MDC MAX DELBRÜCK CENTER FOR MOLECULAR MEDICINE IN THE HELMHOLTZ ASSOCIATION

BIMSB THE BERLIN INSTITUTE FOR MEDICAL SYSTEMS BIOLOGY

Dr. Christoph Lippert
October 11, 2017

We are seeking candidates for a **Ph.D. student** position in the Statistical Genomics Group headed by Dr. Christoph Lippert at the Berlin Institute for Medical Systems Biology.

Job Description

As a student in the Statistical Genomics group, you will work on quantitative problems in healthcare and biology that are driven by technological advances in sequencing, medical imaging and sensors that take detailed recordings of disease-related traits at different biological scales, from molecules, over cells, tissues, and organs.

Integrated analysis of such diverse data poses many statistical and computational challenges that we plan to address, all the way from the mathematical foundations to applications that we perform in collaborations with biologists and clinicians. You will develop the statistical and computational tools that are needed to model high-dimensional phenotypes as well as their subsequent genetic analysis. Based on machine learning you will address the question how to extract and represent high-dimensional disease traits from diverse clinical data sources, including medical images, sensors and sequencing data. Further, you will address the statistical questions of how to detect and account for unwanted nuisance variation, and how to perform statistical inference on such high-dimensional data sets.

Requirements and Background

You should apply if you have a strong academic background and a Master's degree in bioinformatics, computer science, statistics, physics, or a related quantitative discipline. You should be interested in machine learning, artificial neural networks, and statistical modeling of large data sets in the life sciences. As we communicate and perform research in English, no prior knowledge of German is needed.

You can expect

- to perform research at a welcoming and internationally renowned institute that is embedded in Berlin's thriving academic environment
- to participate in a wide array of seminars, conferences, retreats, workshops, career-development courses, and social activities
- to live in a cosmopolitan city with rich cultural offerings
- a competitive benefits package with pay scale grouping according to Entgeltgruppe 13 TVÖD Bund

How to apply

Please send the following information combined into a single file to `jobs@mdc-berlin.de`

- a statement of interest
- curriculum vitae with names and contact information of two academic referees
- copy of your Master's degree certificate and transcript

As we seek to increase the number of women in computational disciplines, we explicitly encourage women to apply. We are an equal opportunity employer and value diversity at our institution.

THE DEADLINE FOR COMPLETE APPLICATIONS IS NOVEMBER 30, 2017.
Interviews are expected to take place in December 2017 and January 2018.

If you have questions don't hesitate to write to `christoph.lippert@mdc-berlin.de`