Library Software Applications Developer (Analyst/Programmer - Career)

Salary:

Salary Range: $4,372 - $9,877 per month  
Anticipated Hiring Salary: $4,372 per month

Note: This is a full-time, probationary, exempt position.

Organizational Description:

As the center of campus intellectual discovery, the Henry Madden Library at Fresno State promotes teaching, learning, research, and scholarly communication at the University by integrating the Library with campus student success programs and instruction. One of twenty-three libraries in the California State University System, the Library holds over 1.2 million volumes, comprising print and electronic monographs and serials, and is a Federal Document Depository. The Library’s mission is to inspire excellence in teaching, learning, and scholarly activities.

Overview:

Under the general direction of the Director of Library Technology and Collections Management, the incumbent serves as a developer that designs, implements and revises applications that meet library and digital scholarship needs. The incumbent supports the continued implementation of technologies that serve teaching and research at Fresno State.

Position Summary:

The major duties of the job include:

- Creates and develops applications using current programming languages, environments, application frameworks; creates and develops data-related systems that use MARC, MARCXML, Encoded Archival Description (EAD), Dublin Core, MODS RDF, and other encoding schemas; identifies, designs, develops, implements, and revises software applications to meet library and university needs; supports software applications; analyzes and writes specifications; devises solutions to system problems; develops and analyzes new applications and test procedures; writes and edits reports to provide recommendations, conclusions and other data.
- Writes code to meet user specifications; modifies existing or third party software; writes documentation for software and processes; investigates, troubleshoots, debugs programs and code related to library systems such as the library’s discovery systems, institutional repository, and other software; performs custom implementation and extension of repository systems (e.g., Samvera/Hyrax, VIVO), and works extensively with various web APIs.
- The incumbent works closely with the Library Technology team, the Digital Initiatives librarian, as well as the Metadata and Institutional Repository Librarian. The person in this position participates in campus-wide projects in collaboration with the Digital Services Division and other key units on campus, such as Technology Services, in order to ensure safety and security of information assets. This individual frequently serves in a leadership capacity on assigned campus-wide projects. This work will require an aptitude and ability to consult and communicate with faculty and staff from various departments within the library and across campus.

The secondary duties of the job include:

- Creates plans and implementation schedules, develops requirements for the installation and maintenance of new and/or revised systems and software; develops programs and procedures to enhance operations, applications, and general system usage; plans and executes disaster prevention and recovery plans; develops system backup and archival methodology; maintains data security and integrity; and tracks industry trends in support of library and information technology.
- Perform other duties as assigned.

Knowledge, Skills & Abilities:

- Strong customer service attitude; enthusiasm for working in a collaborative team-oriented environment
- Knowledge of SOAP web services
- Demonstrated experience with REST API use and integration
• Ability to:
  ○ Develop succinct, timely programming code or modify software in a logical fashion, which optimizes programming resources and meets functional user requirements
  ○ Perform interactive debugging to test and analyze program failures
  ○ Develop program implementation plans, install software, and apply fixes
  ○ Design data structures to maximize efficiency and flexibility
• A history of regular attendance and positive performance evaluations

Education and Experience:
• Bachelor's degree in Computer Science, Information Technology, Information Systems, Information Science, or related field
OR
• Associate Degree and three years of experience developing web-based software applications
OR
• Five years of experience developing web-based software applications
• Demonstrated experience with:
  ○ Application programming techniques and procedures
  ○ Job control and production procedures with an ability to troubleshoot and isolate production problems and applications code
  ○ At least three of the following server-side programming languages: Python, Perl, PHP, Ruby, Java, JavaScript
  ○ XML, JSON and related technologies
  ○ Database modeling, and implementation with databases such as MySQL, SQLite, or PostgreSQL
  ○ Team-based development using version control systems such as Git, Subversion or Mercurial

Preferred Skills:
• Five or more years of demonstrated development experience
• Experience with integration of student information systems, learning management systems and library systems
• Understanding of digital library preservation and curation concepts, policies, and best practices
• Functional knowledge of all aspects of full stack development
• Demonstrated experience with test driven development frameworks (ex. PHPUnit, RSpec, Cucumber, Jasmine, Selenium, Jenkins), and deployment frameworks and scripting (ex. Vagrant/Docker, Ansible, Fabric/Capistrano)
• Understanding of library catalogs, cataloging rules, and encoding standards
• Experience and skills with additional technologies, including Java/J2SE, Apache httpd, Tomcat, Python/Django, and Solr
• Experience with NoSQL databases (e.g. Redis, MongoDB, DynamoDB)
• Knowledge of Semantic Web and Linked Data concepts and technologies
• Familiarity with Metadata standards (e.g. MODS, Dublin Core, MARC, MARCXML, TEI, EAD, DDI)
• Experience with Angular
• Experience with JavaScript frameworks
• Experience with continuous integration/deployment
• Experience building and optimizing Solr/Lucene indexes
• Demonstrated experience working with repository applications (e.g., DSpace, Samvera, Islandora, Fedora, Omeka)
• Ability to apply and use operations analysis and structured design analysis techniques
• Experience with the Samvera repository framework
• History of contributions to Open Source Projects and participation in developer communities
• Experience working in an academic environment

Filing Deadline:
Applications received by April 4, 2018 will be reviewed for minimum qualifications and given full consideration by the hiring manager and/or search committee. Qualified applicants received after that date will be forwarded upon request to the hiring manager and/or search committee.

Application Procedures:
Complete the required fields on the online application, a resume, and three professional references, including telephone numbers, are required. A cover letter that addresses your qualifications for the position is also required. Full consideration will not be given to applicants who fail to complete all application requirements.

Pursuant to Executive Order 1088, reasonable accommodation is to be provided upon request from an employee or applicant with disabilities, unless doing so would impose an undue hardship on the campus. What constitutes a reasonable accommodation is to be determined by the campus on a case-by-case basis after it has received the individual's request for accommodation and engaged in an
interactive process. Employees or applicants requiring reasonable accommodation should contact Human Resources directly at (559) 278-2032.

**How To Apply:**

To apply for this or any open position at Fresno State visit our online employment site at: [http://jobs.csufresno.edu/](http://jobs.csufresno.edu/)

**Other Requirements:**

Pursuant to the requirements of the Immigration Reform and Control Act of 1986, any offer of employment is contingent upon verification of individual's eligibility to be employed in the United States.

California State University, Fresno, in conjunction with the CSU policy, requires that the successful candidate complete a full background check (including a criminal records check) prior to assuming this position. Failure to satisfactorily complete or pass the background check may impact the job offer or continued employment of current CSU employees who apply for posted positions identified as sensitive.

California State University, Fresno annual security report includes statistics for the previous three years concerning reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by Fresno State, and on public property within, or immediately adjacent to or accessible from the campus. The report also includes institutional policies concerning campus security, alcohol/drug use, crime prevention, reporting of crimes, sexual assault, and other matters. You can obtain a copy of this report by contacting the Campus Police Department or by accessing the following web site: [http://www.fresnostate.edu/adminserv/police/clery/index.html](http://www.fresnostate.edu/adminserv/police/clery/index.html)

The person holding this position is considered a "mandated reporter" under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083 Revised July 21, 2017 as a condition of employment. You can obtain a copy of this Executive order by accessing the following web site: [https://www.calstate.edu/EO-1083-rev-7-21-17.html](https://www.calstate.edu/EO-1083-rev-7-21-17.html)

This position may be a "designated position" in the California State University's Conflict of Interest Code. The successful candidate accepting this position may be required to file Conflict of Interest forms subject to the regulations of the Fair Political Practices Commission.

Fresno State is a tobacco-free, smoke-free and vapor-free campus.

**Other Applicant Information:**

Applicants will receive confirmation of receipt of their application materials via automatic email reply. In addition, qualified applicants will receive email notification at the conclusion of the recruitment process.

It is the policy of the California State University to fill vacant positions represented by the California State University Employees' Union (CSUEU) with qualified applicants currently employed on the campus. Other applicants may be selected when it is necessary to meet the best interests of the campus by obtaining specialized skills and abilities not available from campus applicants.

**Equal Employment Opportunity:**

California State University, Fresno is committed to maintaining and implementing employment policies and procedures in compliance with applicable state and federal equal employment opportunity laws and regulations. Executive Order 883 prohibits discrimination and Executive Order 927 prohibits harassment, on the basis of a protected status: race, color, religion, national origin, ancestry, age, sex (including gender identity, per HR 2004-12), sexual orientation, marital status, pregnancy, mental disability, physical disability, medical condition and covered veteran status. Retaliation against individuals for complaining about these proscribed conduct, opposing such conduct, or participating in an investigation or proceeding involving such conduct is prohibited by both executive orders.

Further, California State University, Fresno's statement of commitment to equal employment opportunity principles is also found in the various collective bargaining agreements.

**General Information:**

California State University, Fresno is one of 23 campuses in the California State University System. The University's mission is to offer high-quality educational opportunities to qualified students at the bachelor's and master's levels, and in certain applied disciplines, at the doctoral level. The current student enrollment is approximately 24,000, including a large percentage of students with diverse and culturally rich backgrounds. The University serves the San Joaquin Valley while maintaining deep involvement with the state, nation, and world. California State University, Fresno promotes student learning and community engagement through faculty scholarship and service learning opportunities in collaboration with community organizations, educational institutions, industry, business and government. The University was one of the first U.S. Colleges and Universities to be selected by The Carnegie Foundation for the Advancement of Teaching for its Community Engagement Classification.
Metropolitan Fresno, with a multi-ethnic population of over 600,000, is located in the heart of the San Joaquin Valley on the western edge of the Sierra Nevada Mountain Range. The campus is within driving distance of San Francisco, Los Angeles, Yosemite, Kings Canyon and Sequoia National Parks, the Monterey Peninsula, beaches, sailing, lakes, and numerous ski resorts. Fresno boasts one of the most reasonable housing markets in California and offers a wide array of locally grown fruits and produce.