Title of Internship
Bioinformatics/Genomics signal processing Intern

Location
Center for Biomedical Informatics, Harvard Medical School, Boston, MA

Description
We are looking for a graduate student, with experience in machine learning and/or signal processing, as an intern to contribute to developing computational algorithms and methods for detecting copy number variation (CNV) in cancer, using next generation sequencing data. This is a part time paid internship for 15-20 hour per week. The position begins January 15th 2015 and ends July 15th 2015.

Responsibilities
- Identify characteristics and limitations of current CNV detection methods
- Assess features of an effective CNV detection method
- Develop detection and noise cancellation algorithms
- Develop code (programming)
- Prepare reports

Requirements
- Background in computer science, Electrical and Computer Engineering or Bioinformatics
- Able to work in Linux environment
- Working knowledge of programming languages such as R, MATLAB and/or Python
- Experience in machine learning and/or signal/image processing
- Basic knowledge of genomics
- Experience in wavelet transforms and/or sparse signal processing is a plus
- Familiar with raw NGS data (fastq and BAM files) is a plus
- Strong communication and interpersonal skills
- Motivated and self driven

How To Apply
To apply please submit your resume, cover letter, and the names and email addresses of two references to sheida_nabavi@hms.harvard.edu