



## Musculoskeletal Digital Innovation & Informatics (MDI<sup>2</sup>) Program

*Department of Orthopaedic Surgery & Sports Medicine  
Boston Children's Hospital, Harvard Medical School*

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### **Postdoctoral Fellowship in Computer Vision Applications in Musculoskeletal Injuries**

The Musculoskeletal Digital Innovation and Informatics (MDI<sup>2</sup>) Program in the Department of Orthopaedic Surgery at Boston Children's Hospital and Harvard Medical School has an immediate opening for an outstanding, highly motivated Postdoctoral Research fellow to work on several computer vision projects to assist with clinical decision making in patients with a range of orthopedic problems. The Postdoctoral Research Fellow will work with a multidisciplinary team of biomedical engineers, orthopedic surgeons, and computer and data scientists to develop algorithms to analyze medical images (e.g., MRI and CT). This fellowship opportunity is primarily focused on translational research with immediate impact on clinical care of patients with a range of musculoskeletal conditions, through publication of novel findings and development of computational tools used by clinicians. The postdoctoral fellow will have joint appointments at Boston Children's Hospital and Harvard Medical School and will benefit from access to the largest medical R&D community in the world (Longwood / Boston), along with numerous career development resources offered by Harvard University and its affiliated hospitals and research centers. The successful candidate will have:

- PhD or MD/PhD in Computer Science or related fields with strong background in Computer Vision and ML platforms.
- Experience taking a Computer Vision project from concept to production
- Expertise with Python
- Experience with Medical Images
- Experience with Generative AI and Large Vision Models
- At least one first author journal publication or peer-reviewed conference papers (e.g., MICCAI)
- Excellent communication skills in English.
- Considering the translational nature of our work, prior relevant industry experience (i.e., internship) is highly desirable.

This is a full-time one-year appointment with potential second year extension based on applicant's performance. Interested applicants, please send your CV along with a copy of a technical paper, a "paragraph" including statement of goals and contact information for three references to:

#### **Ata Kiapour, PhD MMSc**

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