PhD position in Advanced Medical Image Analysis

PhD position in Advanced Medical Image Analysis with Applications in Type 2 Diabetes and Cardiovascular Disease

At Uppsala University, Department of Surgical Sciences, Section of Radiology, education and research is pursued within the topic Radiology. The main emphasis is on diagnostics and intervention with radiological methods. The topic includes clinical as well as experimental studies. In these studies, computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomography (PET) and ultrasound is used. One project within the division concerns development and application of advanced image analysis methods for quantitative analysis of whole-body MRI and CT image data and apply these in for improved understanding of type 2 diabetes and cardiovascular disease.

Duties
Today imaging data from MRI and CT systems are collected in large scale, often together with clinical data, blood analysis data, genetic data. We are looking for a colleague that will help us develop and apply image analysis methods that can integrate imaging and non-imaging data for large-scale studies that include collection of imaging data (including the UK Biobank, and SCAPIS studies). The methods are based on image registration and deep learning-based regression analysis and associated so called cohort saliency analysis to enable interpretability of predictions. The project involves development and application of image analysis methods for processing and statistical analysis of large amounts of heterogeneous data for large-scale analysis.

Requirements
To meet the entry requirements for doctoral studies, you must
- hold a Master’s (second-cycle) degree in an area relevant to the PhD topic, or
- have completed at least 240 credits in higher education, with at least 60 credits at Master’s level including an independent project worth at least 15 credits, or
- have acquired substantially equivalent knowledge in some other way.

A strong background in medical imaging, medical image analysis, physics, or medicine, is necessary for this position.

We are looking for a person interested in both developing the technologies further and applying them to answer medical questions.

Fluency in spoken and written English is a must.

You are expected to be able to teach in Swedish or in English.

Rules governing PhD students are set out in the Higher Education Ordinance chapter 5, §§ 1-7 and in Uppsala University’s rules and guidelines.

**About the employment**
The employment is a temporary position according to the Higher Education Ordinance chapter 5 § 7. The position is for a maximum of five years and includes courses and at most 20% departmental duties. Scope of employment 100 %. Starting date in March 2024 or as agreed. Placement: Uppsala

**For further information about the position, please contact:** Joel Kullberg (joel.kullberg@uu.se, +46-(0)73-9779386.). For administrative matters, contact human resource administrator Karin Johansson (karin.m.johansson@uu.se).

**Please submit your application by 24 January 2024, UFV-PA 2023/4671.**

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Please do not send offers of recruitment or advertising services.

Submit your application through Uppsala University's recruitment system.

**Placement:** Department of Surgical Sciences  
**Type of employment:** Full time, Temporary position  
**Pay:** Fixed salary  
**Number of positions:** 1  
**Working hours:** 100%  
**Town:** Uppsala  
**County:** Uppsala län  
**Country:** Sweden  
**Union representative:** ST/TCO tco@fackorg.uu.se  
Saco-rådet saco@uadm.uu.se  
Seko Universitetsklubben seko@uadm.uu.se  
**Number of reference:** UFV-PA 2023/4671  
**Last application date:** 2024-01-24

Apply for position