



Systems Technician

Location: Nottingham

Contract: Full time, Permanent

Salary: £28,000 Per Annum

Hours: 40 hours per week

Package: Competitive holidays, performance-based (non-contractual) bonus scheme, pension scheme

Background:

We at Cerca Magnetics Limited (Cerca) all have a shared goal: to make a real difference to people's lives through technological advances. If you want to do the same, joining our passionate team of technical, engineering and business experts might be the right career move for you.

Cerca was founded in 2020 and works in partnership with The University of Nottingham and Magnetic Shields Limited. The team have commercialised the world's most advanced functional brain scanner - a lightweight wearable device that uses Optically-Pumped Magnetometers (OPMs) to measure the magnetic fields within the brain. Unlike other scanners such as MRI, our system can be worn by both adults and children as the participant can move whilst being scanned. The information provided could contribute towards medical advances in treating epilepsy and other neurological conditions such as mTBI and dementia. We are currently working towards gaining medical approvals for use in epilepsy diagnosis and treatment.

Following initial sales in the research market, Cerca's vision is to offer the system to healthcare providers around the world and revolutionise functional brain imaging; to make a real difference to those that suffer from debilitating neurological problems. We share a dream of contributing towards the treatment of a young child who instead of facing a life suffering with daily epileptic seizures, could live their life free from the condition.

Description of the role:

As Systems Technician at Cerca, you will be instrumental in preparing, installing, calibrating, and servicing our cutting-edge wearable OPM-MEG scanners. This hands-on role ensures products are rigorously tested before shipping, expertly set up at customer sites, and supported throughout their operational lifecycle. You will also contribute to the development and scientific validation of new offerings, bolster technical infrastructure, and drive software migration initiatives—all supporting Cerca's mission to revolutionise functional brain imaging.

The Systems Technician will enable the successful deployment and evolution of wearable OPM-MEG systems, empowering researchers globally. You will ensure our systems are not only designed and built with precision but also supported through their entire lifecycle.

Key role focus areas:

1. Assembly, Testing & Shipping

- Assemble, configure, and rigorously test Cerca products to specification before dispatch.
- Validate sensor performance, verify firmware/software integrity, and document system readiness for shipment.

2. Customer Site Installation & Service

- Install, calibrate, and commission systems in magnetically shielded environments.
- Troubleshoot and service equipment in the field, resolving issues or escalating to specialists when needed.
- Domestic & international travel (30–40%) to customer sites.

3. Technical Support & Troubleshooting

- Provide first-line technical support to customers, following established troubleshooting protocols.
- Escalate complex faults or specialised requests to senior colleagues or engineers.

4. Maintenance of System Architecture

- Maintain laboratory equipment, demonstrating system workflows for visitors & prospective customers and supporting pilot data collection where applicable.
- Maintain system and test documentation in accordance with quality standards, ensuring that user manuals & assembly guides are current and comprehensive.

5. Scientific Development & Validation Support

- Define and execute test strategies for unit, integration, system, and acceptance testing.

6. Software Migration

- Drive the migration of MATLAB-based data processing tools into open source Python frameworks.

7. Collaboration & Continuous Improvement

- Work with Scientific, Engineering, Operations and Quality teams to deliver and develop cutting-edge products for customers.
- Propose and implement improvements for installation workflows, documentation, and software tools.

Required skills & experience:

- STEM degree (e.g., BSc/HND in Biomedical Engineering, Physics, Electronics) or equivalent experience with mechanical assembly, system testing, simulation and data analysis.
- Hands-on expertise in soldering, cable harnesses, and electrical wiring.
- Proficiency with test equipment and diagnostic tools (e.g., multimeters, oscilloscopes).
- Strong aptitude for troubleshooting and problem solving, with clear documentation practices.
- Experience in software environments such as MATLAB or python—particularly signal processing.
- Ability to think holistically (system-level) while working with low-level details.
- Excellent communication skills and confidence working with international customers.
- Valid passport and willingness for frequent travel.

Desirable (nice to have):

- Experience in magnetic shielding, sensing, or low noise environments.
- Background in biomedical device installation, especially neuroimaging.
- Familiarity with ISO documentation practices and standards (e.g., ISO 9001, 13485).

What you will bring to Cerca:

- Precision and reliability—ensuring every system performs to specifications before and after deployment.
- A collaborative and scientific mindset—balancing technical rigour with real-world usability.
- Commitment to continuous improvement, both in workflows and software tools.
- Passion for making advanced brain imaging technologies accessible and impactful.

In line with the Equality Act 2010, Cerca understand and appreciate the importance of equality, diversity and inclusion, both in work and in life. We therefore actively encourage applications from all backgrounds, as we believe a more diverse team is a more successful team! We look forward to hearing from you.