SCIENTIFIC COMPUTING SPECIALIST POSITION

Applications are invited for a Scientific Computing Specialist who will serve as a Data Manager and Programmer in the Department of Marine Sciences at the University of Georgia in Athens Georgia. The selected individual will manage and maintain an integrated, multidisciplinary database for the "Ecosystem Impacts of Oil and Gas Inputs to the Gulf of Mexico" (ECOGIG) research program. S/he will design, develop, and administer the integrated web-based ECOGIG scientific database and application interfaces; oversee data collection, processing, and security; archive and extract data into and out of data storage systems, preserving integrity of all data; test and implement server side applications; provide assistance and training to system users; coordinate the formatting and collection of data and metadata across the ECOGIG program.

MINIMUM QUALIFICATIONS:
•Bachelor's degree in Computer Science or equivalent; at least 4 years of experience that is directly related to the duties and responsibilities specified. Science background preferred.

PREFERRED QUALIFICATIONS:

•Experience with database construction, management, and retrieval methods in modern database management systems (e.g., MS SQL Server, MySQL, Oracle);

•Ability to develop databases and on-line information systems including routine curation activities, logging, backup, verification, quality assurance checks and security;

•Ability to maintain request tracker databases for technical support, concurrent versioning systems for software development;

•Experience in analyzing operational data requirements for multidisciplinary datasets and to create and develop databases specific to program requirements;

•Experience programming in languages used for web application development such as Perl and PHP;

CONDITIONS OF EMPLOYMENT:
•Refer to Job Description below for Physical Requirements/Working Conditions.

APPOINTMENT AND APPLICATION:
This position is funded by an extramural research grant; salary will be commensurate with experience. The initial appointment is for one year but the position is renewable, pending acceptable job performance. Applications including a cover letter describing qualifications and career goals, a CV, and the names and addresses of three references should be sent to Dr. Samantha Joye (mjoye@uga.edu). Screening of applications will begin August 15, 2012 and will continue until the position is filled. The University of Georgia is an Equal Opportunity/Affirmative Action Employer and Educator.

Position Details

Specific duties include, but are not limited to:
- Designing, developing, and supporting specialized web- and windows-based forms for data archival, retrieval, and analysis
- Developing, managing and maintaining large and complex databases containing ecological, spatial, physical, and genetic data types
- Systematically archiving and preserving the integrity of incoming data

- Upholding database management protocols, ensuring QA/QC methods are strictly followed and ensuring compliance with metadata standards
- Coordinating data acquisition, archiving, querying and integration from very specialized scientific instrumentation, which requires frequent interaction with ECOGIG investigators, staff and students to determine requirements and goals and to establish priorities
- Instructing researchers and students in the operation of all data system interfaces, including data entry and documentation, database operation, text manipulation and formatting, and interactive data analysis
- Assisting in setup and maintenance of LAN and WAN connections and servers in a mixed operating system environment
- Assisting in installing and maintenance of computer soft- and hardware at UGA as needed

Required Skills
- Extensive working knowledge of relational database functionality and strong familiarity with database management systems.
- Advanced, demonstrated working knowledge of MS Access, MS SQL, stored procedures, and debugging.
- Full working knowledge of data normalization and database design.
- Ability to work with and provide training on very specialized scientific data collector outputs and formats.
- Ability to conduct assessments of the database to produce new data products to be used in publications and proposals prepared ECOGIG staff.
- Strong ability to work under time constraints while maintaining flexibility.
- Strong organizational skills, and attention to detail.
- High familiarity with IIS, ASP.NET, .NET Framework, MS SQL, TSQL, Visual Basic/C#, JavaScript, HTML, DHTML, AJAX, XML, cURL, graphing utilities and other specialized development platforms.
- Prior experience with object oriented application design.
- Strong ability to work under time constraints and maintain flexibility.
- Extensive programming skills and abilities.
- Prior development experience with MySQL and Python in a Linux environment a plus.
- Strong working knowledge of data formalization, transformation methods, and reporting.
- Working knowledge of scripting languages, VB, or C#.
- Ability to resolve QA/QC issues before, during, and after archival.
- Ability to lead and provide ongoing support in creating procedures/routines for preserving the integrity of all data.

Physical Requirements
- Qualified candidates must be able to meet minimum requirements and perform the primary functions of the position with or without reasonable accommodation.
- Ability to lift up to 50 pounds; ability to work in small confined spaces when accessing equipment, often times while kneeling or in an awkward positions. Prolonged periods of computer usage.