

# OTTAWA COUNTY

**TITLE:** GIS PROGRAMMER/TECHNICIAN  
**DEPARTMENT:** INNOVATION & TECHNOLOGY  
**DATE:** 1/13/2017

**EMPLOYEE GROUP:** UNCLASSIFIED  
**GRADE:** 04A  
**FLSA:** EXEMPT

## **JOB SUMMARY:**

Under the general direction of the GIS Supervisor, performs duties related to application development and administration of the county's GIS applications, databases, and resources. Provides moderate business analysis for departmental and partnered agencies including writing and maintaining complex routines that interact with multiple development platforms and data stores. Creates application documentation and provides GIS training to departmental and partnered agency clients. Participates in the creation, analysis and maintenance of spatial data layers for Ottawa County Enterprise GIS.

**ESSENTIAL JOB FUNCTIONS:** The essential functions of this position include, but are not limited to, the following:

1. Administers existing applications and web server including data maintenance, ticket resolution, application patching, and application upgrades.
2. Researches, identifies, analyzes, and fulfills requirements of all program users.
3. Develops custom software applications and enhancements of existing software to enhance the functionality and/or performance of proprietary and purchased applications in accordance with documented requirements and specifications.
4. Provides integration with county applications to increase efficiencies and value to internal and external users. (Onbase, Envision, BS&A)
5. Design, code, document, test, analyze, and maintain software programs and applications to implement and/or support automated GIS solutions for business processes.
6. Proactively and continually evaluates applications by designing, running, and monitoring software performance tests on new and existing programs to identify and correct errors, identify needed improvements, and perform general debugging.
7. Works with a variety of GIS technologies relating to implementing/customizing desktop, web and mobile based GIS solutions.
8. Provides technical assistance to users and staff related to the operation of GIS applications.
9. Serves as system/security administrator for software applications.
10. Develops and maintains user manuals, guidelines, and application documentation. Trains and provides ongoing training for new or modified programs.
11. Acts as quality control for data created or transferred into the County centralized GIS data warehouse.
12. Maintains knowledge of the vendor marketplace and technology developments in order to make recommendations to management regarding investments in new applications/tools.

13. Recommends, schedules, and performs software improvements and upgrades.
14. Performs other functions as assigned.

#### **REQUIRED KNOWLEDGE AND SKILLS:**

1. Thorough working knowledge of a variety of higher level programming languages and programming tools.
2. Excellent understanding of algorithm design, coding methods, and best practices.
3. Thorough working knowledge of relational database design and functions.
4. Thorough working knowledge of the principles and practices of software testing and debugging.
5. Good working knowledge of the business practices and requirements of end-users.
6. Excellent analytical skills and the ability to deconstruct end-user operating process and procedures.
7. Able to demonstrate knowledge of and develop applications in ESRI 10.x software including ArcGIS Desktop, ArcCatalog, ArcGIS Online and ArcGIS Server.
8. Knowledge of the application of GIS principles in a municipal environment; knowledge of GIS system requirements, applications, and uses. Knowledge of cartographic concepts and the ability to apply them in map production.
9. Ability to interact positively and objectively with department directors, elected officials, coworkers, end-users, user committees, vendors, and internal and external clients from a wide range of cultural and socio-economic backgrounds and with varying levels of technical knowledge and skills.
10. Able to consistently demonstrate commitment to compliance with applicable laws, regulations, and county policies and procedures.
11. Excellent written, verbal, and interpersonal communication skills.

#### **REQUIRED EDUCATION, TRAINING AND EXPERIENCE:**

Bachelor's degree from an accredited institution in computer science, information technology, geographic information systems, geography, or closely related field combined with two years of progressively responsible experience in programming and application development; or an equivalent combination of education and experience. Specific experience in the use of ESRI-based software and development of GIS software applications, database design (MSSQL) strongly preferred. Experience in multiple programming languages and web development strongly preferred.

#### **LICENSES AND CERTIFICATIONS:**

ESRI certification preferred. Must be willing to pursue additional knowledge and certifications as required to perform position and as requested by supervisor.

#### **PHYSICAL REQUIREMENTS:**

Must be able to perform essential job functions with or without reasonable accommodations, including, but not limited to, visual and/or audiological appliances and devices to increase mobility.

**WORKING CONDITIONS:**

Work is performed in a normal office environment.