

HARVARD SCHOOL OF PUBLIC HEALTH

Department of Biostatistics 655 Huntington Avenue Boston, MA 02115

Phone: (617) 432-4917 shosui@hsph.harvard.edu

Bioinformatics Software Developer

As part of an initiative with the Harvard Stem Cell Institute, the <u>Hide Lab</u> at the Harvard School of Public Heath is looking for an experienced and enthusiastic bioinformatics software developer to participate in developing an integrated data management and analysis system for a <u>Harvard Stem Cell Commons</u>. A major goal of the system is to provide a shared environment to enable users to compare stem cell data across different laboratories, experimental platforms, organisms, and cell types. As a team, we strive to make our tools readily usable by biologists and work closely with them. This is a great opportunity to be involved in cutting edge stem cell research and the open source bioinformatics community.

Responsibilities

- Work closely with the project manager, the bioinformatics team and scientific end-users to deliver an integrated stem cell data management and analysis system
- Design, engineer and deploy custom and integrated data analysis and visualization solutions using the <u>Galaxy</u> analytical platform
- Use source control and push to production on a weekly schedule
- · Support and promote open source development and open data initiatives
- Implement user access controls and data security measures where appropriate
- Create and maintain documentation of processes, databases and applications
- Provide grant and manuscript level write ups of software solutions and analysis methods

Requirements

- M.S. degree in Computer Science, Biology, Bioinformatics or a B.S. degree with 4 years related experience
- · Strong interest in developing solutions for biological applications
- Demonstrated experience in web application development
- Ability to provide a good user interaction with workflows
- Expert knowledge of at least one programming or scripting language: C++, Java, Python, Perl, Ruby, JavaScript
- Experience with continuous integration/rapid development
- Experience using, adapting and integrating heterogeneous bioinformatics tools and data repositories
- Experience modeling, building and warehousing biological data using MySQL, PostgreSQL or equivalent
- Familiarity with data analysis concepts and knowledge of R
- Knowledge of open source software projects active projects on SourceForge, GitHub or other open source, collaborative platform is an asset
- Strong communication skills
- Ability to work independently
- Ability to multitask, accommodate shifting priorities and meet deadlines
- Experience integrating tools into the Galaxy analytical platform is an advantage

To apply, please email a CV and cover letter to Shannan Ho Sui at shosui@hsph.harvard.edu.