

JOB DESCRIPTION

POSITION TITLE: GIS Programmer Analyst
POSITION NUMBER: 72284230, 78607595
BUSINESS UNIT: Shared Service
DIVISION: Data & Business Information Management
SECTION: Geographic Information Systems & Services
REPORTS: Manager Geographic Information Systems & Services

Approved: **Date:** November 28, 2008

SUMMARY

Reporting to the Manager, Geographic Information Systems & Services, the GIS Programmer Analyst provides a broad range of services in support of HRM's GIS software and applications. These services include is analysis, design, development, documentation, installation, implementation, enhancement, support and maintenance of the Regional Municipality's geographic information systems software and applications. Working independently or in a team environment, the GIS Programmer Analyst also, prepares system documentation, processes change requests, trains end users, and assists in the use of geographic information systems, and development of business procedures, at all times respecting the confidential nature of the work.

DUTIES AND RESPONSIBILITIES

Application Development & Technical Support (55%)

- Reviews, analyzes, and codes GIS software applications using a variety of programming tools and languages including testing and debugging
- Modifies, maintains and supports existing current applications. Troubleshooting problems that occur in the software and hardware
- Prepares system documentation such as entity relationship diagrams, data flow charts, and file layouts, user guides, technical documentation, test plans and maintenance procedures.
- Provides internet and web based support for HRM's internet mapping system
- Develop and execute quality assurance checks and quality control procedures
- Researches, evaluates, makes recommendations, and installs tools and techniques used to support GIS applications, software, and interfaces.
- Acts as a technical resource for other divisions. Acts as a technical contact for external agencies and service providers.
- Performs routine database maintenance such as file conversion, archival and data warehousing.
- Remains current with advances in the information technology industry in general and specifically the geographic information technology industry.
- Works with third party software vendors to develop interfaces between the Municipality's various geographic information systems, and Corporate applications, allowing them to work together.
- Implements 3rd party application software.
- Adheres to industry standard development and change management practices.

Client Services (40%)

- Consults with end users to determine geographic information system requirements, evaluating proposed and existing systems and making recommendations for implementation of business solutions, independently or jointly with a GIS Systems Analyst or in a project team environment.
- Assists end users with the use of their geographic information systems, including guidance, training,

troubleshooting, documentation and ad hoc solutions to business problems.

Administration & Other related Duties (5%)

- Performs routine PC maintenance tasks such as software installations, and provides data management advice.
- Completes regular team administrative requirements.

QUALIFICATIONS

Technical Competencies

Education & Experience

Post secondary degree in Computer Science and an advanced degree or study in Geographical information systems, OR

Post secondary degree in Geography, formalized IT training, and at least 1 year of formal application development in the Geographic Information Industry, OR

A suitable combination of formal Geography, Geomatics, GIS, and IT education with development experience (at least 2 years of development and programming experience in the GIS field).

Job Specific/Technical Knowledge

- Thorough knowledge of GIS concepts including remote sensing, application development, and use.
- General knowledge of the geomatics industry and new developments and trends in GIS.
- Good knowledge of the geography of HRM.
- In-depth knowledge of systems development practices.
- Demonstrated ability and extensive working knowledge of GIS (ESRI products) and GIS techniques
- Demonstrated ability in a wide range of software applications, programming languages and Web technologies associated with GIS (including, but not limited to: AML, ArcGIS, ArcMAP, ArcPAD, ArcIMS, VB, Java, Java Scripting, PHP, SQL, HTML, XML, AJAX, ASP, IIS, Apache and Tomcat)
- Knowledge of ArcObjects (an asset)
- Working knowledge of relational databases and concepts such as Oracle, MySQL and MS-SQL.
- Working knowledge of GroupWise and PC based applications such as Word Perfect, Lotus 123, and MS Office Products
- Familiarity various operating systems such as Unix, Windows, Linux
- Familiarity of network environment (i.e. Novell, TCP/IP) and client/server environments.
- Very strong logic, analysis and problem solving skills.
- Very strong interpersonal and communication skills, both written

Behavioural Competencies

Achievement Motivation - Focuses efforts on working well and/or competing against a standard of excellence while achieving high quality results.

Analytical Thinking - understands a situation by breaking it apart into smaller pieces or tracing the implications of a situation in a step-by-step way. Includes organizing the parts of a problem, situation, etc., in a systematic way; making systematic comparisons of different features or aspects; setting priorities on a rational basis;

Communication - effective, timely, and relevant exchange of information that is respectful of the diversity of

people, and the geography and working environments of our employees. It includes receiving information, listening, understanding and responding openly and effectively in interactions with others. It also implies that this information is processed into actions.

Continuous Learning - Identifying and addressing personal strengths, developmental needs and changing circumstances to enhance performance and career growth.

Customer Service - implies a desire to help or serve others, to meet their needs. It means focusing one's efforts on discovering and meeting the customer or client's needs. "Customers" include citizens, elected officials, internal colleagues, or anyone that the person is trying to help.

Flexibility - is the ability to adapt to and work effectively within a variety of situations, and with various individuals or groups. Flexibility entails understanding and appreciating different and opposing perspectives on an issue, adapting one's approach as the requirements of a situation change, and changing or easily accepting changes in one's own organization or job requirements.

Initiative - Identifying and dealing with issues pro-actively and persistently, seizing opportunities that arise.

Innovation - Questioning conventional approaches and responding to challenges with innovative solutions or services, using intuition, experimentation and fresh perspectives. Improves performance by doing new things.

Networking/Relationship Building - Seeking and maintaining working relationships and/or networks of contacts to further the organization's goals.

Organization and Planning - The ability to effectively plan and organize one's time to: achieve goals, prioritize tasks and allocate time and resources accordingly to ensure completion; to manage multiple tasks and organize time accordingly, and to make use of resources available to assist in achieving these goals.

Risk Management - Identifying, assessing and managing risk while striving to attain objectives.

Stress Management - Maintaining concentration and effectiveness in the face of stress.

Teamwork & Cooperation - to work cooperatively with other, to be part of a team, to work together, as opposed to working separately or competitively. For this competency to be effective, the intention should be genuine. Teamwork and cooperation may be considered whenever the subject is a member of a group of people functioning as a team.

Values and Ethics - Creating and supporting the principles and values of the organization and the Municipality as a whole

Valuing Diversity - is the ability to understand and respect the practices, customs and values of other individuals and cultures. Sees diversity as beneficial to the organization and community. It implies the ability to work effectively with a wide cross-section of the community representing diverse backgrounds, cultures and socio-economic circumstances, and divergent goals.

RELATIONSHIPS/CONTACTS

Reports to: Manager Geographic Information Systems & Services

Supervises: Although this position does not supervise full-time employees, it may supervise or direct the work of students, consultants, or work term staff as part of managing development or implementation initiatives.

Internal Contacts:

Mayor & Council Members
Municipal Clerk's office
Environmental Mgmt Services
Public Works & Transportation
Planning & Development
Real Property & Asset Management
Finance
Shared Services
Emergency Response Agencies
Halifax Regional Water Commission

External Contacts:

General Public
Other Municipalities
Provincial Government
Federal Government (Statistics, Elections, Food & Inspection Agency)
Halifax Regional School Board
Emergency Response Agencies
Vendors
Suppliers
Developers

WORKING CONDITIONS

- As per current union contracts **35** hour work week. Monday through Friday 0830-1630
- Compensated overtime and on call duties as required.
- Normal office environment; must be capable of working with a minimum amount of supervision, working on several projects concurrently, under deadlines and pressure.

Signatures:	
Completed by: Marianne Murphy _____	Date: _____
Reviewed by: Donna Davis _____	Date: _____
Reviewing Director: Brad Anguish _____	Date: _____
Human Resources: _____	Date: _____