



<https://newtoncolmore.com/job/senior-systems-engineer-ultrasound-technology/>

Senior Systems Engineer – Ultrasound Technology

Description

Newton Colmore is working with a highly regarded medical technology company in Cambridge, assisting them with their search for a Systems Engineer to work on their latest surgical ultrasound innovation.

The Challenge – Where physics meets surgery;

The organisation works on some of the most technically demanding problems in medical technology — intelligent surgical instruments, embedded sensing systems, robotic-assisted surgery, and real-time intraoperative imaging. Ultrasound sits at the intersection of all of it.

You won't be applying existing solutions, you will be inventing new ones. Projects run from early feasibility through hardware prototyping, firmware, signal processing algorithms, and regulatory sign-off. You will own the ultrasound thread end-to-end in this newly created role.

What you will be working on;

Electronics and transducer architecture.

Lead design and evaluation of ultrasound transducers and the high-speed analogue/digital front-end electronics that drive them — including transmit beamforming, low-noise receive chains, and high-bandwidth ADC integration.

Signal processing and algorithm development

Develop real-time signal processing pipelines — from raw RF data through envelope detection, beamforming, and image reconstruction — with strong software implementation alongside the DSP theory.

Embedded software and system integration

Write firmware and embedded software to control ultrasound hardware, manage data acquisition, and interface with wider surgical system architectures. Comfort across C/C++, Python, and MATLAB is expected.

What you will need for this role;

You'll need a strong grounding across ultrasound systems, with recognised depth in at least one of the areas below ideally. The electronics stack and software implementation are central to this role.

- High-speed electronics
- Transducer design
- Image segmentation
- Signal processing

Hiring organization

Newton Colmore Consulting Ltd

Employment Type

Full-time

Beginning of employment

ASAP – By arrangement

Duration of employment

Permanent

Industry

Medical Devices

Job Location

Cambridge

Working Hours

Monday to Friday

Date posted

20th July 2026

Valid through

31.08.2026

Apply below or email directly:

matthew.lowdon@newtoncolmore.com

What they can offer you:

The company have invested in created an environment that champions innovation, with both mentoring and autonomy for expert engineers who want to do great work. On offer is a tailored salary, based on a series of factors, as the seniority of the role can be flexible from someone who has just completed a PhD, all the way up to a senior appointment.

This comes with a bonus programme, and a market-leading pension contribution.

If you would like to know more about this exciting role then make a confidential application or reach out to Matt Lowdon, and more details can then be sent over.