Postdoctoral Researcher in Computational Genomics
Institute for Genomic Biology
University of Illinois at Urbana-Champaign

JOB DESCRIPTION

A post-doctoral position is available in the NIH Center of Excellence in Big Data Computing at the University of Illinois at Urbana-Champaign. The postdoc will work on the NIH-funded project titled "KnowEnG: A Scalable Knowledge Engine For Large-Scale Genomic Data" (2014-2018). The KnowEnG Center will build a computational Knowledge Engine that uses data mining and machine learning techniques to obtain and combine gene function and gene interaction information from disparate genomic data sources. More information about the Center can be found at http://www.knoweng.org

The appointed person will work on developing and demonstrating computational tools for prediction of organismal phenotypes from annotated genomes, and will be directly supervised by faculty members Saurabh Sinha (Computer Science) and William W. Metcalf (Microbiology).

This position is a 12-month, 100% time academic professional appointment with regular University benefits, renewable annually based on performance.

SPECIFIC DUTIES AND RESPONSIBILITIES

(1) Developing new approaches for predicting organismal phenotype from genotype, utilizing common tools of data mining and machine learning,

(2) Demonstrating different ways to apply the functionalities in KnowEnG to the genotype-phenotype problem, especially in the context of microbial genomes,

(3) Collaborating with other members of the KnowEnG Center to test and use these methods,

(4) Writing scientific manuscripts, including textual and graphic descriptions of results of analyses.

MINIMUM QUALIFICATIONS
Ph.D. in Computer Science, Bioinformatics, Systems Biology, or a related field, obtained within the last five years, is required. Working knowledge of data mining and statistics applied to biological domains is required.

PREFERRED QUALIFICATIONS
Research experience in informatics for microbial genomes is preferred, but not required.

APPLICATION PROCEDURES
Salary will be commensurate with training and experience. The proposed starting date is negotiable. Application materials to be submitted include a letter of interest (including email address), C.V., two representative publications, and contact information for two professional letters of reference, collated in a single PDF file. Please email these materials to

sinhas@illinois.edu. Consideration is assured for applications received by 30th November, 2014, though applications received after this date may also be considered.