

HITACHI

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Job Description

Job Title: Senior Physicist

Location: Corporate Headquarters, Twinsburg, Ohio

Summary

Primary responsibilities of the Senior Physicist include direct engineering design, implementation, and testing of pulse sequences and MRI physics projects, along with image quality improvement activities, and collaboration with outside research groups. All functions are expected to be performed in a team-oriented fashion.

Essential Functions and Responsibilities

- Provide direct engineering design, implementation and testing input/effort to MRI physics projects assigned
- Work with HHA Clinical Science Group and Applications team to troubleshoot and resolve MRI image quality issues.
- Collaborate with external research groups to conduct research to advance the MRI capabilities of the company.
- Continually look for areas in which the patent portfolio of the company can be expanded, and participate in the submission of patent applications.
- Continually look for areas and topics which can be presented as papers/posters at industry related conferences and participate in the realization of these papers/posters.
- Plan, organize and schedule projects assigned in compliance with regulatory requirements.
- Conduct design reviews as required by the development methodology.
- Assure that design standards are used when applicable, and that a disciplined design methodology is followed.
- Assure that designs adequately treat quality, safety, regulatory compliance, serviceability, test and reliability.
- Work closely with other functional areas to insure integrity of planning and product design integrity.
- Keep up to date on MR techniques for imaging and related applications.

Education/Experience

- MS or PhD in a related field and 5 or more years' experience in the development of MR imaging systems, with demonstrated accomplishments in designing sequences and/or reconstruction methods.
- Possess considerable theoretical knowledge of MRI physics.
- 5 + years of MRI pulse sequence design for commercial human MRI machines
- Understanding and practical experience in machine learning an artificial intelligence preferred.
- Familiarity with Matlab, Visual Studio
- Experience in MR hardware, RF coils, RF pulse design and parallel imaging techniques, in-depth theoretical knowledge in these fields
- Experience with writing scientific conference abstracts and journal papers
- Experience collaborating with external research firms in the development of new imaging capabilities

Certifications

- None required.

Physical Requirements

- The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job:
 - Usual office working conditions.
 - Frequently required to sit; talk; or hear.
 - Frequently use fingers to type and do other fine motor tasks.
 - Occasionally required to stand; walk, handle, or feel; reach with hands and arms; and stoop; kneel; or crouch.
 - Occasionally lift and/or move up to 20 pounds.
 - Specific vision abilities required by this job include close vision, distance vision and depth perception.
 - Ability to work around an MRI magnet with field strengths up to 3.0 tesla.

Additional Needs/Requirements

- Problem Solving Skills- Strong ability to resolve a conflict or issue quickly and completely; providing alternative solutions as necessary.
- Organizational Skills- Strong ability to manage and execute multiple diverse projects at the same time; organize work, self and staff as necessary.
- Communications Skills- Ability to communicate with individuals from diverse backgrounds; actively leads and participates in meetings and other departmental gatherings; excellent verbal and written communication skills.
- Interpersonal Skills- ability to address issues and maintain confidentiality; develop relationships. Strong listening skills and ability to determine needs of customers, employees, colleagues and vendors.
- Teamwork Skills-Strong ability to work with staff and develop methods to encourage maximum work effort and avenues to expand knowledge of functional area.

- Valid driver's license
- Access to a national credit card

Nothing in this job description restricts management's right to assign or reassign duties and responsibilities to this job at any time.

The Essential Functions and Responsibilities outlined represent typical duties required of the job. The Company will make every effort to reasonably accommodate qualified individuals with disabilities.