

JOB#12575

**Arizona State University
Biodiversity Knowledge Integration Center (BioKIC)
School of Life Sciences**

Postdoctoral Research Scholar

The Biodiversity Knowledge Integration Center (BioKIC) at Arizona State University (ASU) invites applications for a postdoctoral research scholar position in biodiversity informatics. The position is part of a new Biodiversity Data Science Initiative launched at ASU and led by [Beckett Sterner](#) and [Nico Franz](#). The initiative will develop a next-generation solution to overcome the performance limits of taxonomic names as fundamental categories for grouping all forms of data about living things into scientifically meaningful units. Prevalent existing solutions bundle data by names alone, without accounting for changes in their scientific meanings, which causes incorrect data packaging and decision-making. Taxonomic intelligence provides the mapping between names and concepts that is necessary to resolve names accurately into meanings despite changing relationships across time and experts. The initiative will focus on building an innovative web platform that leverages theoretical advancements and prototype software for [taxonomic concept alignment](#), with the goal to establish a scalable taxonomic intelligence service that will carry value for scientific audiences, science publishers, government agencies, and environmental consulting firms. The platform will accelerate the growth of high-quality, reproducible biological data by driving the adoption of taxonomic intelligence metadata in scientific datasets and journals.

This postdoctoral research scholar position will focus on developing a web-based taxonomic intelligence platform and innovating better solutions for knowledge representation and reasoning at scale.

Minimum qualifications

The successful candidate must have a Ph.D. in biology, computer science, or related field, and minimally two years for experience in building production-level software.

Desired qualifications

The successful candidate will also have a strong record of achievement in biodiversity informatics, linked data/knowledge engineering and Semantic Web technologies; including, for example, knowledge representation (e.g., RDF) and machine reasoning (e.g., Answer Set Programming), data search, management, knowledge graphs, visualization, and software development, with knowledge of biological systematics being

highly beneficial. Technical proficiency in full-stack programming is critical (HTML/CSS, JavaScript, Python, SQL, as well as NoSQL). The ability to select technologies, and rapidly iterate on the implementation of a high-quality, functional and scalable system is preferred. Mentoring of students and co-/authorship of peer-reviewed publications, presentations, and of research proposals, will be strongly encouraged.

Working environment

We are committed to open science and an inclusive, equitable, and team-oriented work environment that promotes the candidate's career and personal advancement. The Biodiversity Data Science Initiative is located within the School of Life Sciences and Natural History Collections at Arizona State University. This setting offers a supportive and stimulating environment, with a diverse collection of faculty with expertise across the life and computational sciences, as well as access to excellent academic and computing resources. The Initiative is further supported by faculty from ASU's School of Computing, Informatics, and Decision Systems Engineering and external experts in data science for systematic biology. In addition, the postdoctoral researcher will be able to take advantage of multiple seminar series and a large community of faculty, postdocs, and students. Arizona State University offers a rich environment for early-career researchers and a wide range of support programs for postdocs.

For more information on working environment, please see the ASU hiring standards below.

How to apply

Exploratory e-mail inquiries are strongly encouraged. Interested applicants should send a one-page research statement, clearly indicating their qualifications and motivation to join the project, Curriculum Vitae, and contact information for three references to nico.franz@asu.edu. The review of applications will begin October 26, 2018; if not filled, applications will be reviewed every week thereafter until the search is closed. The start date is flexible, with a preference for January 1, 2019.

Salary is commensurate with experience, with a range of \$55,000 to 75,000 annually, plus ASU benefits, for exceptionally well-qualified applicants. Reasonable relocation funds are available.

For more information about hiring standards at Arizona State, please visit: <https://www.asu.edu/titleIX> or <https://cfo.asu.edu/titleIX>

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. ASU's full nondiscrimination statement (ACD 401) is located on the ASU website at <https://www.asu.edu/aad/manuals/acd/acd401.html> and <https://www.asu.edu/titleIX>

General Information:

Arizona State University is a comprehensive public research university named #1 in the United States for innovation for the second consecutive year, followed by #2 Stanford and #3 MIT. We measure our success not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities we serve. ASU's School of Life Sciences is home to innovative teachers who are guided by educational access, student success, applied learning, and interdisciplinary inquiry. We understand there are many paths to achieving a university education, and we build undergraduate and graduate degree programs and pathways that are flexible and relevant for a rapidly changing world.