All required qualifications must be documented on application materials.

**Required Qualifications:**
- An advanced degree in Physics, Engineering, Computer Science, or related discipline with 1 or more years of research training.
- Demonstrated ability to develop, modify and test MR pulse sequences on a clinical MRI platform, knowledge of MRI physics
- Demonstrated ability to work in a team environment
- Excellent verbal and written communication skills

**Preferred Qualifications:**
- Experience with Pulse Sequence Programming on the Siemens Platform (IDEA) and C++.
- Experience in image reconstruction
- Experience in scanning human subjects

**Job description:**
The University of Minnesota’s Center for Magnetic Resonance Research (http://www.cmrr.umn.edu/) has an opening for a Researcher to assist in developing methods for MRI imaging for both brain and body (prostate, breast, etc.) applications on Siemens 3T and 7T and 10.5T platforms. The primary responsibility will be programming and testing acquisition pulse sequences and image reconstruction methods, including field monitoring (e.g., using SKOPE field probes) based image reconstruction and/or prospective acquisition corrections. Some scanning of human subjects (volunteers and patients) may also be required. The researcher will be encouraged to be involved with, advance, and develop any combination of technologies that are used at CMRR, including high performance gradients, high channel count coils, field monitoring cameras, MRI in inhomogenous fields, exploiting indigenous contrast, accelerated image reconstruction and Deep learning/AI. He/She would support such technologies for dissemination within CMRR, to external collaborators, and users in general.

**Responsibilities**
- 80% - Develop, modify, and test MR pulse sequences using the Siemens development environment
- 10% - Collaborate with CMRR researchers to develop new strategies and tactics for MR imaging
- 5% - Scan phantoms and human subjects to test, optimize and integrate novel methods
- 5% - Involved with advancing and developing new technologies such as: gradients, RF coils, field cameras and image reconstruction.
- Other duties as assigned

The University of Minnesota offers a comprehensive benefits package including:
- Competitive wages, paid holidays, vacation and sick leave
- Low cost medical, dental, and pharmacy plans
- Health care and dependent daycare flexible spending accounts
- Excellent retirement plans with employer match
- Disability and employer paid life insurance
- Wellbeing program with reduced insurance premiums
- Tuition reimbursement opportunities covering 75%-100% of eligible tuition
- Student loan forgiveness opportunity
- Opportunities for growth and promotion
- Employee Assistance Program

Applications can be submitted using this link: https://hr.my.umn.edu/jobs/ext/344956

For more information regarding benefits: https://humanresources.umn.edu/sites/humanresources.umn.edu/files/2019_tcd-fpa-75100-ben-0105-10_0.pdf