Assistant Research Professional / Biodiversity Data Systems Administrator and Programmer
Job 16880

Job Description:

The Arizona State University School of Life Sciences and Biodiversity Knowledge Integration Center (BioKIC) are seeking an Assistant Research Professional who will serve as the Biodiversity Data Systems Administrator and Programmer for the iDigBio Phase 3 project. iDigBio, the Integrated Digitized Biocollections, supports the National Science Foundation's Advancing Digitization of Biodiversity Collections and related programs. The iDigBio Phase 3 project will extend from 2021-2026 to facilitate the digitization, use, and impact of biocollections data for more than 1,600 collections.

BioKIC will provide a Symbiota Support Hub serving all Thematic Collections Networks and portals that make use of the Symbiota software platform. The Hub will provide daily Symbiota support to hundreds of collections; implement novel Symbiota tools; promote cross-network collaborations and training; host and manage data networks and their associated images; and offer an entry into digitization and data publication for new iDigBio collections.

Prospective candidates with outside-of-domain backgrounds in systems administration and programming, are nevertheless strongly encouraged to apply. Our team is dynamic and communicative, with domain-specific strengths that match up well with members who have more generalized IT infrastructure management skills. This a full-time, academic-year (9 month), benefits eligible position allowing candidates to make themselves available for additional summer salary through other funded projects. Experience or a strong interest in developing innovative biodiversity informatics software and services, are highly sought but not required.

The Assistant Research Professional can be located in Tempe, Arizona, or work remotely.

Essential Duties:

- Develop and sustain the Symbiota Support Hub portal infrastructure and services;
- Coordinate activities with members of the ASU Symbiota team and the greater iDigBio network;
- Perform routine of VM server management duties, including:
  - Software installations and updates, expansion, and access permissions;
Server security provision, SSL certificates, monitoring and regulating access, and resolving security issues;

MySQL/MariaDB database management, installations, optimization, native and advanced indexing (Solr, Elasticsearch), and custom data manipulations;

Troubleshooting of VM server- and database-related performance issues;

Updates of the Symbiota code version and propagation of new Symbiota functions or modules across all indicated portals;

- Install and manage an image server, including the provision of robust services for collections to submit production-quality images;
- Perform custom (non-Symbiota) scripting to sustain localized portal functions;
- Provide technical assistance to the Symbiota Support Hub team, including software developers, portal data managers, and portal community managers.

Minimum Qualifications:

- Bachelor's degree in Computer Science, or related science or engineering field, and two years of systems and/or applications programming experience;
- Well-documented, broad range of IT infrastructure management and informatics skills; ranging from systems administration to relational database optimization and custom scripting.

Desired Qualifications:

- Familiarity with research- and production-grade IT infrastructure systems and programming;
- Ability to develop and integrate back-end sections of the IT infrastructure with other software development, portal data management, and front-facing services;
- Experience in virtualization and cloud technologies, system automation, multiple operating systems, programming and scripting, source code version control, open source relational database management systems, distributed storage and filesystems, RESTful web services and APIs, web application development, writing documentation, and preparing and presenting materials for conferences and workshops;
- Familiarity with biodiversity data science will be beneficial but is not required, as long as candidates are open to acquire these skills through on-the-project mentorship;
Applicants with an interest in contributing to future Symbiota software development, facilitated through related awards and Summer salary, will receive strong consideration.

Applications will be accepted through Interfolio, at [https://apply.interfolio.com]. Please submit 1.) a letter of interest, 2.) curriculum vitae, and 3.) names and contact information for three professional references. Review of completed applications will begin on Oct. 4, 2021, and will continue each week thereafter until the search is completed. For additional information, please feel free to contact Nico Franz, Professor and Director of Biocollections, nico.franz@asu.edu.

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A background check is required for employment.

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