GIS Programmer

Department: Information Systems
Position: Career Service
Grade: 730
Supervisory: No
Reports to: GIS Manager

Summary

Under general supervision of the GIS Manager, leads Geographic Information Systems (GIS) application development and other programming to support GIS functions. Performs complex technical coordination and management of GIS projects with other departments, agencies, and officials.

Essential Functions

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. Design, create, implement, manage, maintain, and document GIS using ArcGIS Desktop, ArcGIS Pro, ArcGIS Enterprise Server, ESRI Enterprise Geodatabases, Oracle, and other software that supports and enhances Utah County business functions.
2. Assist GIS Manager with generating quality standards and maintaining overall integrity of databases and systems.
3. Assist GIS Manager with establishing long-range direction for GIS in Utah County.
4. Assist GIS Manager with hiring and training of personnel within the GIS Division.
5. Lead the design, development, programming, and maintenance of GIS applications and tools to meet the needs of various county departments and agencies; integrate GIS data with other county enterprise systems; utilize PB, VBA, VB.NET, SQL, HTML, JavaScript, C#, Java, Swift, XAML, Python, and other programming languages, as needed.
6. Perform high-level technical review of geographic information, GIS software, and third-party software to determine accuracy and usability.
7. Capture field data in various formats using global positioning system equipment and other means.
8. Document application development in real time; modify existing documentation, as needed.
9. Support operations of a multi-department GIS enterprise; provide technical assistance with implementing GIS projects and applications to county departments, other government agencies, and the public; train County employees in GIS procedures and software.
10. Research and analyze new hardware and software products for County GIS use.

11. Respond to and resolve customer complaints and emergency problems related to the GIS function.
12. Assist with performing System Administrator duties on assigned hardware and software, including Windows Server and Window workstation operating systems.

Knowledge, Skills, and Abilities
- Knowledge of ArcGIS, ArcGIS Desktop, ArcGIS Pro, ArcGIS Online, ArcGIS Enterprise Server, ArcGIS Runtime SDK's, and other related GIS products
- Knowledge of Python, C#, Java, JavaScript, Swift, IOS, Android, SQL, VB.net, and similar tools
- Knowledge of computer operating systems including Windows Server, and Windows 10+
- Knowledge of computer programming and design techniques
- Knowledge of civil engineering, cartography, cartographic principles, and surveying
- Highly skilled in relational database systems, such as Oracle or SQL server in an enterprise GIS deployment
- Skilled in maintaining software on personal computers, workstations, and servers
- Skilled in utilizing geographic information systems
- Skilled in reading, writing, and presenting technical information to individuals from various backgrounds
- Skilled in advanced math
- Ability to assess priorities of other departments
- Ability to work effectively and positively within a team environment while maintaining cooperative relationships with users, key stake holders, team members, and management
- Ability to produce applications and tools using Python, iOS, Android, ArcGIS Runtime SDK's, C#, Javascript, Java, Swift, SQL, VB.Net, Spillman RMS and CAD systems, ArcGIS Collector, ArcGIS Dashboards, ArcGIS AppStudio, ArcGIS Web AppBuilder, ArcGIS Survey123, or similar programming languages and tools

Supervisory Responsibility
This position has no direct supervisory responsibility but does serve as a coach and mentor for other positions in the department.

Work Environment
This job operates in a professional office environment but may be performed for sustained periods outdoors and occasionally in hot, cold, or inclement weather. Work may expose the incumbent to possible bodily injury when performing field work. This role routinely uses standard office equipment such as a laptop, desktop, smart phone, photocopiers, shredders, and filing cabinets. The noise level in the work environment is usually moderate. The incumbent may be required to drive Utah County owned vehicles in the course of conducting County business and must abide by the Utah County Vehicle Policy.

For Office Use Only
Job Code: 2038   Worker's Compensation: Clerical
Job Title: GIS Programmer   Background Level: I
FLSA: Exempt   Safety Sensitive: No
Effective Date: 2/29/2024   DOT: No
Public Safety: No   ML: Individual Contributor

Physical Demands
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is required to use manual dexterity to handle, feel, and operate objects, tools and controls, and reach with hands and arms. This employee is frequently required to stand, talk, hear, and sit for long periods of time. Specific vision abilities by this job include close vision and ability to adjust focus. The employee works for sustained periods of time maintaining concentration and attention to detail. The employee is required to type, file, and lift supplies up to thirty (30) pounds. The employee occasionally drives a motor vehicle.

Position Type/ Expected Hours of Work
Incumbent must work eighty (80) hours each pay period to maintain full-time status. There may be availability to work out a flex schedule ahead of time that works for both the County and the employee. Occasional evening and weekend work may be required as job duties demand.

Travel
Travel is primarily local during the business day, although some out-of-area and overnight travel may be expected, up to five (5) percent.

Required Education and Experience
1. Bachelor's degree in Geographic Information Systems (GIS), Computer Science, Geography, Planning, or a related field.
2. Four (4) years of computer programming work experience.
3. Demonstrable work competence in programming or GIS application development.
4. Equivalent combinations of education, experience, and demonstrated work competence, which includes two (2) years of experience in computer programming, may also be considered.

Preferred Education and Experience
1. Preference may be given to applicants with programming experience directly related to GIS.

Additional Eligibility Qualifications
1. Applicants must possess a valid driver's license and obtain a valid State of Utah driver's license within sixty (60) days of employment.
2. Selected applicants will be required to submit to a pre-employment drug screen and background check. Due to potential access to sensitive and protected data, this position is subject to additional criminal background checks as directed by the Information Systems Department.

AAP/EEO Statement
It is the policy of Utah County Government to assure equal employment opportunity to its employees and applicants for employment without regard to race, color, religion, national origin, disability, age, sex, sexual orientation, genetic status or gender identity.

Other Duties
Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee of this job. Duties, responsibilities, and activities may change at any time.

Utah County Government is a drug-free workplace.

Acknowledgement below to be completed after an offer has been extended and accepted.

This job description has been approved by the Office of Human Resource Management in consultation with the Department Head.

Signature below constitutes an understanding of the requirements, essential functions and duties of the position.

Candidate / Employee _____ Date _____