Senior Scientist

Locations: Minnesota, United States
Job Family: Research & Development

Division: Siemens Healthineers
Business Unit: Diagnostic Imaging
Requisition Number: 206302
Primary Location: United States-Minnesota-
Assignment Category: Full-time regular
Experience Level: Senior level
Education Required Level: Master's Degree
Travel Required: 10%

Division Description:

Siemens is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 165 years. As a global technology company, Siemens is rigorously leveraging the advantages that this setup provides. To tap business opportunities in both new and established markets, the Company is organized in nine Divisions: Power and Gas, Wind Power and Renewables, Energy Management, Building Technologies, Mobility, Digital Factory, Process Industries and Drives, Healthcare and Financial Services.

The Siemens Healthcare Division develops innovations that support better patient outcomes with greater efficiencies, giving providers the confidence they need to meet the clinical, operational and financial challenges of a changing healthcare landscape. As a global leader in medical imaging, laboratory diagnostics, and healthcare information technology, we have a keen understanding of the entire patient care continuum—from prevention and early detection to diagnosis and treatment.

For more information, please visit: http://www.usa.siemens.com/healthcare

Job Description:

As a remote employee in the Magnetic Resonance (MR) Research Collaborations Group, manage the research collaboration with a leading academic center in Rochester, MN.

Position Overview

The Siemens MR R&D team in the US is a multidisciplinary group of highly motivated scientists, engineers, and advanced application specialists based at various locations across the country, and working closely with our research partners at Universities and academic hospitals.
We are seeking a highly motivated and experienced individual to join our team to help maximize the clinical and business impact of our research work. The position will be based at a leading academic institution in Rochester, MN, and will report to the MR Zone Research Director for the Midwest zone. The individual will be responsible for driving innovative and clinically relevant MR techniques from prototype to a commercially available product. The individual is expected to take a lead in design, implementation, and execution of research projects 7T and other field strengths, in collaboration with our academic and clinical partners.

Furthermore, the individual will act as a liaison between Siemens’ research collaborators and Siemens’ internal groups worldwide, including, but not limited to R&D, product definition and development teams, and Marketing.

Strong expertise in clinical applications of MR and its physical principles and understanding of how an MRI scanner works is required. Prior experience with ultra-high field MR imaging is highly desired. Substantial experience in C++/C# software development and design of MR sequences and image reconstruction using the Siemens SDE platform (IDEA/ICE) is expected, as well as knowledge in image post processing. Strong attention to detail, outstanding communications skills, ability to create new and innovative solutions, establish and maintain relationships with a variety of people in different roles / levels and physical locations are critical. An outstanding track record of peer reviewed publications is highly desired.

**Responsibilities**

Duties will include but are not limited to the following areas:

**Collaboration Management**
- Develop and manage the research collaboration with your academic partner.
- Define and execute research projects with your academic partner to generate scientific results that are relevant for the academic and industrial partnership.
- Adhere to Siemens’ collaborations policies, and take ownership of the processes for collaboration management with your assigned partner.

**Research and Development**
- Work closely with your academic partner to drive MR research and translate this knowledge into MR products.
- Drive the development of novel, clinically relevant techniques (MR pulse sequences and image reconstruction) with our research partner.
- Develop and release prototypes of novel techniques in compliance with highest source code quality.
- Evaluate prototypes, and publish results in peer-reviewed journals.
- Conduct original research resulting in patent applications.
- Educate R&D and Applications colleagues on clinical research issues.

**Product Development**
- Product integration of innovative techniques according to quality standards for medical devices.
- Implementation of improvements of currently existing product features.
- Maintenance and improvements of existing code base, bug fixing, testing.
- Contribute to product protocol development for novel features.

**Sales and Marketing Support**
- Provide content for articles for Siemens publications such as MAGNETOM Flash together with internal and external collaborators.
- Support educational meetings, tradeshows, and site visits.
- Answer questions from Sales and Marketing related to areas of the team’s responsibility.
- Demonstrate strong knowledge of organization’s business practices, issues faced, and contribute to problem resolution of those issues.

Required Knowledge/Skills, Education, and Experience
- Ph.D. in Biomedical Engineering / Biomedical Physics / Imaging Physics, or equivalent.
- Strong collaboration skills and ability to thrive in a dynamic environment.
- Strong MR physics background.
- Prior experience with ultra-high field MR imaging.
- Expertise in MR imaging techniques and clinical applications.
- Experience in working with internal and external partners.
- Substantial experience in C++/C software design, implementation and coding.
- Experience using Matlab for signal and image processing.
- Outstanding writing, presentation, and communication skills.
- Excellent teaching skills and a proactive can-do attitude.
- Ability to work independently and prioritize work.
- Ability to multi-task and follow through.
- Detail-oriented and organized.
- Skilled in MS office software applications (PowerPoint, Word, Excel).
- Ability to travel approximately 10%

Preferred Knowledge/Skills, Education, and Experience
- Expertise in image post processing methods such as segmentation and registration approaches.
- Prior experience working on Siemens’ MR systems in pulse sequence design and image reconstruction is highly desired.
- Ability to relocate domestically and internationally preferred.

Equal Employment Opportunity Statement
Siemens is an Equal Opportunity and Affirmative Action Employer encouraging diversity in the workplace. All qualified applicants will receive consideration for employment without regard to their race, color, creed, religion, national origin, citizenship status, ancestry, sex, age, physical or mental disability, marital status, family responsibilities, pregnancy, genetic information, sexual orientation, gender expression, gender identity, transgender, sex stereotyping, protected veteran or military status, and other categories protected by federal, state or local law.

EEO is the Law
Applicants and employees are protected under Federal law from discrimination. To learn more, Click here.

Pay Transparency Non-Discrimination Provision
Siemens follows Executive Order 11246, including the Pay Transparency Nondiscrimination Provision. To learn more, Click here.