Ph.D. Student in Computational Biology and Machine Learning at SciLifeLab, Stockholm

Job description Multi-cellular biological systems display an in several ways astonishing complexity. While most of the primary structure of DNA is shared across the trillions of genomes of the cells in the human body, the cells will show a wide diversity in morphology and molecular composition. Currently, we are harnessing seemingly ever-improving techniques for the exploratory determination of genomes, transcriptomes, proteomes, and metabolomes, both in tissue and single cells. However, to fully deliver on their potential, these technologies must be matched with advanced computational analysis tools. The understanding of experimental technologies and the ability to formulate pertinent medical questions must come hand in hand with designing machine learning algorithms.

This project is concerned with Machine Learning and probabilistic modeling of proteomics data. Methodologically, this project will be focused on methods for computational predictions and inferences, as well as the implementation of such methods on modern high-performance computers and clusters. The project will be in collaboration with a machine-learning lab, a mass spectrometry lab, and a structure prediction lab. This is a four-year time-limited position that can be extended up to a year with the inclusion of a maximum of 20% departmental duties, usually teaching. In order to be employed, you must apply and be accepted as a doctoral student at KTH. The starting date is open for discussion, though ideally, we would like the successful candidate to start as soon as possible.

Qualifications A suitable background for this position would be a master's degree in Computer Science, Physics, Statistics or any other discipline with large component of quantitative science. Programming skills and language skills are required. Knowledge of biology and computational biology are regarded as advantageous qualifications.

Contact Lukas Käll, E-mail: lukask@kth.se, Tel: +46 769425179

Application Log into KTH's recruitment system, `https://kth.varbi.com/en/what:job/type:job/jobID:626865/?where=26`. Your application shall include the following documents:

1. A cover letter, stating your research interests.
2. Curriculum vitae.
3. Transcripts of course work from University/University College.
4. A link to a piece of source code that you have been involved in developing.

Deadline for application: 2023-06-01