



**Software Developer for
Medical Imaging Research**
*University of Wisconsin Madison
Department of Radiology
Madison, Wisconsin, USA*



The Magnetic Resonance Technology and Use Design (MRTUD) group (mrtud.radiology.wisc.edu), part of UW Madison Radiology, has an opening for a software developer to work with our team of engineers and physicists to facilitate the design, development, and deployment of rapid, next generation MRI methods for clinical use. Our software-based innovations include algorithm design, manipulation of magnetic fields in an MRI scanner for data acquisition, rapid and robust image reconstruction, and methods to simplify and clarify scanner operation. The person in this role will design and develop a new version (front and back end) of our open-source development platform GPI (gpilab.com), develop frameworks for our computational infrastructure, write and optimize code (primarily C++, perhaps also on GPU), help design and facilitate changes to the scanner interface and operation, and aid in development of projects involving AI/ML.

Candidate Qualifications. Candidates must have, at minimum, a Bachelors degree in computer engineering or comparable field - candidates with higher level degrees are encourage to apply, as the scope of the role will depend on qualifications.

It is desirable that the candidate has experience, training and a strong interest in many of the following areas:

- Knowledge/experience with signal processing and/or medical imaging.
- Software architecture design (front and back end).
- Coding optimization and development of libraries/frameworks.
- Numerical methods for linear algebra
- Knowledge of machine Learning / Deep Learning methods and experience with AI software such as TensorFlow or PyTorch.

The successful applicant must be able to work well independently and also as part of a larger team, and be able to work with several (related) projects at the same time.

Environment: Our group is part of a large, active, collaborative MRI research community. Madison is a vibrant college town with a strong sense of community. It is also the capital city of Wisconsin, is located between two large lakes, and has a wide range of restaurants, outdoor activities, and music and cultural recreational opportunities.

For more information please contact Jim Pipe at jpipe@wisc.edu.

To apply, go to:

<https://jobs.wisc.edu/jobs/software-developer-medical-imaging-research-madison-wisconsin-united-states>