RF Coil System Development and Integration Engineer

Location: London, Ontario
Salary: Highly competitive with share options
Apply to: **info@xlrimaging.com**

XLR Imaging is a developer/manufacturer of high performance Magnetic Resonance Imaging (MRI) RF Coils. We currently supply leading edge neuro-imaging and spectroscopy RF coil solutions to some of the top worldwide research institutions and hospitals. We have concurrently developed an impressive I.P. portfolio and supplemented it by licenses from internationally recognized research institutions. We are now developing a complete solution that addresses the workflow needs of the high-growth potential paediatric clinical MRI market. XLR Imaging has an exciting opportunity for an RF Engineer with product development experience. Working with world-class MRI physicists, radiologists, industrial designers and engineers, you will help improve paediatric imaging by commercializing next-generation RF coil technologies and systems. This is a great opportunity to get in on the ground floor and work in a high-growth potential RF coil company addressing the needs of an underserved market.

Responsibilities:

- Propose and implement solutions to design problems.
- Analyze and troubleshoot design and manufacturing problems.
- Develop and build prototypes.
- Develop manufacturing processes, procedures and equipment
- Develop test plans and test equipment.
- Test and troubleshoot parts and electrical assemblies.
- Prepare schematics, layouts and cable harnesses.
- Participating and leading both internal and external (suppliers and customers) cross-functional project teams (Engineering, Clinical, Marketing, etc) to all phases of product development life cycle such as research, design, integration, evaluation and product support of the RF coils for clinical use
- New innovative RF coil research, electromagnetic design and analysis in the MRI system design
- Verification and Validation testing of RF coils and reporting for use on MRI scanners. Testing is conducted using various instrumentation including MRI scanners
- Preparing, writing and filing project related documents, presentations, reporting and organizing project review meetings, perform other duties/special projects as assigned.
- Support of existing products with engineering, QA, manufacturing, procurement, suppliers and servicing.
- Travel to suppliers, customers and within organization as required

Requirements

- Masters level Electrical Engineering or Applied Physics degree or equivalent.
- 3 years of industrial experience in RF / EM or MRI system design, including project leadership
- Experience with circuit design and prototyping.
- Experience with multi-channel phased array MRI RF coils
- Competent with PCB CAD software
- Experience taking RF devices from prototype to mature production
- Ability to formulate electronic drawings and process documentation including bills of material and work instructions.
- Skilled in soldering/de-soldering and use of hand tools in an electronics assembly environment.
- Experience with layouts, cable harnesses, antenna design and RF simulation an asset.
- Experience with mechanical design and assembly an asset.
- Knowledge in electromagnetics and analog RF electronics
- Knowledge of electromagnetic field and circuit simulation (e.g. FDTD, Spice), data analysis (e.g. Matlab) and office (e.g. Microsoft Word) software and advanced measurement equipment (e.g. network/spectrum/NF analyzer)
- Ability to write project related documents, reports and presentations - Basic understanding of product development and project management in medical devices
- Excellent communication skills
- Ability to travel internationally