



CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

**YES.**

We'll show you how at Fraunhofer.

YOU ARE INTERESTED IN MEDICAL IMAGING TECHNOLOGY?

JOIN US AT FRAUNHOFER MEVIS AS A

## **PH.D. STUDENT (F/M/D) "MAGNETIC RESONANCE IMAGING"**

Fraunhofer MEVIS is a world leading research and development center driving the digital transformation of medicine. We pursue a patient-centered approach tailored to clinical processes to solve important questions in precision diagnosis and therapy. We conduct both publicly funded R&D projects as well as industry funded contract R&D and product development.

As part of a collaboration between DFKI, University of Bremen and Fraunhofer MEVIS we plan to develop a domain language for Magnetic Resonance Imaging (MRI) that resembles the typical patterns and regularities of MRI sequences. It will define a syntax to easily combine and steer the hardware components used in an MRI scanner, increasing the accessibility of MRI sequence programming for machine learning and AI. Eventually, this will allow automated generation of MRI sequences for optimized image quality. Interesting and challenging tasks in the field of MRI are waiting for you!

## What we expect from you

- an above-average master's degree (scientific university degree) in physics, computer science, mathematics, engineering or a related discipline
- experience in object-oriented programming (C++, Python Lua)
- experience in the area of medical imaging, ideally Magnetic Resonance Imaging (MRI)
- experience in machine learning / AI will be advantageous
- high motivation to work scientifically both independently and in an interdisciplinary team with the goal of obtaining a doctoral degree
- high motivation to work scientifically with regular presentations of project results
- very good English language skills

## What you can expect from us

You will work in a young interdisciplinary institute with flat hierarchies and a variety of training and development opportunities. You can freely arrange your working hours within the framework of our trust-based working hours model and work from home if required.

The weekly working time is 39 hours. The full-time position with half pay allows 50% of your working time for your doctorate and 50% for the collaboration in the research project as a research assistant.

The position is initially limited to 3 years.

The Fraunhofer-Gesellschaft attaches great importance to the professional equality of all genders.

Fraunhofer MEVIS bears the "family logo" of the Fraunhofer-Gesellschaft - a confirmation that we as an institute offer outstanding opportunities for a good work-life-balance. For example, we support our employees with flexible work options and their arrangement in terms of time and place, part-time work, childcare options (including taking care in emergencies), support in the area of homecare/eldercare, and the organization of parental leave and return to work after parental leave.

The employment of severely disabled people is also an important concern for us. If they are equally suitable, people with a severe disability are given preferential consideration.

Fraunhofer is Europe's largest application-oriented research organization. Our research efforts are geared entirely to people's needs: health, security, communication, energy and the environment. As a result, the work undertaken by our researchers and developers has a significant impact on people's lives. We are creative. We shape technology. We design products. We improve methods and techniques. We open up new vistas.

In case of questions regarding this position, please contact:

**Dr. Daniel Hoinkiss**

**daniel.hoinkiss@mevis.fraunhofer.de**

**<http://www.mevis.fraunhofer.de>**

Job Reference: **MEVIS-2021-29**

For further information and application guidelines see our website:

**<https://recruiting.fraunhofer.de/Vacancies/63673/Description/2>**