

Helmholtz AI is an interdisciplinary research platform that compiles, develops, fosters, and promotes artificial intelligence (AI) and machine learning (ML) methods across the Helmholtz Association, Germany's largest research organization. Its central unit is located in Munich, one of Germany's major hubs for AI/ML and most livable cities.

For the Helmholtz Al group (helmholtz.ai) headed by Niki Kilbertus we are currently looking for a

# Ph.D. candidate (f/m/d) in Reliable Machine Learning

### Vision

Machine learning systems increasingly interact with humans, for example by making consequential decisions or influencing our behavior. These applications raise concerns about fairness, long-term consequences and privacy. Our group investigates how data-driven systems interact with society and develops reliable, fair and privacy-preserving algorithms for these settings. As a key tool for trustworthy machine learning, we also focus on improving the applicability of causal inference techniques. To learn more, please visit: <a href="mailto:nikikilbertus.info">nikikilbertus.info</a>

## What awaits you

As a member of this group you will conduct basic machine learning methods research. This includes studying the literature, blue sky thinking, interdisciplinary dialogue, pen-and-paper mathematical analysis, as well as implementing prototypes of algorithms. Our research is driven by pressing societal challenges, but emphasizes theoretical understanding. The successful applicant will cover a spectrum between theory and application.

We are located at the Helmholtz Center Munich, which focuses broadly on health and biomedical applications. Thereby, it provides a fantastic environment to tackle societal issues in the context of healthcare. Our group is also embedded in a thriving ML community in and around Munich with close connections to the Technical University of Munich (TUM, which will be the degree granting University) and the Ludwig Maximilian University Munich (LMU). We are part of the Munich ELLIS unit and maintain collaborations with renowned researchers worldwide. Students will have the opportunity to engage in these collaborations and visit other institutions.

#### Your Oualifications

- MSc in computer science, statistics, mathematics, physics, economics, or a related area
- strong math background as well as some coding experience

#### Our Offer

To promote your professional development, we offer extensive and targeted research training and career programs. 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. 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.

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.

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

## **Application**

The application should consist of a single PDF file containing

- 1. a motivation letter with a brief description of why you are interested in the position (max. 1 page)
- 2. a curriculum vitae
- 3. transcripts from previous studies

Please also arrange for at least two reference letters sent directly to niki.kilbertus@helmholtz-muenchen.de

Please send your application document to niki.kilbertus@helmholtz-muenchen.de until November 30, 2020.