Full Stack Engineer

POSITION INFORMATION

*Type of Action Requested:* New (Create a new Position Description)
*Internal Team:* SL-ITS - App Dev & Integration-133600
*Job Code/Employee Classification:* Analyst/Programmer 12 Mo
  Job No: 0400

Position Number: New Position # Request
  Position no: SL-00011032

*CSU Working Title:* Full Stack Engineer

Salary Range/Grade:
  0420-CAREER-Grade-2
  Minimum $ 4,372.00
  Maximum $ 10,478.00

*Reports To:* Mgr of App Dev & Info Mgmt

*Campus:* San Luis Obispo
*Division:* Information Services

*College/Program:* ITS - Info Technology Svcs
*Department:* ITS-App Data & Integratin Svcs - 134520
*FLSA Status:* Exempt

*Job Summary/Basic Function:* Under general direction, this position designs, develops, and documents campus enterprise applications. Primary activities include growing and building applications for university educational and administrative systems. In addition, this position will support methods to integrate applications with the campus computing infrastructure, which includes authentication, provisioning, and enterprise portal services; utilizing current technologies and DevOps philosophies. Emphasis will be placed on providing development support for critical systems, managing application builds, updates, integrations and web services, as well as creating customized modules and external product implementations for applications currently in use, such as ERP systems, collaboration and communications tools, identity management, file sharing, video streaming, web content management systems, campus card management, data management, billing, and other similar university related systems and/or applications.

*Minimum Qualifications:* Bachelor's degree and two years of relevant experience. Additional qualifying experience may be substituted for up to two years of the required education on a year-for-year basis.

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Required Qualifications:

- Working knowledge of configuring, securing, tuning, and maintaining a large multi-site content management system (e.g., Drupal).
- Working knowledge of administering a web application stack including Linux, Apache, MySQL, and PHP.
- Demonstrated skill working with cloud infrastructure platforms (e.g., AWS, Azure, GCP).
- Working knowledge of enterprise applications and web-based application technologies, including account management, data and system integration, browser-based client interaction, and database application logic.
- Demonstrated skill developing applications using modern languages and frameworks (e.g., JAVA, PHP, Python, Perl, PeopleCode, etc.).
- Demonstrated skill using databases/query languages to store, manipulate, and retrieve data (e.g., MySQL, Oracle, MSSql, PostgreSQL, or Aurora).
- Thorough working knowledge of software development life cycle (SDLC), structured programming, object-oriented design and development techniques, continuous improvement and change management business practices.
- Thorough working knowledge of testing practices and application debugging and troubleshooting procedures.
- Demonstrated ability to identify and implement critical maintenance fixes and to isolate and correct malfunctions, including interface problems.
- Ability to identify, assess impact, and develop recovery strategies and documentation for application or system failures.
- Working knowledge of common software application packages and deployment automation tools for performance monitoring and issues tracking.
- Demonstrated skill working with Linux, UNIX and Windows operating systems.
- Demonstrated ability to research and evaluate new technologies and software to meet user needs.
- Demonstrated ability to work with technical and non-technical staff to identify user requirements and translate them into technology-based solutions.
- Ability to use creative problem-solving skills and apply effective technical solutions.
- Ability to apply campus information security policy and standards to develop specific security requirements.
- Ability to apply security models and frameworks to ensure appropriate database security is maintained.
- Excellent verbal and written communication skills, including the ability to prepare and deliver formal and informal documentation, presentations, and training to a variety of end users.
- Excellent organizational and time management skills with the ability to set own priorities to coordinate multiple assignments with fluctuating and time-sensitive deadlines.
- Ability to foster and maintain positive and professional working relationships; ability to effectively handle interpersonal interactions at all levels and respond appropriately to conflicts and problems.
- Ability to provide lead work direction and train others.
- Interest and ability to maintain and enhance technical currency.
- General knowledge of requirements for accessibility and other regulatory compliance.

Preferred Qualifications:

- Certification:
  - Associate AWS SysOps Administrator or higher
  - Associate AWS Developer or higher
- Degree in computer science or related field.
- Demonstrated experience developing and maintaining user interfaces.
- Working knowledge of cloud technologies and DevOps application management strategies and techniques; CVCD workflows and code management standards.
- Demonstrated experience with deployment automation tools and techniques; experience utilizing Ansible, Chef, or Puppet.
- Demonstrated experience with analytics and logging software.
- Thorough working knowledge of enterprise email architectures and application support.
- Thorough working knowledge of lean/agile work management processes.
- Understanding of AWS tools and frameworks.
- Working knowledge of model-view-controller (MVC) architecture.
- Demonstrated experience with data networking TCP/IP concepts and how they relate to application delivery.
### Special Conditions:

- Ability to safely move equipment up to 50 pounds, with or without assistance.
- Must be willing to travel to coordinate off-site events and for occasional professional development.
- Must be able to work overtime, occasional holidays, and adjust working hours to meet special jobs. May be called back periodically to perform work as needed on an emergency basis.
- 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 1983 as a condition of employment.
- Must be able to successfully pass a pre-employment background check.
- This position classification has been defined as "Exempt" and is not subject to overtime provisions of the Fair Labor Standards Act (FLSA).

### License / Certification:

**Mandated Reporter:**
- General - The person holding this position is considered a general 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 1983, revised July 21, 2017.

**NCAA:**
- Yes ☐ No ☐

**Conflict of Interest:**
- None

**Supervises Employees:**
- Yes ☐ No ☐

### Job Duties
### JOB DUTIES

<table>
<thead>
<tr>
<th>% of time</th>
<th>Duties / Responsibilities</th>
<th>Essential / Marginal</th>
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<tbody>
<tr>
<td>90</td>
<td>Application Administration and Maintenance: Develop and support enterprise applications, including implementing, integrating, and maintaining servers, application releases, web services and customized modules and reports. Provide technical analysis, support, and defect resolution of assigned applications, tools and interfaces. Maintain and support assigned systems to ensure minimal downtime and loss of productivity and service. Analyze functional requirements; research, design, develop, test and implement applications, modifications, and interfaces. Use technology tools appropriately for application development and support. Install, test, maintain, and troubleshoot software. Use SDLC methods and procedures to facilitate application source code management and modifications. Analyze user system and application needs; recommend and implement appropriate solutions. Develop and conduct user needs assessments. Analyze security requirements and implement procedures to meet these requirements. Regularly review assigned responsibilities to identify and manage security risks. Escalate security issues as appropriate. Prepare and maintain documentation. Develop training materials. Consultation, Collaboration, &amp; Support: Develop and implement maintenance and project plans for enterprise applications and associated systems Consult and collaborate with functional customers and technical staff to identify and document requirements. Determine and evaluate alternative approaches to meet user needs and recommend optimal solutions. Provide support to both technical and non-technical staff. Leverage design expertise to collaborate with stakeholders to identify and implement procedures that facilitate a smooth delivery of services or enhancements to existing services. Assess vendor proposals and provide technical recommendations. Provide escalated tier 2 and tier 3 support to both technical and non-technical staff.</td>
<td>Essential</td>
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<tr>
<td>10</td>
<td>Document assignment status as required by supervisor. Escalate problems or unexpected resource requirements. Apply general knowledge of requirements for accessibility and other regulatory compliance where appropriate. Identify opportunities to enhance customer experience and improve service offerings. Support continuous improvement initiatives. Provide training to other employees as needed and provide lead work direction to student assistants. Use available resources to maintain and enhance technical currency. Maintain and develop interpersonal skills to support departmental collaboration and success. Perform other job-related duties and special projects as assigned.</td>
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### SELECTION CRITERIA

- There are no items to show

### POSTING DETAILS
*Advertising Summary:*

This position designs, develops, and documents campus enterprise applications. Primary activities include growing and building applications for university educational and administrative systems. In addition, this position will support methods to integrate applications with the campus computing infrastructure, which includes authentication, provisioning, and enterprise portal services; utilizing current technologies and DevOps philosophies.

*Advertisement text:*

Position Summary

Under general direction, this position designs, develops, and documents campus enterprise applications. Primary activities include growing and building applications for university educational and administrative systems. In addition, this position will support methods to integrate applications with the campus computing infrastructure, which includes authentication, provisioning, and enterprise portal services; utilizing current technologies and DevOps philosophies. Emphasis will be placed on providing development support for critical systems, managing application builds, updates, integrations and web services, as well as creating customized modules and external product implementations for applications currently in use, such as ERP systems, collaboration and communications tools, identity management, file sharing, video streaming, web content management systems, campus card management, data management, billing, and other similar university related systems and/or applications.

Number of Openings: 2

Key Qualifications

- Working knowledge of configuring, securing, tuning, and maintaining a large multi-site content management system (e.g., Drupal)
- Working knowledge of administering a web application stack including Linux, Apache, MySQL, and PHP.
- Demonstrated skill working with cloud infrastructure platforms (e.g., AWS, Azure, GCP).
- Working knowledge of enterprise applications and web-based application technologies, including account management, data and system integration, browser-based client interaction, and database application logic.
- Demonstrated skill developing applications using modern languages and frameworks (e.g., JAVA, PHP, Python, Perl, PeopleCode, etc.).
- Demonstrated skill using databases/query languages to store, manipulate, and retrieve data (e.g., MySQL, Oracle, MSSql, PostgreSQL, or Aurora).

Education and Experience

Bachelor’s Degree and two years of relevant experience (additional qualifying experience may be substituted for up to two years of required education on a year-for-year basis).

Salary:

Anticipated Hiring Range: $7,500 - 8,333

Classification Range: $4,372 - $10,478

Cal Poly

Known for its Learn by Doing pedagogy, Cal Poly is the flagship of the world-renowned California State University system. Annually recognized as one of the top public universities in the nation, Cal Poly continues to offer an academic curriculum based on learned experience gained through real-world practice. Located in San Luis Obispo, Cal Poly is nestled comfortably among the coastal foothills, minutes from the Pacific Ocean and equidistant to the Bay Area and Los Angeles.

Cal Poly offers a best-in-class benefits program, including health, dental and vision insurance, retirement participation in the Public Employees’ Retirement System, and educational benefits for eligible employees. See our benefits website for additional information.

Diversity Statement

At Cal Poly, we believe that cultivating an environment that embraces and promotes diversity is fundamental to the success of our students, our employees and our community. Bringing people together from different backgrounds, experiences and values systems fosters the innovative and creative thinking that exemplifies Cal Poly’s values of free inquiry, cultural and intellectual diversity, mutual respect, civic engagement, and social environmental responsibility.

Cal Poly’s commitment to diversity informs our efforts in recruitment, hiring and retention. California Poly is an affirmative action/equal opportunity employer.

Supplemental Information

Following a conditional offer of employment, a background check (including a criminal records check) must be completed satisfactorily before any candidate may start work with Cal Poly. Failure to satisfactorily complete the background check may result in the withdrawal of the offer of employment. Current employees who are offered positions on campus will be required to undergo a background check for any position where a background check is required by law or that Cal Poly has designated as sensitive.

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 as a condition of employment.

This position may be "Designated" under California State University’s Conflict of Interest Code. This would require the filing of a Statement of Economic Interest on an annual basis and the completion of training within 6 months of assuming office and every 2 years thereafter.

Cal Poly, San Luis Obispo is not a sponsoring agency for staff positions (i.e. H-1B visas).

**USERS AND APPROVALS**

**Justification for Position:**

Replacements for Cory Kitchens and Matt McDermott.

**Hiring Administrator:**

Stephanie McDonald
Approval process:* SL - Staff - Emergency Hire PD

1. Supervisor: Stephanie McDonald ✔ Approved 19 Apr 2019

HRIFaculty Affairs Representative:* Stephanie McDonald