GeoSpatial Data Curator

August 13, 2013

The University of California, Santa Barbara, one of ten campuses of the University of California system, seeks applications for a GeoSpatial Data Curator (an Associate Specialist position) to work with faculty, students, researchers, and Library staff to develop strategies and programs for the collection, description, organization, normalization, storage, preservation, integration, visualization and mining of geospatial data within the Library and across the spectrum of programs on campus. The position will offer its incumbent the chance to help define the emerging field of geospatial data curation and informatics.

ENVIRONMENT

The University of California, Santa Barbara, (UCSB) is one of ten campuses of the University of California system and one of only 61 research-intensive institutions elected to membership in the Association of American Universities. UCSB's increasingly strong reputation for collaboration and excellence is recognized in a growing number of high national rankings. Of the 31 campus programs reviewed, the 2010 National Research Council rankings placed nearly one third of UCSB's academic programs in the top five nationally, and 20 of the 31 programs in the top 20. *U.S. News & World Report's* 2011 guide to "America's Best Colleges" ranks UCSB number 10 among all public universities. The total student population is over 22,000 and faculty number over 1,100.

The UCSB Library is committed to the pursuit of excellence, diversity, innovation, and collaboration with a vision to be the premier scholar resource and information leader advancing UCSB's mission of exemplary research, teaching, and service to California and beyond.

The Library is actively engaged with partners on campus and with other University of California (UC) libraries to provide extensive resources and services to advance information discovery for research, scholarship and creativity in a dynamically evolving teaching and learning environment. UCSB Library is a member of the prestigious Association of Research Libraries and an active participant in UC's and other regional and national collaborative initiatives. Among the top research libraries in the country, the Library's collections include approximately 3 million volumes and over 6 million non-print and digital resources. The collection supports undergraduate and graduate programs in 33 academic areas and serves the wide-ranging research needs of diverse campus programs and centers. Central to the campus skyline as well as to its mission, the Library takes pride in providing outstanding service to all its clientele.

Responsibilities

Under the direction of the head of Cataloging and Metadata Services (CMS), the GeoSpatial Data Curator has primary responsibility for ensuring standards of description and delivery of UCSB geospatial data. As part of an evolving team of Data Curators, the candidate will be expected to make substantial contributions in the primary area of responsibility and in collaboration with other members of the team. The GeoSpatial Data Curator contributes to the design and delivery of services and content supporting the Map & Imagery Laboratory (MIL) that manages more than one million aerial photographs (200,000 scanned), 500,000 sheet maps, and multiple terabytes of raster and vector GIS data. These services include, but are not limited to, the Alexandria Digital Library Gazetteer (a global placename dictionary) and a Fedora-based repository for aerial photography and other digital collections in MIL. Working

closely with staff in MIL, CMS, and other departments, the GeoSpatial Data Curator has primary responsibility for:

- Developing and implementing best practices for describing geospatial data in all collected formats, including workflows for ingesting geospatial data into the developing Digital Library repository;
- Planning, conducting, and overseeing the conversion of legacy data and metadata to contemporary formats;
- Maintaining a high level of expertise in descriptive metadata standards for geospatial data, including but not limited to MARC and ISO-191xx;
- Create digital content used as finding aids, instructional materials, and visualizations of canonical datasets;
- Assisting with the ongoing architecture of discovery and access mechanisms for geospatial information;
- Supporting end-user services by providing consultation to end-users with geospatial data needs in all formats, analog and digital individually and in classroom settings using consumer- and professional- mapping software, including but not limited to ArcGIS desktop, ArcGIS Online, Google Earth, and Quantum GIS;
- In collaboration with the Head of MIL and other librarians, engaging faculty and researchers on requirements for the UCSB University Library's geospatial strategy and partnerships;
- Helping the Library perform outreach and promote its geospatial data services within UCSB disciplines, programs, and centers;
- With MIL staff, developing training and support strategies (particularly online and self-directed) in aspects of geospatial data curation relevant to researchers, including data formats, identifiers, metadata, integration, visualization and data mining/informatics;
- Working with the Head of CMS and the Metadata Librarian to develop standards and implement practices for ingesting and describing relevant geospatial data into the Library's collections and the campus cyberinfrastructure;
- Collaborating with fellow metadata specialists and data curators in emerging data-curation efforts for the UCSB Library and UC-system;
- Helping train the staff of the UCSB Library and collaborating with other UC system-wide initiatives as appropriate in the curation needs of geospatial data.

Required skills, knowledge, abilities, and competencies

- An advanced degree in a relevant field (e.g. geography or information science) or a field with a substantial geospatial data research component and equivalent skills/training;
- Significant relevant experience working with spatial data;
- Familiarity with information science or informatics as applied to geographical research or geospatial data, including design and/or use of software for data analysis;
- Demonstrated understanding of research methods and the data lifecycle;
- Expert user of at least one desktop GIS-software package, and familiarity with a second
- Expertise with a wide variety of spatial data formats, including but not limited to shapefiles, geodatabases, raster remote sensing data, and geoJSON;
- Proven flexibility and self-motivation in setting and meeting goals and challenges;
- Excellent interpersonal and communication skills (oral and written);
- Experience in a collegial setting.

Preferred qualifications

- Knowledge of library descriptive practices, including XML metadata schemes for specific knowledge domains, MARC cataloging;
- Professional experience in a geospatial archive, library, or research center;
- Professional experience constructing and maintaining a controlled vocabulary,
- Demonstrated experience working with researchers and technology staff regarding requirements for technology and platforms that support research;
- Excellent skills in project management;
- Experience providing training or instruction;
- Expert user of ArcMap;
- Hands-on experience implementing and administering online spatial database applications under architectures such as ArcSDE, Oracle, Postgres, MicrosoftSQL and/or MySQL.;
- Familiarity with linked data expressed as RDF, and web mapping techniques such as Leaflet, PolyMaps, and D3.

SALARY AND BENEFITS:

Salary is competitive and commensurate with experience and qualifications.

TO APPLY:

- Consideration of applications begins immediately and continues until the position is filled; applications received by Friday, September 13 will receive first consideration.
- Applications will be accepted online through UC Recruit: https://recruit.ap.ucsb.edu/apply/JPF00208.
 - Help for UC Recruit is available at https://recruit.ap.ucsb.edu/help/applicants.
- Applicants will be asked to submit a portfolio that demonstrates a knowledge of cartography, graphic design, and skills with the software and processes necessary for making maps available online.
 - Portfolio materials may be submitted electronically to <u>rgeorge@library.ucsb.edu</u> or via mail to:

UC Santa Barbara University Library ATTN: Ryan George Santa Barbara, CA 93106-9010

- For additional assistance, contact Ryan George with Library Human Resources at (805) 893-3841 or rgeorge@library.ucsb.edu.
- Appointment and/or continued employment is contingent on successful completion of a background check.

The Library is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching and service. The University of California is an Equal Opportunity Affirmative Action Employer.