

# Biomedical Informatics Lab



## OPEN POSITION: **Staff Researchers**

### Artificial Intelligence for Medical Imaging and Signal Processing

The Biomedical Informatics Laboratory, Heart Institute (InCor), Clinics Hospital, University of Sao Paulo Medical School is seeking staff researchers to support our efforts in scientific projects involving machine learning in medical healthcare applications. We are looking for talented and motivated professionals to join our team to solve clinically motivated problems in the fields of Medical Image and Biomedical Signal processing using new machine learning architectures. Applications include image and signal detection, segmentation, classification and biomarkers identification, and their relationship with omics and clinical data.

#### **Qualifications:**

1. M.Sc. or Ph.D. in Electrical Engineering, Computer Science, Bioinformatics and/or related fields;
2. Strong mathematical and computational skills;
3. In-depth knowledge of artificial intelligence and modern machine learning concepts;
4. Training or background in at least one of the following fields:
  - a. Medical image analysis, digital image processing, computer vision pattern recognition;
  - b. Biomedical signal processing, pattern recognition of temporal signals;
  - c. Natural language processing, pattern recognition of temporal events;
5. Expertise in deep learning frameworks, in addition to programming experience in Python, Matlab and/or C++;
6. Desirable trackable record of productive research and/or publications;
7. Ability to work independently, be self-motivated, willingness to collaborate openly, give/take constructive feedback to team members.

The Biomedical Informatics Laboratory, Heart Institute (InCor), Clinics Hospital, University of Sao Paulo Medical School has been involved in research, development and implementation of solutions in Information Technology applied to the medical field since 1979. During this period, the group has become a reference center in Brazil in the fields of image and signal processing, and medical information systems. In the last few years, the group has been committed to advancing the analysis and integration of medical information (text data, omics data, images and signals) for targeted, precise disease treatment.

Selection for these positions will be based solely on merit. Salary will commensurate with experience and background.

Applicants should submit a CV, a brief statement of research interests, and two letters of reference by email with the subject "**Staff Researchers Application**". Interested applicants are invited to contact:

Prof. Marco Antonio Gutierrez  
Chief, Biomedical Informatics Laboratory  
Director, Division of Informatics  
Heart Institute (InCor), Clinics Hospital  
University of Sao Paulo Medical School

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