MRI Pulse Sequence and Image Reconstruction Engineer

- MRI, Pulse Sequence, Commercial Scanner Technology
- Imaging, Physics
- Programming - C/C++, C#, Visual C++, Python

Magnetica is a medical device engineering and technology company specialising in the development and supply of Magnetic Resonance Imaging (MRI) systems, sub-systems and technologies.

We are focused on commercialising our dedicated compact MRI systems to bring high-quality imaging closer to the patient point-of-care. With a strong pedigree in MRI and NMR sub-system development and supply we have created a company with compelling IP and a broad technical team, to deliver diagnostic imaging systems and sub-systems to clinicians.

With proven capabilities in R&D, product commercialisation, manufacturing and supply, the company is at a stage of growth and opportunity to provide a unique integrated product offering in the MedTech sector.

From an operational and delivery perspective, the MRI Pulse Sequence and Image Reconstruction Engineer will:

- Be responsible for design and development of MRI pulse sequences, their testing in MRI scanner, and their integration in Imaging Software.
- Be responsible for design, development and testing of MR image reconstruction methods, and their integration in Imaging Software.
- Take ownership of the full product development lifecycle for pulse sequences and image reconstruction methods from concept through to completion.
- Conduct and/or participate in technical reviews of requirements, specifications, designs, and other relevant regulatory and ISO standards as part of defined projects.
- Conduct and/or participate in formal design review meetings, including preparation of presentation material.
- Be responsible for documentation of MRI pulse sequence and image reconstruction methods.
- Extension and optimization of the pulse sequence and image reconstruction modules in the existing MRI software with emphasis on clinical functionality and usability.
- Operating in a strong cross-functional interaction across all business disciplines, like hardware, software, system integration and verification, and product application.
To be successful in this role you will have experience as an MRI Pulse Sequence and Image Reconstruction Engineer within a similar company. You will have experience across the following:

- Post-graduate degree (Masters or PhD) in Engineering or Physics with strong focus on medical imaging
- In-depth understanding of MRI physics
- Experience with developing MR pulse sequences and reconstruction algorithms, either during PhD or within the medical devices industry.
- Pulse Sequence design and development experience including deployment and testing on commercial or research dedicated MRI scanners.
- Experience with programming of pulse sequences in C/C++, C#, JAVA or other programming languages
- Coding/Software Development experience in Visual C++, Python, MATLAB.
- Familiarity with WINDOWS and Linux based environments.
- Approachable personality with strong communication and interpersonal skills
- A demonstrated history of delivering high quality work, on-time, and to specifications.
- Worked within an ISO 9001 and/or ISO 13485 accredited organisation.
- Experience working in a product development team focusing on the design and development of product MRI pulse sequences in commercial scanners.
- Accuracy, attention to detail and completes tasks (a finisher).
- Self-driven with good time management and prioritisation skills.
- Ability to successfully collaborate with technical and non-technical staff.
- A team player that can also ensure individual workload is successfully delivered.
- Proven problem-solving ability and enjoys learning and applying new skills.
- Strong autonomous background and ability to self-manage time and tasks.
- Ability to work under pressure and time constraints.
- Commercial acumen, resilience, and a flexible approach to dealing with changing priorities and demands.

To be considered, please submit your resume and a cover letter outlining your core capability for the role, demonstrated experience of how you have delivered outcomes here.

Alternatively, for a confidential discussion, please contact Peter Starling on +61 7 3305 5800