Senior MRI Physicist

Job Reference Number: 2022FT01

Full-Time

Baltimore, MD, USA

Company Information
Join an innovative and nimble team with a bold mission to empower clinicians by pushing the frontiers of quantitative imaging for precision medicine. Imaginostics is a health tech startup developing magnetic resonance imaging (MRI) technology, with locations in Boston and Baltimore. Our non-invasive diagnostic solutions enable renal-safe vascular angiography and breakthrough quantitative imaging biomarkers to provide new insight in health and disease. Our proprietary QUTE-CE MRI methodology can non-invasively assay vascular structure, function, and leakage in high resolution anywhere in the body at the single-patient level, providing clinicians and scientists new endpoints for early detection and enhanced characterization of complex diseases. Data can be used to visualize the vasculature, assay health and disease, stratify patient populations, provide early preventative diagnostics, and assess drug efficacy. Our technology and software are compatible with existing MRI scanners and hardware. We offer our biomarker solutions commercially through CROs to pharma, and participate in pre-clinical and clinical research in a variety of focus areas collaborating with world-renowned researchers at leading institutions.

Job Description
Reporting directly to the organization’s leadership (executive and scientific) this role will be primarily responsible for the implementation of MRI Physics software: pulse sequences, image reconstruction, biomarker algorithms and data processing for various applications. The key senior role will have project-based assignments, including NIH-funded product development, and other general assignments related to supporting clinical researchers and commercialization of the QUTE-CE MRI technology. Job requires living in Baltimore with the ability to perform an 8-month project in Boston. Must have flexibility for paid travel to visit additional sites.

Duties Include:
- Implementing hybrid radial-cones 3D UTE MRI pulse sequences on Bruker 7T scanners
- Implementing image reconstruction algorithms for accelerated and robust imaging
- Deploying and managing on-site servers and software at MRI scanners
- Managing biomarker algorithms and data processing pipelines
- Collaborating with world-leading MRI researchers and clinicians to achieve project objectives
- Regularly keeping organizational scientific and managerial leadership informed on progress, challenges with actionable suggestions to overcome challenges
- Engaging in scientific writing including internal summaries, scientific publications, and technical or scientific writing needed for regulatory submissions or applications

Qualifications:
- At least a Ph.D. in Biomedical Engineering, Computer Science, Electrical Engineering, or related field providing similar expertise.
- Expert programmer in basic languages in a Linux environment
- Experience with parallel / GPU programming
- Previous experience implementing pulse sequences (any manufacturer acceptable)
- Preferred experience with Machine Learning algorithms

Benefits
Competitive compensation package commensurate with experience and qualifications. Includes potential bonus opportunity and other incentives. Medical, dental, and vision coverage.

For more information, contact Dr. Codi Gharagouzloo at codi@imaginostics.com