



SYMBIOSIS CENTRE FOR MEDICAL IMAGE ANALYSIS

Symbiosis International (Deemed University)

(Established under section 3 of the UGC Act, 1956)

Re-accredited by NAAC with 'A++' Grade | Awarded Category - I by UGC

Founder: Prof. Dr. S. B. Mujumdar, M. Sc., Ph. D. (Awarded Padma Bhushan and Padma Shri by President of India)

SCMIA/ADMIN/2024/03

Date: 09 Jan 2024

Postdoctoral Research Fellow (PDRF) positions at Symbiosis International (Deemed University), Lavale, Pune.

The Symbiosis Centre for Medical Image Analysis (SCMIA) (<https://scmia.edu.in/>) at the Symbiosis International (Deemed) University invites applications for two Postdoctoral Research Fellow positions. These positions are immediately available and are in the domain of advanced computational imaging for medical image acquisition, analysis, and synthesis.

Who are we

Our research center (SCMIA) is one of a kind in India as it is focused on conducting translational research in the medical imaging domain and has dedicated access to engineering (networking technologies, robotics, etc.), computational (servers, GPU workstations etc.), and medical (MRI, CT imaging scanners and data) facilities. The center is located at Symbiosis' Lavale campus between the Engineering Institute (Symbiosis Institute of Technology) and the Symbiosis University Hospital and Research Center (SUHRC). The successful candidate must be highly motivated, goal-oriented, and have a proven ability to solve image analysis problems associated with musculoskeletal system disorders and orthopedic biomechanics.

What are we looking for

We are looking for candidates who have a passion and translational expertise in one or more of the following areas: deep learning/machine learning for medical imaging; musculoskeletal imaging-based biomechanics; functional neuroimaging (fMRI); diffusion MRI; radiomics or radio-genomics; applied AI for medical image analysis; computational imaging; image-guided medical robotics; and advanced medical imaging technologies. A knowledge of handling high-end computing systems and GPU servers such as NVIDIA DGX would be a plus.

What you will be working on

The selected candidates will work on one of the ongoing collaborative projects with international institutes. These include the University of Cambridge, UK (femoroacetabular impingement and its clinical management), the University of Cape Town, South Africa (Digital Human Musculoskeletal Model development), IMT Atlantique, France (Shoulder joint disorders), Old Dominion University, USA (intracranial tumor neurosurgeries), and German Sports University, Cologne (Developmental Dysplasia of the hip). The responsibilities within each project include publishing scientific results in peer-reviewed journals, working closely with the faculty and research center staff for writing/submitting research proposals, data acquisition and analysis, mentoring/supervising research activities for graduate and undergraduate students, and interacting with the collaborators and other stakeholders such as radiologists, oncologists, neurologists, surgeons, biostatisticians, other clinicians, and engineers.

Qualifications

A Ph.D. (or ABD) in computer science, electronics and telecommunication, data sciences, mathematics, biomedical engineering, etc., with experience in medical imaging and machine learning domains. At least two research papers with a respectable impact in the concerned research area and publication in journals indexed in WoS/Scopus.

Terms of Service:

The appointees will be called Postdoctoral Research Fellow (PDRF), and the initial award will be for **ONE** year, which can be extended for a maximum of Two years. The extension after each year will be after a thorough review of the candidate's performance.

How to apply:

Interested candidates should submit the following application materials to Dr. Bhushan Borotikar by January 20th 2024, at: head@scmia.edu.in

- 1) A cover letter
- 2) A curriculum vita
- 3) A brief statement (2 pages max) of research statement
- 4) PDF copies of three recent publications
- 5) List of three professional references

Notes:

- These fellowships are open to foreign nationals and overseas citizens of India, too.
- A mere fulfillment of the required minimum qualifications and experience does not mean a candidate should be called for discussion.
- The foreign residents and overseas citizens of India can attend the interview via Zoom.
- These positions will remain open until filled.

Dr. Bhushan Borotikar

Head SCMIA