

Wanted: Scientific Programmer / Software Engineer for Basic Research in Cancer Genomics and Human Genetics

Rozen Lab, Duke-NUS Graduate Medical School Singapore

To apply, send e-mail to A/Prof Steve Rozen, [steve.rozen \[at\] duke-nus.edu.sg](mailto:steve.rozen@duke-nus.edu.sg)

Position posted 18 May, 2009, open until filled

Work with a dynamic group of scientists focused on deciphering the genetics that cause cancer and other human diseases (<http://www.duke-nus.edu.sg/index.php?Research/Faculty/Rozen,%20Steve.html>). You will help develop and maintain programs and software systems used within Duke-NUS Graduate Medical School and also by scientists worldwide. We do most of our work in Linux using perl. We also do continued development of an existing system that uses some C/C++ (primer3, <http://primer3.sourceforge.net>). In addition, we use the MySQL database management system and the R language for statistical computing, and we do some dynamic web development (CGI and javascript). This position offers technical variety, in terms of both development tools and software engineering tasks. It also offers the opportunity to contribute to open source development and to work on lightweight systems in which your efforts will immediately benefit users.

Overall responsibilities

Implement, enhance, and maintain software to support high-throughput biological data generation and computational and statistical analysis of the data. Work closely with lab head (principal investigator), other lab members, and collaborators to implement and support software and software systems with priorities determined by lab head.

Duties

Design, code, debug, document, deploy, and enhance small and moderate sized computer programs and software systems based on guidance from lab head. Identify, install, debug, document third party academic software as assigned by lab head, and integrate into “pipelines” for electronic analysis.

Required Qualifications

Bachelor's degree in computer science or equivalent programming experience
Strong coding (programming) skills in one of C/C++, java, or perl, and willingness to work in C/C++ and perl. (Most work will be in perl, with some work in C/C++.)
Good communication and interpersonal skills
Technical resourcefulness

Additional Qualifications

Familiarity with perl and perl modules
Experience with off-the-shelf bioinformatics software
Knowledge of SQL and a database management system such as MySQL, SQL Sever, Oracle.
Knowledge of HTML
Knowledge of web-CGI protocols or other web-based programming
Prior involvement with or courses in biology or biochemistry
Familiarity with Linux/Unix development environment
Background in statistics or the R programming language
Ability to write end-user documentation