

## Postdoctoral and Research Scientist Positions in Advanced Magnetic Resonance Imaging and Image Processing

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**Position description:** Postdoctoral and research scientist positions are available immediately on signal and image processing for motion-robust MRI acquisition and reconstruction (diffusion-weighted MRI, susceptibility-weighted MRI, functional MRI, and MR angiography) in the Intelligent Medical Imaging (IMAGINE) Research Group<sup>1</sup> of the Computational Radiology Laboratory (CRL)<sup>2</sup> at Boston Children's Hospital. The postdoctoral researchers and scientists will develop new imaging methods, algorithms, and tools, validate, and implement them on state-of-the-art 3T MRI scanners for improved diagnosis and prognosis of pediatric disease, especially those that affect early brain development in fetuses and newborns. Positions are full time with benefits. A two-year commitment is required with possibility of extension. Salary will be competitive and commensurate with qualifications.

**About:** Boston Children's Hospital (BCH) is ranked #1 in many disciplines in US News ranking of pediatric hospitals. Researchers at CRL are affiliated with Harvard Medical School, which is ranked #1 in US News ranking of medical schools. CRL works closely with industrial partners.

### Minimum requirements:

- PhD in electrical or biomedical engineering, medical physics, applied mathematics, computer science, neuroscience, or a related field with a research focus on signal and image processing /medical image computing, and/or magnetic resonance imaging
- Extensive experience in high-performance programming with C++ and Python
- Demonstrated record of high-quality publications in biomedical signal/image processing

### Highly desired qualifications:

- Experience in developing innovative methods of
  - Magnetic resonance imaging, MR image reconstruction
  - Diffusion weighted imaging, Susceptibility weighted imaging, MR angiography
  - Neuroimaging and functional connectivity MRI,
  - Advanced image and signal processing,
  - Medical image registration, restoration, and segmentation.

**To apply:** Only applications that strictly meet the minimum requirements will be considered. Interested candidates should send a full CV along with a copy of a technical paper, desired start date, contact information of 3 references, and one paragraph statement of goals to Ali Gholipour, PhD at: [ali.gholipour@childrens.harvard.edu](mailto:ali.gholipour@childrens.harvard.edu)

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<sup>1</sup> <https://imagine.med.harvard.edu/>

<sup>2</sup> <http://crl.med.harvard.edu/>

