

County of El Dorado

Job # 3153 September 2006

SUPERVISING INFORMATION TECHNOLOGY ANALYST SUPERVISOR

DEFINITION

Under general direction, organizes, assignsplans, supervises, organizes, coordinates, and reviews the work of staff responsible for the planning, design, and implementation of County-wide technology programs and services; implements division priorities, goals, and objectives; monitors and evaluates the work of assigned information technology staffservice delivery models and recommends changes; performs difficult and complex analysis of customer and system requirements; develops, implements and maintains complex enterprise and departmental computer systems and networks; professional, analytical duties in support of County technology programs; and performs related workduties as assigned. Incumbents will be assigned responsibility for projects, programs and staff involving one or more of the following options: Database Administration, Office Systems, Operating Systems, Enterprise/Department Applications

SUPERVISION RECEIVED AND EXERCISED

<u>Receives general direction from management personnel.</u> Exercises direct supervision over technical, paraprofessional, and/or Networking/Telecommunications. professional staff.

DISTINGUISHING<u>CLASS</u> CHARACTERISTICS

This is the working supervisor full supervisory-level classification in the Information Technology Analystclass series, responsible for assisting management in the development and implementation of technology systems. Incumbents are responsible for planning, organizing, assigning, supervising, reviewing, and evaluating the work of assigned and day-to-day activities and functions of assigned technical, paraprofessional, and professional staff. Incumbents are expected to independently perform a full range of complex and difficult Information Technology Analyst duties at an advanced journey for timely delivery of technology services to County clients, and for performing professional-level. Successful performance analytical technology duties. Performance of the work requires thorough knowledge of and demonstrated proficiency in the technologies appropriate for the specific option(s) to which assigned, and the ability to exercise use of considerable independence, initiative and sound independent judgment within established guidelines. Supervision of staff supporting multiple projects that span organizational and technological lines is typical of assignments in this class. _, and discretion.

This class is distinguished from the Information Technology Manager in that the latter has overall managerial responsibility for one or more sub-divisions Deputy Director of the Information Technology Department.

EXAMPLES OF DUTIES (Illustrative Only)

- Supervises assigned staff and activities, either directly or through subordinate lead staff.
- Plans, schedules and assigns work to staff to ensure accomplishment of applications, systems and network projects.
- Participates in the hiring of assigned staff, recommending selection for management approval.

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- Trains assigned staff in County procedures and specific departmental and unit policies and procedures; promotes achievement of Countywide program and policy objectives.
- Evaluates employee performance, counsels employees and effectively recommends initial disciplinary action and other personnel decisions.
- Establishes program and production goals, priorities and major work schedules; assists management in determining long-range staffing requirements.
- Determines materials, equipment and infrastructure required by staff to accomplish assigned projects and objectives; notifies management of unit requirements.
- Researches operational and administrative problems, evaluates alternatives, recommends solutions and implements approved changes.

 Consults with customers on projects; advises on project feasibility and recommends solutions. Supervising Information Technology Analyst
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- Resolves complex technical problems; provides training and assistance to staff as needed.
- Develops and obtains concurrence on service level agreements.
- Coordinates the resolution of vendor problems.
- Plans, determines requirements, designs, builds, tests, implements, maintains and enhances complex business, department and/or countywide systems.
- Integrates information systems for operability over multiple platforms and technologies.
- Acts as a liaison between vendors, technical support and departments to resolve system, network or telecommunications problems; coordinates and implements corrective measures.
- Models changes against hardware and software configurations to optimize the utilization of resources.

Works with customers to determine needs; develops plans and proposals acceptable to the Information Technologies in that the latter has division management responsibilities within the Information Technologies Department.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

- <u>Plans, organizes, assigns, supervises, and reviews the work of staff responsible for the planning, design, and implementation of County-wide technology programs and services.</u>
- ◆ Selects, trains, motivates, and directs personnel; evaluates and reviews work for acceptability and conformance with department standards; prepares and delivers performance evaluations; works with employees on performance issues; implements discipline and termination procedures; responds to staff questions and concerns; works with department to meet the needs of customers. management and staff to build and maintain a high performing team environment.
- Researches to determine feasibility; advises and recommends appropriate uses of information technology.
- Develops and implements comprehensive test plans to ensure that information technology components are tested and debugged.
- Monitors and enforces security procedures.
- Installs third party software; modifies software as necessary to meet specific customer requirements; installs vendor supplied maintenance and enhancements.
- Determines proper installation parameters for software/hardware for smooth integration, transition and efficiency.
- Provides assistance and training Continuously monitors and evaluates the efficiency and effectiveness of service delivery methods and procedures; assesses and monitors the distribution of work, support systems, and internal reporting relationships; identifies and recommends opportunities for improvement; implements approved changes.
- Trains staff in work and safety procedures and in the operation and use of technology equipment; assesses individual staff training needs and recommends courses or programs to meet those needs; implements training procedures and standards.
- Recommends and participates in the development and implementation of technology related protocols, policies, procedures, and operating standards.

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- Provides leadership and analytical support to the County-wide technology programs in diverse capacities ranging from highly complex user support to technology system development, implementation, and administration.
- Provides technical consultation and guidance to staff members on the resolution of complex system and user issues; works with staff to ensure that status updates, recommended solutions, cost impacts, and anticipated dates of resolution are submitted to clients in a timely manner.
- Participates in the development and administration of the budget in assigned program areas; provides information used to develop budget expenditure expectations; monitors expenses relative to budgeted amounts and works with management on variances.
- Coordinates responses to critical system outages or failures among multiple systems; confers with, and directs staff in resolving issues, or confers with management on resolution options.
- Coordinates the allocation of staff resources to respond to security incidents; assists security staff in identifying the extent and impact of security incidents on systems and data; assists in implementing containment measures; assesses assigned technology area for potential exposure to risk and provides recommendations to mitigate risk; documents security related actions.
- Monitors systems, through multiple devices, to evaluate their reliability, conformance to performance metrics, and overall availability; identifies system deficiencies or additional resource requirements and makes recommendations on resolution of same.
- <u>> Prepares technical documentation</u> for customersassigned technology program areas; updates as needed.
- Monitors and collects data on system performance.
- Plans, develops, implements and monitors backup and recovery procedures.
- Determines and adjusts thresholds for system resources.
- Participates in projects related to assigned specialty fields.
- May supervise a project team assigned to projects covering multiple platforms and/or specialty fields.
- Provides data for justification of unit budget in relation to assigned projects.
- Attendance and punctuality that is observant of scheduled hours on a regular basis.
- Conducts research and stays current on new trends and innovative solutions for technology programs; recommends new technologies which would improve the department's operational effectiveness or services to client departments.
- Performs related work<u>duties</u> as assigned.

QUALIFICATIONS

Knowledge of:

All Options:

- SupervisoryPrinciples and practices of employee supervision, including planning and assigning work, performance review and evaluation, discipline, and the training of staff in work procedures.
- Principles and practices of leadership.
- <u>Administrative</u> principles and practices including work planning and scheduling, work review and evaluation, employee training and discipline, and team dynamics and team building.
- Business system applications.
- Principles and techniques of software, including goal setting and program development and systems quality assuranceimplementation.
- > Advanced operations, services, and activities of integrated information technology systems.
- Correlations across integrated technology services, including operating systems, server management, and network/communications.
- Advanced principles and practices of enterprise infrastructure and architecture, and associated components.
- → <u>Industry best practices of information technology management</u> and control.
- Principles and practices of technical problem solving.

- Principles, processesAdvanced operational characteristics of desktop, network, and telecommunication systems hardware, software, and peripheral equipment.
- Advanced methods and techniques of installing, configuring, administering, and monitoring a diverse range of physical and virtual systems.
- → <u>Advanced methods</u> and techniques of project management and related software. <u>evaluating</u> system effectiveness and responding accordingly.
- Advanced principles, practices, methods, and techniques of troubleshooting, diagnosing, and resolving hardware and software, and network/telecommunication system issues.
- Methods and techniques of eliciting information and performing diagnostic procedures on technology systems.
- Security and monitoring devices, and procedures necessary to maintain the integrity and security of data in networked systems.
- Methods and techniques of conducting research.
- Principles and practices of developing and maintaining technical documentation, files, and records.
- Applicable federal, state and local laws, regulatory codes, ordinances and procedures relevant to assigned areas of responsibility.
- Principles, practices and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- → Techniques for providing a high level of customer service. by effectively dealing with the public, vendors, contractors, and County staff.

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- Design, The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination.
- Computers and software programs (e.g., Microsoft software packages) to conduct, compile, and/or generate documentation.

Ability to:

- Select and supervise staff, provide training and development opportunities, ensure work is performed effectively, and evaluate performance in an objective and positive manner.
- Participate in the development and implementation of goals, objectives, practices, policies, procedures, protocols, and work standards.
- Plan, implement, and evaluate the effectiveness of assigned technology programs.
- Provide advanced professional support to a diverse range of the County's technology programs.
- ⇔ Perform complex duties in the installation, configuration, administration, and maintenance of mainframe, distributed, client/server and desktop computertechnology systems. hardware and software in assigned program areas.
- PrinciplesSupervise the design, development, testing, and practicesimplementation of producing projectnew technology systems.
- Evaluate, research, and diagnose complex user issues and recommend solutions.
- Ensure systems operational effectiveness and reliability; identify security vulnerability and direct the appropriate response.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Demonstrate strong and effective customer support skills.
- → Prepare clear and concise technical documentation.

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- o Current trends and technological advancements.
- o Information technology standards.

Skill in:

All Options

- o Planning, organizing, coordinating, and directing the work of assigned staff.
- o Selecting, motivating and evaluating staff and providing for their training and development.
- o Promoting and maintaining a team environment.
- Organizing work, setting priorities, and Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Effectively use computer systems, software applications, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- → <u>Use tact</u>, initiative, <u>prudence</u>, and <u>SOUND</u> independent judgment within <u>established</u><u>general policy</u>, <u>procedural</u>, <u>and legal</u> guidelines.
- Analyzing complex technical and administrative problems, evaluating alternative solutions and recommending and implementing effective courses of action.
- Understanding highly complex information technology systems and issues.
- o Making technical oral presentations to technical and non-technical audiences.
- Developing information technology strategies and architecture.
- Interpreting and applying rules, and explaining policies and procedures to customers and assigned staff.
- o Preparing clear and concise reports, correspondence and other written materials.
- Communicating tactfully and effectively, orally and in writing, with Information Technology management, professional and support staff, Department Heads, departmental system users and vendors.
- → Establishing and maintainingEstablish, maintain, and foster positive and effective working relationships with those contacted in the course of the work.

<u>Education and Experience:</u>Incumbents in the Supervising Information Technology Analyst classification will also be expected to have knowledge of and skill in one or more of the following options:

Database Administration Option:

- Database management systems (DBMS).
- Data and database topology and architecture.
- → Database design.
- → Logical data schema.
- ⊖ Database CASE tools.
- → Data/file management tools.
- ⊖ Database utilities.
- o File and data recovery.
- Database security methods and techniques.
- Physical control standards and procedures.

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Office Systems Option:

- o County-wide office systems standards, policies and procedures.
- o Fundamentals and concepts of designing customer hardware, software and connectivity solutions.
- Principles and practices of training, instructing and supporting customers.
- o Concepts of installation, configuration and testing of systems in diverse customer environments.

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- o Office systems maintenance, monitoring and troubleshooting methodologies.
- o Architecture of operating systems and network operating systems.
- o Office systems software internal operating functions and customer interfaces.
- → LAN/WAN logical and physical design.
- Internet and Intranet architecture.

Operating Systems Option:

- Fundamentals and concepts of enterprise, distributed, network, client/server and desktop computer operating systems.
- Computer systems configurations.
- o Operating systems architecture, structure, operations and utilities.
- o Operating systems and systems utilities version control principles.

Enterprise/Department Applications Option:

- o Systems and program design and analysis.
- Principles and techniques of programming.
- Programming languages, utilities and job control language.
- Development and use of proper test plans and procedures.
- o Definition of technical specifications from customer and business requirements.
- o Business systems analysis and planning process.
- o Principles and practices of training, instructing and supporting customers.
- o Practices of effective communication of technical issues to customer and client community.
- Customer acceptance testing.
- Website design concepts and standards.
- Website development languages, tools and techniques.
- Web based application design, tools and techniques.

Networking/Telecommunications Option:

- Networking topology and architecture.
- Logical and physical network design.
- o LAN/WAN network hardware and software vendors and products.
- o Data communication concepts and principles.
- Network security policies, techniques and procedures.
- o Network documentation, configuration maintenance and diagnostic procedures and techniques.
- o Designing, building, managing and maintaining Internet Protocol (IP) telephony systems.
- Data and voice network design.
- Network switching concepts and facilities.
- o Architecture and design of telecommunications switches and voicemail systems.

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- o Programming of switches and voicemail systems.
- o Global communications systems and local carriers.
- o Troubleshooting and repair of telecommunications equipment.
- o Telecommunications vendor operating policies and procedures.

Special Requirements:

May be required to work on call, weekends and irregular hours. Must be willing to respond to after hours system emergencies. Applicants must pass a criminal history and background check which may include contact of prior employers and personal references, and fingerprinting for purposes of searching local, state and national fingerprint files through the Department of Justice and Federal Bureau of Investigations to disclose any criminal record.

Education and Experience:

Any combination of the required experience, education, and training that would provide the essential knowledge, skills, and abilities is qualifying.

Equivalent to <u>graduationa bachelor's degree</u> from <u>an accredited</u> four-year college or university with major coursework in<u>information technology</u>, computer science, information systems or a closely related field-; <u>possession of one or more approved nationally recognized industry specific technology</u> certifications may be substituted for some or all of the education;

AND<mark>: a) Seven</mark>

<u>Four (4)</u> years experience working in one or more of the following fields: systems analysis, systems engineering, programming, data and/or database administration and/or analysis, operating systems, office systems, network analysis and/or management or similar field, in a multi-platform of professional experience providing analytical support to information systems environment. At technology enterprise systems in assigned program area, including at least one (1) year shall include project management and in a lead direction of or supervisory capacity.

Licenses and Certifications:

Possession of, or ability to obtain and maintain, a valid California Driver's License by time of appointment and a satisfactory driving record.

PHYSICAL DEMANDS

Must possess mobility to work in an office setting; use standard office equipment, including a computer; some positions may be required to operate a motor vehicle; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. Standing in and walking between work areas is frequently required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification frequently bend, stoop, kneel, and reach to perform assigned duties, as well as push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 25 pounds. Reasonable accommodations will be made for individuals on a case-by-case basis.

ENVIRONMENTAL CONDITIONS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff, OR b) Three years of experience at the level equivalent to the County's class of Information Technology Analyst II as a Project/Team Leader. and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

NOTE: The above qualifications are a typically accepted way of obtaining the required knowledge and skills. <u>WORKING CONDITIONS</u>

Must be willing to work after hours, weekends, and holidays as needed. Must be able to pass a thorough background investigation.