Yale University

Center for Biodiversity and Global Change, Map of Life

Database Architect Position

We are seeking a database architect to work with our growing team of developers and scientists at Yale University in New Haven, Connecticut. A main responsibility of the position will be to oversee the design and management of a large, global spatial biodiversity database of Map of Life (https://mol.org).

Map of Life aims to support effective and global biodiversity education, monitoring, research and decision-making by assembling and integrating a wide range of knowledge about species distributions and their dynamics over time. Built on a scalable web platform geared for large biodiversity and environmental data, Map of Life provides best-possible species distribution information together with a range of information and biodiversity indicator products.

Work environment:

The database architect will be part of a growing and interdisciplinary team of scientists and informaticians in the Yale Center for Biodiversity and Global Change (http://bgc.yale.edu). The center connects biodiversity and global change scientists from across the Yale campus and beyond. Yale has a thriving and growing community of postdocs and graduate students in ecology, evolution and global change science in the EEB Department, the Yale Institute for Biospheric Studies, the Peabody Museum, and the Yale School of Forestry and Environmental Studies. The town and campus are renowned for the classic Ivy League setting, 75 miles north of New York City.

Responsibilities:

The role of the database architect position is to improve on an existing spatial and biodiversity database hosted within a PostgreSQL/PostGIS environment and work with software engineers and a database manager to build, extend and support new databases driving biodiversity web and mobile applications. The ideal candidate will be a quick learner, self-driven, and detail oriented.

Position requirements:

- Demonstrated success working with 'big data' on the order of hundreds to billions of records
- Understanding of entity relationship diagrams (ERD) and the inherited cardinality rules of schemas/tables
- Demonstrated experience with documentation and optimization

- Basic proficiency in Unix-based systems
- Demonstrated experience working independently and as part of a team
- Effective oral and written communication skills
- Strong technical writing and briefing skills
- Eligible to work in the United States

Preferred skills:

- Familiarity with Google Cloud Platform (BigQuery, Cloud SQL, Cloud Datastore, and Cloud Storage)
- Experience working with geospatial and biodiversity data
- Experience developing geospatial applications
- Strong technical skills and relevant experience with Python and Shell scripting
- Experience with hosted platforms such as Google App Engine and CARTO

Start date: Hours:

As soon as possible (flexible)   20-37.5 hours per week

To apply, please send a cover letter, resume, and 2 references to jobs@mol.org.