



COLORADO NATURAL HERITAGE PROGRAM POSITION ANNOUNCEMENT

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TITLE:	Database and Web Developer, Research Associate III
NUMBER OF POSITIONS:	1 (100% time)
WORK LOCATION:	Colorado Natural Heritage Program Warner College of Natural Resources Colorado State University Fort Collins, CO 80523
PAY RATE:	\$52,000–\$55,000

Summary of Position:

The Colorado Natural Heritage Program (CNHP) of Colorado State University seeks a Database and Web Developer to design and support natural resource-based databases for CNHP clients, assist in the administration and maintenance of existing online databases, and work closely with others at CNHP to develop data products and improve data services. The position will play a pivotal role in expanding CNHP's online data delivery tools through web programming technologies. This is a full-time position. The incumbent will have the opportunity to collaborate with CNHP staff and partners to develop proposals for grants and projects to ensure continued funding of their position. CNHP provides a flexible work environment to support work-life balance with excellent benefits and CSU is dedicated to taking care of faculty and staff by providing a wide range of benefits that promote health, financial security, and overall well-being. The University also offers many perks to eligible employees – from educational benefits and work-life programs to discounts and deals. Must be legally authorized to work in the United States by the employment start date; CNHP will not sponsor a visa for this position.

The Colorado Natural Heritage Program (www.cnhp.colostate.edu) is Colorado's primary biological conservation information center housed within the Warner College of Natural Resources at Colorado State University. CNHP is a key player in Colorado's conservation of open lands and maintains the only centralized database in Colorado that includes information on the locations and status of rare and imperiled plant and animal species, high quality natural communities, and potential conservation areas. The CNHP's Conservation Data Services (CDS) Team supports Colorado's conservation information needs through GIS mapping, data management, database development, website development, and related computer services for recording and presenting biological and natural resource information. The CDS Team maintains CNHP's Biodiversity Tracking and Conservation System (BIOTICS) database, providing the most comprehensive source of locational information about imperiled species and ecological communities in Colorado. We work closely with government, private land managers, and non-governmental organizations to provide a central clearinghouse to collect and compare information on these vital biological resources across many jurisdictions and land ownerships in Colorado. The CDS Team also delivers customized

mapping, database, and website solutions to staff and clients to help manage biological resources, and/or analyze biological field sampling data. The incumbent must be able to work independently and with the team, be self-motivated, and have excellent communication skills. A commitment to conservation and familiarity with environmental datasets is necessary to thrive at this position. CNHP is committed to building diversity and inclusion in natural resources conservation, and is an equal opportunity employer.

DUTIES (% time):

- Coordinate, design, and implement project-specific natural resource-based database applications primarily using MS SQL and PHP, but also potentially MySQL, Oracle, ASP.NET, C#, PostgreSQL, MS Access or equivalent software and programming languages. Maintain and enhance current web databases using existing code base. (40%)
- Convert and import data from diverse sources and file formats to open-data and machine readable formats using R and Python. Document the conversion and quality control process. (35%)
- Assist in the maintenance of CNHP's website. Develop new web pages or new functionality using Microsoft SQL, Wordpress, CSS, and asp.NET/PHP or other similar technologies. (15%)
- Work closely with the CDS Team to coordinate, integrate, and implement evolving database technologies, and assist with the development of new products and services. Assist with the implementation of these improvements and maintenance routines by performing complex SQL, MS Access, or Oracle programming. Work with Team members to track overall information management needs of CNHP. Collaborate with staff to pursue funding and participate in grant/proposal writing. (10%)

QUALIFICATIONS:

Required:

1. CSU Research Associate II **OR** Bachelor's degree in Computer Science, Information Management, Natural Sciences/Resources or related field and five years of professional programming experience developing and managing relational databases and web applications **OR** Master's degree and two years of professional experience required.
2. Experience with SQL, PHP, HTML, and web development (such as CSS, jQuery, JavaScript, Ajax, etc.).
3. Experience integrating and troubleshooting web applications and applying best practices for internet security.
4. Demonstrated experience with large datasets, different file formats, and enterprise data management systems (such as MS SQL, Oracle, PostgreSQL, MySQL, etc.)
5. Experience with responsive web design, ADA compliance, and search engine optimization.
6. Understanding of MS Access queries, forms, and coding.
7. Demonstrated experience and competence with Windows operating systems and MS Office.
8. Ability to handle multiple demands and set appropriate priorities, and demonstrated experience working on multiple projects at once.

9. Excellent communication and organizational skills. Must be able to write and speak clearly and accurately. Must be self-motivated. Must be able to communicate with stakeholders, identify their needs, and offer database solutions.

Desired:

1. Familiarity with biological, ecological, and/or environmental datasets, and a commitment to conservation.
2. Experience with WordPress or other content management systems strongly desired.
3. Familiarity with R strongly desired.
4. Programming experience in the following: Python, ASP.NET, C#, C++, or Ruby.
5. Familiarity with interchange file formats like JSON, XML, and CSV.
6. Experience with source control technologies like MS TFS or GitHub and software development applications like Eclipse IDE.
7. Experience preparing media for web usage and publications with Adobe CS (e.g. InDesign, Photoshop, etc.) or similar graphics software.
8. Experience with different operating systems such as Linux.
9. Familiarity with web server administration with Microsoft IIS Web Server and Apache HTTP Web Server.
10. Preference will be given to individuals with demonstrable experience building accessible websites that meet the most current version of the Web Content Accessibility Guidelines (WCAG) published by the W3C. Knowledge/Experience with:
 - User interfaces and interactive deliverables that perform well both on mainstream devices and with assistive technology
 - Semantic and ARIA mark-up elements
 - Product accessibility testing continuously through all development stages
 - Troubleshooting, revising, and updating websites encumbered by legacy code accessibility constraints