

*The Hasso Plattner Institute (HPI) is one of the top-ranking institutions for computer science in Germany and is affiliated with the University of Potsdam close to Berlin. The Digital Health Center at the HPI brings together researchers from the medical, data science and data engineering fields in order to improve the health and welfare of society.*

The Digital Health – Machine Learning group at the HPI is looking for an excellent and motivated postdoctoral researcher to join INTERVENE under the supervision of Prof. Christoph Lippert.

The INTERVENE consortium (<https://www.interveneproject.eu/>) is a 5-year 10 million € EU funded project that aims to develop and test next generation tools for disease prevention, diagnosis and personalized treatment utilizing the first US-European pool of genomic and health data and integrating longitudinal and disease-relevant -omics data into genetic risk scores. The consortium includes 17 collaborating partners from 10 countries.

The position is funded for 2 years with possibility of extension. We offer stimulating work in a collegial and international environment with an unprecedented amount of health and genetic information from 1.7 million individuals.

#### About our research:

The Digital Health – Machine Learning group, led by Prof. Christoph Lippert, develops and applies machine-learning methods for the analysis of health-related data, including genetics, patient records and imaging data. Most recent work has been focused on deep neural networks and their use in statistical tests and cohort studies. In the past, Christoph Lippert has developed widely applied efficient statistical methods that correct for confounding in Genome-wide association studies.

#### Job description and qualifications:

The postdoc will work on the development and application of next generation risk prediction methods. This will involve learning interpretable representations from high-dimensional electronic health record data and using these representations to improve the performance of integrative risk scores. On the genetics side, the postdoc will leverage functional sequence annotations to prioritize causal genetic variants and improve interpretability and generalizability of genetic risk scores.

We are primarily looking for candidates with a background in statistics, machine learning or related data science. The ideal candidate would also have experience in genetic prediction methods (e.g., polygenic risk scores), genome-wide association studies and sequencing data, or experience working with imaging or health-record data (e.g., UK Biobank).

The candidate should hold a Ph.D. or be about to finish their doctorate studies in the field of genetics, statistics, mathematics, computational sciences, machine learning, or (genetic)

epidemiology. We value scientific independence, publishing experience, and an aptitude towards developing novel techniques. Together with the PI, candidates will be jointly responsible for coordinating projects and supervising PhD students. Candidates will have the possibility to visit other INTERVENE partners for research purposes, and participate in regular in-person events, for example yearly analyst meetings.

Contract & salary: The position is for a fixed term of 2 years with a possibility of extension. The salary for the position is oriented on the German collective agreement for public service of the federal states and depends on the candidate's qualifications. A trial period of 6 months will be applied.

How to apply: The application should include cover letter, CV, list of publications, contact information for referees. Documents should be submitted as a single PDF file.

The position will be open until filled. To apply, please submit the application via email to [office-lippert@hpi.de](mailto:office-lippert@hpi.de)

For further information about the position, please contact the recruiting PI: [christoph.lippert@hpi.de](mailto:christoph.lippert@hpi.de)