



SYSTEMS PROGRAMMER/ANALYST/INTEGRATOR

DEPARTMENT: Financial and Management Services/Information Resources Management/Information Technology

NATURE OF WORK:

Performs responsible developmental/support technical work.

Analyzes computer automation needs, designs appropriate solutions, implements both hardware and/or software solutions, maintain new and existing systems, trains and assists users in such systems. Provides operational and enhancement support for the County's Geographic Information System. Work is performed under the general supervision of the Information Technology Administrator.

ESSENTIAL FUNCTIONS OF THE JOB:

Analyzes computer automation needs from both the user and technical points of view. Provides feasibility and cost analysis of automation needs.

Designs possible solutions and makes recommendations to management, which includes performing research of existing markets for off-the-shelf software solutions, designing custom solutions when off-the-shelf solutions are not available, providing cost and time estimates to management.

Implements integrated computer automation designs which include pricing all necessary hardware and software and supplies requisitions to Purchasing Division; assembling all related hardware and installing all related software; implementing any data structures or program designs determined in the analysis, and providing system, application, programming and user level documentation for continued support and training.

Maintains newly implemented and existing systems which includes troubleshooting system and application problems (to include hardware and software) and implements solutions; providing networking services (along with other IT staff) to those applicants/users needing such service.

Trains and assists users in new and existing systems which includes providing after installation/implementation instructions for established County software and specialized in-house implementations; providing on-line or telephone support to users questions; providing network and department administrators with training and support.

Provides operational and enhancement support for County's Geographic Information System (GIS) including establishing and implementing procedures for backup, recovery and upgrade of hardware, operating system and application; designing, implementing and maintaining networking and data access needs for GIS users; assisting GIS/Cartographic Technician with system, data and programming needs; providing technical assistance in the printing/plotting needs of GIS users.

Practices continuous learning through individual study, classroom training, seminars and conferences.

Performs work safely in accordance with departmental safety procedures and the County safety program. Operates equipment safely and reports any unsafe work condition or practice to supervisor.

Performs related work as required.

JOB LOCATION AND EQUIPMENT OPERATED:

Duties are performed primarily in an office setting. Operates personal computer and other office equipment. Uses small hand tools, diagnostic hardware and software, programming software and network cable testing equipment.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

Thorough knowledge of computers and related hardware to include data storage systems, networking components, communication equipment and printers/plotters.

Considerable knowledge of operating systems to include DOS, Microsoft Windows, Windows NT, Unix and Novell.

Considerable knowledge of office automation application software.

Considerable knowledge of requirements analysis and system/program design.

Ability to program in standard languages such as Basic, Cobol, Pascal, and Object Oriented/Event Driven Languages such as Visual Basic, Visual C++.

Ability to prepare technical documentation, reports and presentations.

Ability to manage time and keep schedules.

Ability to establish good working relationships with users and coworkers.

Ability to make decisions in accordance with established policies.

MINIMUM QUALIFICATIONS:

Associates' degree in computer science or related field and considerable programming and user support experience or any equivalent combination of acceptable education and experience providing the knowledge, abilities and skills cited above.

Date: June 2002

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IDENTIFICATION OF GENERAL APTITUDES AND PHYSICAL REQUIREMENTS

Position Title: Systems Programmer/Analyst/Integrator Position Number: 517
Department: Financial and Management Services Division: IRM/IT

The Americans with Disabilities Act requires that we identify the general aptitudes and physical requirements needed to perform the job listed above. Individuals who have the position must be able to perform all essential job functions unaided or with reasonable accommodation.

I. Mental Abilities: General learning ability. The ability to “catch on” or understand instructions and underlying principles.

- Ability to reason and make judgments
- Ability to understand and follow oral instruction
- Ability to understand and follow written instruction
- Ability to guide and/or give instructions
- Ability to make decisions in accordance with established procedures and policies
- Not essential to job function

II. Verbal Abilities: Ability to understand meanings of words and ideas associated with them and to use them effectively. To comprehend language, to understand relationships between words, and to understand meanings of whole sentences and paragraphs. To present information or ideas clearly.

1. Speaking/Talking:

- Answering telephone, radio, or switchboard
- Communicating with County officials
- Communicating with general public
- Communicating with vendors
- Communicating with supervisors and/or with other employees
- Communicating with others _____
- _____
- Not essential to job function

2. Hearing/Listening:

- Ability to distinguish between different tones
- For communication with County officials, public, vendors, supervisors and/or other employees
- Not essential to job function

3. Reading: (ability to read and understand text)

- Essential to job function
- Not essential to job function

III. Numerical: Ability to perform arithmetic operations quickly and accurately.

- Ability to mentally perform accurate two digit calculations
- Ability to perform accurate calculations aided by a calculator, adding machine or measurement device
- Not essential to job function

IV. Spatial Abilities: Ability to comprehend forms in space and understand relationships of plane and solid objects. May be used in such tasks as blue print reading and in solving geometry problems. Frequently described as the ability to “visualize” objects of two or three dimensions, or to think visually of geometric forms.

- Essential function
- Not essential function

V. Motor Coordination: Ability to coordinate eyes and hands or fingers rapidly and accurately in making precise movements with speed. Ability to make a movement response accurately and quickly.

1. Manual Dexterity: Ability to move the hands easily and skillfully. To work with the hands in placing and turning motions.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use telephone | <input checked="" type="checkbox"/> Manipulate computer keyboard and mouse |
| <input type="checkbox"/> Use switchboard | <input type="checkbox"/> Use postage machine |
| <input checked="" type="checkbox"/> Use radio/console | <input checked="" type="checkbox"/> Use hand tools |
| <input checked="" type="checkbox"/> Use a calculator | <input checked="" type="checkbox"/> Use power tools |
| <input checked="" type="checkbox"/> Use a copy machine | <input checked="" type="checkbox"/> Other: <u>Cell Phone</u> |
| <input checked="" type="checkbox"/> Use a fax machine | <input type="checkbox"/> Not essential to job function |

2. Finger Dexterity: Ability to move the fingers and manipulate small objects with the fingers rapidly or accurately. For example: electrical wiring.

- Essential to job function
- Not essential to job function

Explain: _____

VI. Physical Demands:

1. Strength: The quality, state or property of being strong. The power to withstand strain, force or stress.

Please check (✓) in appropriate boxes below.

Ability to manipulate materials and/or equipment (lbs)							Frequency of Manipulation		
	5-	5-10	10-15	15-25	25-50	50+	Occasionally	Frequently	Continuously
Lift					✓			✓	
Push/Pull						✓		✓	
Hold/Carry					✓			✓	

Manipulation done from: ground to waist waist level waist to shoulder above shoulder
(Check all that apply)

Not essential to job function: Lift Push/Pull Hold/Carry (Check all that apply)

2. Climbing: To move up or mount by using the hands or feet.

Ladders

Stairways

Steps

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Step stool | <input checked="" type="checkbox"/> 1 flight | <input type="checkbox"/> 1-2 |
| <input checked="" type="checkbox"/> 8' to 10' step ladder | <input type="checkbox"/> 2 flights | <input type="checkbox"/> 2-3 |
| <input type="checkbox"/> Extension ladder | <input type="checkbox"/> 3 or more flights | <input checked="" type="checkbox"/> 4 or more steps |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Not essential to job function | <input type="checkbox"/> Not essential to job function | <input type="checkbox"/> Not essential to job function |

3. Ability to Stand, Sit, Walk, and Run:

Please check (✓) in appropriate boxes below.

	Duration (hours/day)						Occasionally	Frequently	Continuously
	0-1	1-3	3-5	5-7	7-9	9+			
Stand	✓						✓		
Sit			✓					✓	
Walk	✓						✓		
Run									

If walking or running, over what type of terrain? flat rough both

Not essential to job function: Stand Sit Walk Run (Check all that apply)

4. Stooping, Kneeling, Crouching, and/or Crawling:

To bend forward or down from the middle of the waist or the middle of the back, to bend downwards, to lower oneself and/or to move freely on hands and knees.

Daily Amounts

- 0-5x 5-20x 20-50x 50+x
 Other _____ Not essential to job function

5. Reaching, Handling, Fingering, and/or Feeling:

To stretch out, extend, or put forth a bodily part. To touch or grasp something, by extending or stretching. To touch, lift, hold or operate with the hands.

Daily Amounts

- 0-5x 5-20x 20-50x 50+x
 Other _____ Not essential to job function

6. Seeing: To perceive or comprehend by the sense of sight.

Essential to job function: These characteristics are necessary (Check all that apply)

- Peripheral vision
- Night vision
- Focus (distinctness or clarity)
- Color perception (discriminate between colors)
- Depth perception (determine distance relationship between objects)
- Not essential to job function

VII. Driving: The ability to transfer or convey in a vehicle.

Transmission	Standard	Automatic	Multi-Gears
Car	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Van	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small Truck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medium Truck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Large Truck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Truck w/Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Bus Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not essential to job function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (list) _____			

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