

Germany's largest research organization, the Helmholtz Association, launches Helmholtz AI: This dedicated, interdisciplinary platform will compile, develop, foster, and promote applied artificial intelligence (AI) and machine learning (ML) methods nationwide for all Helmholtz centers in collaboration with its external and university partners. Its central unit is currently being implemented in Munich, one of Germany's major hubs for applied AI/ML, at the Helmholtz Center Munich. With Helmholtz AI, the Helmholtz Association now has the unique opportunity to leverage its broad and large data sets across many fields with analysis expertise to answer questions with societal impact, with health being a major application area.

For our new research group headed by Dr. Heidi Seibold we are currently looking for a

Researcher or Ph.D. candidate (f/m/d) in "Open Data Science and AI"

Job Description

The project will focus on improving the way we do science by making it more open and reproducible. In times of the so-called "reproducibility crisis" various research fields are evaluating their practices. In this project we will evaluate and improve the work of computational sciences such as data science and machine learning. We will learn from other fields such as medicine and psychology and adapt their strategies to something that fits in the computational sciences. Strategies we will look at include: evidence-based studies, preregistration, independent analyses, meta-analyses and blinding.

Aim of the project involves:

- Adapting machine learning research according to best practices of evidence-based research and implementing an evidence-based benchmarking study.
- Translating best practices from medical research to AI research.
- Exploring how preregistration could be used in AI research and defining a gold standard.
- Making results of this research available in different formats.

As part of the project we will collaborate with clinical and machine learning researchers in Munich and elsewhere. Research stays abroad are possible.

The project can be a Ph.D. project and the candidate can enroll in the Munich School for Data Science ([MUDS](#)).

Your Qualifications

- Strong interest and background in Open Science, Reproducible Research and Machine Learning.
- Master's Degree in Statistics, Computer Science, Computational Medicine, Computational Social Science or similar fields. Unconventional backgrounds can be an advantage for this work.
- Scientific curiosity and ability to work independently.
- Fluency in spoken and written English.
- Programming skills in R and/or Python.
- Interest in health research.
- Making the world a better place is more important to you than prestige.

The following qualifications are considered advantageous:

- Experience in machine learning benchmarking, meta-analyses, or blinded analyses.
- Experience in communicating across discipline boundaries.
- Strong communication and presentation skills.

Our Offer

As a member of this new group working on Open AI, you will change the way we do AI research for the better. We are an enthusiastic team and Helmholtz AI provides an optimal atmosphere to grow and do exciting research.

At the Helmholtz Zentrum München, you can contribute together with leading researchers to the investigation of the development, prevention and treatment of environmental diseases such as cancer, diabetes, chronic lung diseases and allergies. In order to further promote your professional development, we offer extensive and targeted research training and career programmes. We support the reconciliation between work and private life with flexible working time models, occupational health management, day care facility for children, a child care subsidy, Elder Care, as well as other counselling and support services.

Remuneration and benefits are in accordance with the collective agreement for the public service (EG 13 75% TV EntgO Bund). The position is (initially) limited to three years, with possibility to extend by another year.

The activity involves specialised knowledge and experience specific to one's own scientific skills.

As a holder of the Total E-Quality Award, we promote equality of opportunity. Applications from women are welcome. Qualified applicants with physical disabilities will be given preference.

For initial enquiries regarding the position, please email Heidi Seibold (heidi.seibold@helmholtz-muenchen.de) with your attached CV.

For any other administrative enquiry please contact Meike-Jana Kalb (meike-jana.kalb@helmholtz-muenchen.de).

The application should be a single PDF file containing a curriculum vitae, the names and contact details of at least two references, and a brief description of why you are interested in the position. Please send your application to heidi.seibold@helmholtz-muenchen.de.

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