

FRESNO COUNTY SUPERINTENDENT OF SCHOOLS

CLASSIFIED POSITION¹

JCN: 427
RANGE: 168
EXEMPT

SOFTWARE ENGINEER LEAD

BASIC FUNCTION:

Under the direction of the Director of Application, Development and Support or assigned supervisor, lead a small team in performing a variety of specialized duties in the programming, development, maintenance and analysis of computer applications and databases to resolve software problems; enhance technology performance and provide for system enhancements; oversee and participate in the research, design, development and implementation of new system applications; train and provide work direction and guidance to assigned staff.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

- Lead a small team in performing a variety of specialized duties in the programming, development, maintenance and analysis of computer applications and databases to resolve software problems; enhance technology performance and provide for system enhancements.
- Create test plans, develop test data, execute test scenarios, interpret and communicate test results, analyze new and revised applications for effectiveness and compliance with established goals, standards and procedures; detect and resolve programming errors and miscalculations; troubleshoot and resolve application malfunctions.
- Facilitate the collection, management, manipulation, reporting and distribution of computerized data used for analysis; design, install, upgrade and configure software applications to ensure smooth running of assigned computer systems; develop and modify existing programs and procedures to improve and resolve problems with computerized reporting and record maintenance.
- Design, code and test new Windows and web software applications, enhance existing systems by analyzing business objectives, preparing an action plan and identifying areas for modification and improvement.
- Maintain existing software systems by identifying and correcting software defects; investigate and develop skills in new technologies; create technical specifications and test plans.
- Operate a variety of computers, servers, peripherals and specialized software.
- Oversee and participate in the research, design, development and implementation of new system applications; modify existing programs to enhance database operations and functions; integrate new software and revise programs as necessary to ensure adaptation with existing computer systems.
- Prepare and maintain a variety of records and reports related to applications, databases, systems and assigned activities; prepare programming documentation and error logs; generate a variety of computerized reports as required.
- Provide training and technical support to system users; ensure user understanding of new and modified system applications; receive and respond to user requests and complaints regarding system problems, malfunctions, issues and concerns; assist users with maintaining automated records and generating computerized reports as directed.
- Train and provide work direction and guidance to assigned staff; assign duties to meet county programming needs, priorities and timelines; review subordinate work for accuracy and completeness; provide input concerning employee interviews and evaluations as requested.
- Utilize design and development tools; design concepts; interpret project specifications; prepare design documents; meet usability requirements.
- Utilize established development tools, guidelines and conventions including, but not limited

¹Unrepresented

to, ASP.NET, SQL Server, HTML, CSS, JavaScript, and C#/VB.NET.

- Attend and participate in a variety of assigned meetings, committees, conferences, in-services and/or special events.
- Comply with schedules, policies, regulations, procedures, orders and directives of the as County Superintendent.
- Exhibit professionally appropriate interpersonal skills including but not limited to tact, patience, flexibility and courtesy.
- Maintain a safe work environment.
- Operate a variety of office equipment, including but not limited to a computer and assigned software applications.
- Serve as a liaison between County Superintendent and administrators, personnel, outside organizations or the public concerning assigned area.
- Serve as a technical resource concerning assigned program, function or instructional area.
- Work collaboratively and maintain effective working relationships with others in the course of work in assigned area.

OTHER DUTIES:

- Drive a vehicle to conduct work, using own transportation.
- Perform related duties as assigned.
- Travel may be required in and outside of California.
- Work a flexible work schedule as required.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

- 7+ Experience of programming in .NET Systems such as C#, ASP.NET, VB, IIS.
- Backend integration with Database, SQL.
- Basics of TCP/IP, Internetworking and World Wide Web.
- Client-server web-based application development.
- Common Object Model of software development.
- Computer programming systems, applications and languages utilized by the county office.
- Database knowledge.
- Database structures, on-line applications and system capabilities of county office computer systems.
- Developing and deploying Windows based desktop as well as web application.
- Electronic computer programming.
- Electronic data processing equipment and its capabilities.
- Front end application such as Java script, Angular, Ruby on Rails.
- Object oriented program coding and testing in a completely interactive environment.
- Policies and objectives of assigned programs and activities.
- Principles of training and providing work direction.
- Principles, methods and procedures of operating computers and peripheral equipment.
- Principles, practices and techniques of computer programming and system design.
- Principles, practices and techniques used in the development, maintenance and analysis of computer systems, databases and applications.
- Stored Procs/Triggers.
- System utilities and design and program applications.
- Technical report writing.
- Techniques of testing and debugging computer programs.
- User interface standards.
- Various OS including NT, Unix, MPE (HP3000).

- Proper English usage, grammar, spelling, punctuation and vocabulary in all forms of communication.
- State Education Code, local, state and federal laws, codes, regulations and requirements and county office organization, operations, policies and objectives as related to assigned activities and/or instructional area.
- Theoretical and technical aspects of field of specialty.

ABILITY TO:

- Maintain current knowledge of technological advances in the field.
- Meet schedules and timelines.
- Maintain records and prepare reports.
- Analyze and evaluate situations accurately and adopt an effective course of action.
- Communicate effectively both orally and in writing.
- Drive a vehicle to conduct work.
- Interpret, apply, and explain rules, regulations, policies and procedures.
- Maintain consistent, reasonably regular, punctual attendance consistent with federal, state and local standards.
- Safely and successfully perform essential job functions consistent with federal, state and local standards, including meeting qualitative and/or quantitative productivity standards.
- Work confidentially and with discretion.
- Work independently with little direction.

EDUCATION AND EXPERIENCE:

EDUCATION:

- High School Diploma, General Education Degree (GED) or State High School Proficiency certificate.
- Bachelor's degree in computer science or related field preferred.

EXPERIENCE:

- Three years increasingly responsible experience in the analysis, programming and design of computer systems and applications preferred.

LICENSES AND OTHER REQUIREMENTS:

- Valid California driver's license; when driving for work, maintain automobile liability insurance in accordance with California Insurance Code section 11580.1 or maintain other statutorily authorized financial responsibility.
- Enrollment in the California Department of Motor Vehicles Government Employer Pull Notice Program at time of hire and throughout employment with County Superintendent.

WORKING CONDITIONS:

ENVIRONMENT

- Drive a vehicle to conduct work, using own transportation.
- Office environment.
- Regular interruptions.
- Small and large group meetings.

PHYSICAL DEMANDS:

- Bending at the waist, kneeling or crouching; climb or balance.

- Eyesight corrected or uncorrected sufficient to read a variety of materials including but not limited to fine print.
- Hearing with or without use of hearing aid(s) sufficient to hear any conversation with others; understandable voice and speech patterns.
- Manual dexterity and coordination sufficient to operate office and/or classroom equipment.
- Sitting, standing and/or walking for extended periods of time.
- Use hands to handle and/or feel; reach with hands and arms.
- Must frequently lift, push, pull or carry up to ten (10) pounds and occasionally lift and/or move up to twenty-five (25) pounds.

The physical demands and working conditions described here are representative of those that must be met by an employee to successfully perform the essential functions of this position, subject to reasonable accommodation.

This position description may not be an exhaustive list of all duties, knowledge, or abilities associated with this classification, however it is intended to accurately reflect the principal job elements. Related duties, knowledge, or abilities to those expressly stated may also be required for successful performance of the position.

APPROVED:

Effective: July 1, 2004
Revised: October 1, 2017