

Postdoctoral Position in Machine Learning for Precision Medicine

Johns Hopkins University

A postdoctoral position is available at the Johns Hopkins department of Oncology. The position is affiliated with the Institute for Computational Medicine and the Department of Applied Mathematics and Statistics. The successful applicant will work under the mentorship of Luigi Marchionni, MD, PhD, and Donald Geman, PhD., and will primarily work on developing novel mechanistic prediction algorithms and then applying these methods for tumor classification and other problems in personalized medicine. The position will entail the analysis of high-throughput data from microarray and next generation sequencing platforms, encompassing genotyping, copy number variation, DNA methylation, gene expression, and other data modalities. Working with several collaborators throughout Johns Hopkins and in various departments will expose the fellow to many different applications, technologies, and clinical problems and will enable the fellow to develop flexible, innovative, and tailored solutions to a wide range of experimental and scientific problems.

The mentoring PIs have strong research and teaching connections with the Next Generation Sequencing Center in the JHU department of Oncology, the Department of Biostatistics in the Johns Hopkins Bloomberg School of Public Health, and the Department of Applied Mathematics and Statistics of the Johns Hopkins Whiting School of Engineering. Dr. Marchionni is also a founding member of the Center for Computational Genomics, which is a multidisciplinary, highly interactive, and supportive environment for solving biological problems that involve high-dimensional data. The fellow will also be strongly encouraged to undertake an independent research program.

Qualifications:

The ideal applicants should have

1. A PhD in a biostatistics or computer science;
2. Solid programming skills (a scripting language such as Perl or Python, a statistical analysis environment such as R, and optionally one or more compiled languages);
3. A publication record in biostatistics, computational biology, bioinformatics, genomics or related fields;
4. Creativity, enthusiasm, and excellent communication skills.

How to Apply:

Interested applicants should email a curriculum vitae and at least two recommendation contacts to marchion@jhu.edu. Applications will be considered until the positions are filled. The Johns Hopkins University is an Affirmative Action / Equal Opportunity Employer. We strongly encourage qualified women and under-represented minorities to apply.