Musculoskeletal Informatics Group
Department of Orthopaedic Surgery
Boston Children's Hospital
Harvard Medical School
Musculoskeletal.ai | @ MSK_DATA

Postdoctoral Fellowship in NLP Applications in Musculoskeletal Injuries

The Musculoskeletal Informatics Group 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 developing NLP-based tools to assist with clinical decision making in patients with a range of orthopedic problems. The postdoctoral fellow will work with a multidisciplinary team of biomedical engineers, orthopedic surgeons, and computer and data scientist to develop unbiased algorithms to analyze medical records. 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 NLP and ML platforms.
- Experience in NLP feature engineering and modeling (e.g., text classification, entity recognition, entity extraction, question answering)
- Experience taking an NLP project from concept to production
- Experience with Large Language Models
- Expertise with Python
- Experience with healthcare datasets
- Experience with Generative Adversarial Network (GAN)
- At least one first author journal publication or peer-reviewed conference papers (e.g., ACL, EMNLP, NAACL, AAAI, ICML, NeurIPS)
- 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
Director of Musculoskeletal Informatics Group
Department of Orthopaedic Surgery, Boston Children's Hospital
Assistant Professor of Orthopaedic Surgery, Harvard Medical School
Faculty Affiliate, Harvard Data Science Initiative
Ata.kiapour@childrens.harvard.edu