Position Description

Requisition Number: 03023622
Position Number: 02023777
Dept: ENTERPRISE STUDENT APPLICATIONS - 061418
Position: GRADUATE STUDIES APPLICATION DEVELOPER
Approved Payroll Title Code: 0652
Approved Payroll Title: APPLICATIONS PROGR 4
Approved MSP Salary Grade: MSP24
Approved PSS Salary Grade: MSP24

POSITION DETAILS

Job Summary:
Under general supervision of the Supervisor of the Office of Graduate Studies (OGS) Applications group, design and develop IT applications to support and enhance business processes integral to the administration of graduate education at UC Davis. Provide decision making, technical leadership, and oversight during the software development process. Develop technical solutions to meet the increasing demand for seamless access to information and the multiple services provided by the Office of Graduate Studies (OGS). Organize and manage campus-wide interactive Web applications that support graduate applications, admissions, student support and commencement, as well as supporting departmental graduate programs and multi-department graduate groups. Develop Java applications that retrieve and feed data to and from multiple campus data sources, including the Student Information System (Banner), the Personnel Payroll System (PPS), and the Financial System (DaFIS/KFS). Develop and implement applications that automate and streamline business processes while preserving data quality and ensuring compliance with campus security standards. Take the lead on highly complex applications and work with other team members to oversee a projects overall success.

Campus Job Scope:

Department Specific Job Scope:

Positions Supervised:
80% APPLICATION DEVELOPMENT AND SUPPORT
This position provides the leadership and technical expertise necessary to successfully engage campus stakeholders to identify and document key business requirements specific to UC Davis graduate program components administered by OGS, departmental graduate programs, multi-departmental graduate groups, and other campus offices. Responsible for the identification of technology approaches to accommodate these requirements, and managing all aspects of the development lifecycle from initial design to Quality Assurance/Quality Control and final user testing and acceptance.

Essential Responsibilities:
Take lead responsibility on complex software designs and development efforts that
include overseeing the effort of other developers. Establish and run interactive focus groups with clients in order to gather requirements and make decisions for complex software designs.

Evaluate usability on an ongoing basis; advise on user training. Ensure complete technical documentation and user guides. Author non-technical summary documents appropriate for management briefing and decision-making.

Research, design and develop new web applications using Java, Spring Framework, Hibernate, Oracle JavaScript, HTML, and other tools that deliver information and collect data required for policy making, reporting and administration of graduate programs and graduate student services. Develop applications for managing workflow between students, graduate program staff, faculty and graduate studies staff. Develop applications to pull data from and push data to multiple sources including the OGS document management system, the admissions vendor web application, and the Student Information System.

Maintain and enhance existing ColdFusion and MySQL web applications. Convert existing ColdFusion and MySQL applications to Java and Oracle. Convert existing HTML/ColdFusion public website to a Content Management System.

Create and expand relational databases and queries in Oracle and MySQL using PL-SQL, SQL, and database development tools. Integrate graduate studies database objects with the Student Information System using available APIs to populate them.

Create and maintain reference and training documentation for new applications and software processes.

10% CYBERSAFETY
Responsible for ensuring compliance with campus CyberSafety standards, including user authentication, data encryption, secured data transfer, query and data manipulation. Perform ongoing security testing to proactively identify and mitigate potential vulnerabilities. Provide technical expertise and leadership to advise OGS management on issues of IT security; ensure implementation of agreed-up security measures and practices.

10% PROFESSIONAL DEVELOPMENT/CAMPUS SERVICE
Serve on the senior technical leadership team responsible for development of web-based applications, OGS document management, OGS technical support, and technology service agreements between OGS and other units (i.e., CA&ES for tertiary desktop support, IET for Data Center services, etc.).

Represent OGS in campus technology venues; participate in campus- and unit-wide planning and development of technology infrastructures and specific applications. Attend workshops and seminars to ensure current knowledge of emerging technology trends. Participate in office functions, activities, and work teams, including annual Graduate Studies Commencement activities.

**Physical Demands:**

- Sit at computer with extensive keyboard use and view CRT screens for extended periods of time.
- Lift equipment weighing up to 50 lbs.

**Work Environment:**

- Work a flexible schedule, occasional evenings/nights, weekends and holidays as needed.
- Vacation is restricted during peak work periods.
- Adhere to workplace safety practices, read information communicated about workplace safety, complete required safety training on time, and report any workplace safety issues promptly to their supervisor or the designated safety coordinator.
Background Check: Yes

QUALIFICATIONS

Minimum Qualifications:

- Experience leading the design and development of large scope projects under broad supervision that include various clients.
- Experience with advanced Web programming in Java and JavaScript, and in using J2EE implementations such as Tomcat, via Maven, Java Servlets, and Spring development framework.
- Skill with Cold Fusion, HTML, Cascading style sheets.
- Experience developing and maintaining multiple, complex web sites and web applications.
- Knowledge of coding practices (including indentation, syntax structure, documentation, logical flow, clean, modular code).
- Knowledge of software development quality assurance and testing; experience in version control via SVN and code migration paths.
- Experience with web service administration and a thorough understanding of web security.
- Experience with advanced web application development using Java, SQL, PL/SQL, JavaScript RIA, and HTML5. Experience with using JavaEE and JavaSE technology implementations such as Tomcat, Maven, Java Servlets, JSP, Spring Framework (Dependency Injection, AOP, MVC, and security) and Hibernate/JPA.
- Skill with ColdFusion, HTML, JavaScript, and CSS. Knowledge of coding best practices including but not limited to object oriented design, domain driven design, syntax and commenting standards, developer and user documentation, unit testing and modularized code.
- Experience with advanced database design using SQL, PL/SQL nad other database tools in Oracle and MySQL. Strong understanding of database concepts including but not limited to normalization, data warehousing, referential integrity, ETL, and performance tuning.
- Skills in designing web pages with a visually attractive and functionally effective presentation style that is fully compliant with W3 ADA recommendations.
- Experience troubleshooting software and hardware and recommending solutions.
- Skills to communicate with users and comprehend user needs; excellent writing skills to develop documentation for IT professionals and user manuals for non-technical end-users.
- Analytical skills to understand complex business problems, and to recognize and analyze current business needs and anticipate future needs; documented ability to successfully manage complex technology projects.

Preferred Qualifications for Selection:

- A bachelor’s degree in computer science, informatics, or equivalent work experience.
- Knowledge of the UC policy and applicable laws and legislation governing privacy, such as the Family Educational Right to Privacy Act (FERPA) and the Health Insurance
Portability and Accountability Act (HIPPA).

Working knowledge of campus enterprise applications such as the Personnel Payroll System (PPS), the PPS Decision Support System, and the Banner Student Information System (SIS).

Familiarity with campus CyberSafety standards and administrative computing policies.

**Expectations**

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<th>Job Expectations</th>
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<tr>
<td>Read and follow the UC Davis Principles of Community.</td>
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<td>Effectively represent the office of Graduate Studies as liaison to graduate programs, and serve on campus and departmental committees.</td>
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<td>Take initiative and exercise independent judgment.</td>
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<td>Maintain excellent working relationships with other Graduate Studies staff and other campus units.</td>
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<td>Work cooperatively and effectively as a team member.</td>
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<td>Organize work effectively to achieve timely progress on multiple simultaneous projects, distribute work effort among projects, meet deadlines and maintain a high level of productivity.</td>
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<td>Clearly and effectively interact with individuals of diverse backgrounds and perspectives.</td>
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<td>Maintain confidentiality of personal financial information and other sensitive issues, and to exercise discretion in dealing with controversial or sensitive topics.</td>
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<td>Attempt unfamiliar assignments and respond with flexibility to requests for assistance from faculty, staff, and students.</td>
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<td>Learn new information, synthesize and evaluate data from a variety of sources, prepare reports and make prudent recommendations for a plan of action.</td>
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