APPLY HERE

RECONSTRUCTION SCIENTIST (MR)
Mayfield Village (Cleveland), Ohio
www.research.us.medical.canon

COMPANY DESCRIPTION
Canon Medical Research USA, Inc. (CMRU) is a multi-modality R&D organization creating next-generation medical imaging systems. It is equipped with cutting-edge instrumentation, prototyping, hardware labs and scientific computing facilities in order to perform research targeted to pre-clinical and clinical CT, PET, MRI, and X-ray systems. For those who like to develop new technologies and research new ways of using them, Canon is a rewarding place to work, due to its focus on innovation as the lifeblood of new products.

CMRU is committed to recognizing and appreciating the variety of characteristics that make individuals unique in an atmosphere that promotes work/life balance and celebrates individual and collective achievement. We are especially interested in qualified candidates who can contribute, through their experience, education, research and/or service, to the diversity and excellence of our organization and the scientific and engineering community at large.

CMRU offers a great work environment, professional development, challenging careers, and competitive compensation and benefits. We are an equal opportunity employer (EOE).

SUMMARY OF POSITION
CMRU has an immediate opening for a Reconstruction Scientist in our Magnetic Resonance Imaging (MRI) business unit located in Mayfield Village, an eastern suburb of Cleveland, Ohio.

The Reconstruction Scientist will contribute to the productization of state-of-the-art features for Canon Medical MRI. A key role for this scientist will be to research and develop advanced image reconstruction algorithms for release on Canon Medical MRI systems.

RESPONSIBILITIES
- Research, design, prototype, and productize advanced image reconstruction algorithms
- Optimize reconstruction algorithms and software design to enable clinically acceptable reconstruction time
- Research and report on technical trends in numerical optimization and software engineering to influence future project and product strategy
- Generate intellectual property (patents, conference publications)
QUALIFICATIONS

Education
• M.S. or Ph.D. in software engineering, electrical engineering, applied mathematics, or equivalent; or 3-5+ years related experience

Experience
• Significant experience in developing advanced reconstruction algorithms for medical imaging (preferably MRI), including iterative methods like compressed sensing and low-rank reconstructions
• Demonstrated understanding of C++ programming (including object-oriented principles) and common debugging practices
• Prior experience with being part of a multidisciplinary team particularly in the medical applications field

Key Competencies
• Ability to design high performance software, including use of multithreading, vectorization, and HW accelerated programming (CUDA)
• Proficiency with Python and Matlab
• Proven ability to be a proactive, productive, and flexible team member
• Excellent analytical and problem-solving skills
• Results-oriented and driven by innovation and creativity
• Excellent verbal and written communication skills especially across disciplines

Travel
• Ability to complete domestic and international travel (10% of time)