The Department of Data Science at the Dana Farber Cancer Institute (DFCI) seeks candidates with a strong R programming background. As part of the department's mission to collaborate with basic biologists and clinical researchers to better understand cancer and improve treatment, our department develops new statistical methods and data analysis pipelines and implements these as R packages or shiny dashboards. We need help extending and improving these, as well as training our students, postdoctoral faculty and collaborators in best practices and new developments related to R. We are seeking a software engineer to help with these challenges. The department chair will help prioritizing projects and compartmentalize them into manageable units.

The successful candidate will have a unique opportunity to work in an exceptional collaborative environment with experts in a wide range of areas including clinical trials, cancer genetics, immunology, epigenetics, machine learning, Bayesian methods, and alignment algorithms. There is room for growth in this position as the career ladder permits promotion to levels that lead groups of other software engineers. We offer salaries that are competitive with the biotech industry. Remote work is a possibility.

Located in Boston and the surrounding communities, Dana-Farber Cancer Institute is a leader in life changing breakthroughs in cancer research and patient care. We are united in our mission of conquering cancer, HIV/AIDS and related diseases. We strive to create an inclusive, diverse, and equitable environment where we provide compassionate and comprehensive care to patients of all backgrounds, and design programs to promote public health particularly among high-risk and underserved populations. We conduct groundbreaking research that advances treatment, we educate tomorrow's physician/researchers, and we work with amazing partners, including other Harvard Medical School-affiliated hospitals.

Responsibilities
As this is part of multiple ongoing collaborations, the nature of the work will depend on your strengths and experiences; this is an exciting opportunity to be involved in work with direct real-world impact and leverage our department’s expertise to build skills in a number of areas from high-performance computing/GPU acceleration, implementation of machine learning algorithms, computational biology pipelines, matrix operations on sparse data, among others. Examples of tasks you may be asked to perform are listed below.

- Work with center technical and research staff to develop tools that directly help researchers put their ideas into production.
- Maintain and improve shiny apps
- Train SAS users to use dplyr or data.table
- Iteratively develop software in collaboration with a world-leading team of researchers
- Use test-driven-development and continuous integration to ensure that the new code is reliable
- Document the software from a user and developer perspective

Qualifications

Minimum Education:

Successful completion of a coding training/coursework, software certificate program, or similar; or current enrollment in a bachelor’s degree program in Computer Science, Software Engineering, or a related field.

- You should hold demonstrable experience in R, shiny, C++, Python, and Unix.
- You will be familiar with version control (e.g. git) and standard development practice tools and be able to write modular, maintainable and testable code.
- A high level of communication skills is essential to be able to elicit complex requirements from, and convey complex requirements to, groups with differing technical backgrounds.

Please contact chair@ds.dfcicancer.harvard.edu with questions about this role.

At Dana-Farber Cancer Institute, we work every day to create an innovative, caring, and inclusive environment where every patient, family, and staff member feels they belong. As relentless as we are in our mission to reduce the burden of cancer for all, we are equally committed to diversifying our faculty and staff. Cancer knows no boundaries and when it comes to hiring the most dedicated and diverse professionals, neither do we. If working in this kind of organization inspires you, we encourage you to apply.