based on experience. Our performance-based bonus scheme offers up to 12% of the candidate's salary, paid quarterly.

A laptop for work will also be provided.

Holidays and Sick days

- 21 days per year holiday + public holidays
- Normal sick days as per government guidelines

How to apply

Please send a copy of your CV/Resume to info@3dlifeprints.com

As part of the application process, you will be asked to perform a medical segmentation task by our Head of Engineering as a measure of your current ability.