

Job Description

Job Title:	Library Information Technology Specialist/Developer
Department:	Library
Reports To:	Head, Digital Initiatives
Jobs Reporting:	None
Salary Grade:	USG 9-11
Effective Date:	August 2016

Primary Purpose

The Library Information Technology Specialist/Developer works on library software development activities to support the research, teaching and learning activities of the University of Waterloo. In collaboration with other Digital Initiatives and library staff, the software development activities may encompass all phases of the software development lifecycle, including business analysis, initial configuration and setup, design, testing, updates, and ongoing support, maintenance, and troubleshooting. The Library Information Technology Specialist/Developer liaises with library staff to analyze needs and suggest technological solutions.

Key Accountabilities

As a member of the Digital Initiatives team:

- Works collaboratively with library staff to understand the technology needs and processes of library staff and users
- Keeps track of and responds to technology trends that may be beneficial to supporting the Library's strategic directions
- Evaluates, selects and participates in technology deployments
- Works collaboratively with Library Technology and Facilities Services (LTFS) to ensure the reliable and effective operation of the Library's technical infrastructure
- Participates as a member of a support team to ensure essential system functionality during times of vacation or illness
- Provides guidance to others in various projects and committees
- Participates in planning sessions in assigned service areas
- Provides mentoring support to colleagues
- Serves as a resource to the Head, Digital Initiatives

As a developer involved in technological solutions for the Library:

- Serves as developer on projects related to areas of development expertise to provide new or enhanced services using a variety of technologies and languages
- Contributes to the configuration, customization and support of interfaces and application functionality for a variety of open source and commercial solutions used in the Library
- Identifies unmet functional requirements, works with users to develop specifications, evaluates available software, develops and documents programs and scripts that extend system functionality and automates routine tasks
- Performs detailed analysis and design of new systems, participates in in-house development in support of library projects and services
- Manages software development using version control systems and issue tracking
- Effectively plans, prioritizes and manages multiple concurrent assignments and tasks

Job Description



- Works collaboratively to maintain, support, extend and refactor/rewrite production and legacy applications as needed and prioritized
- Researches and maintains an up-to-date knowledge of technologies to assist the Library in migrating legacy services to current technology standards
- Participates in the planning, development, prototyping and implementation of library information technologies
- Provides documentation of development activities
- Adheres to quality assurance standards and follows best practices

Solve a wide range of problems creatively and efficiently:

- Resolves problems in a wide range of supported technologies
- Applies experience and judgment to explore possibilities, recognizing preferred approaches and solutions. Identifies circumstances when standard approaches to problem solving are practical as well as those requiring creative thinking and ingenuity
- Collaborates effectively with library staff and staff in other campus information technology (IT) departments to create solutions

Provides excellent client service:

- Trains and provides support for staff in the technologies directly related to their areas of expertise
- Understands and effectively communicates complex technical concepts in ways that are appropriate to a variety of individuals and groups
- Provides assistance to other staff in investigating and resolving technology-related problems

Obtains and maintains technical knowledge:

- Through practical experience and professional development, keeps abreast of current computing-related technology as it relates to currently used system configurations, technology used within the Library and University, and potential acquisitions related to client needs
- As the incumbent progresses through the career path, develops and strengthens expertise in one or more areas of specialization while broadening knowledge in other areas

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- Post-secondary education in a computing discipline together with relevant experience, or an equivalent combination of education and experience.

Experience

- Demonstrated ability to interact and collaborate with all staff in a respectful and sensitive manner
- Demonstrated ability to work effectively and efficiently without direct supervision and to work well in a team-based environment
- Demonstrated proficiency applying best practices to technical projects
- Demonstrated understanding of web accessibility guidelines and their practical use
- Experience with team collaboration tools, version control systems, and application deployment
- Demonstrated experience with Unix or Linux server platforms, related software, and basic system administration utilities

Knowledge/Skills/Abilities

- Creativity and strong analytical and problem-solving skills

Job Description



- Excellent communication and interpersonal skills, both oral and written
- A strong commitment to high quality customer service

Nature and Scope

- **Contacts:** Must be able to use verbal and written communication effectively with audiences of a wide range of levels of technical knowledge and understanding. Significant relationships include other members of the Library; IT staff across the University in individual and group contexts; staff, faculty, students, and community member users; technology specialists at other institutions [e.g. TriUniversity University Group of Libraries (TUG) consortium] and organizations; and technology vendors.
 - **Level of Responsibility:** The position is responsible and accountable for the projects and other work that s/he leads. Level of responsibility increases with skill and experience. See Career Path Matrix.
 - **Decision-Making Authority:** Responsible and accountable for recommending technical approaches for strategic and operational projects to department peers, project groups and committees, and Head, Digital Initiatives. Within the Library's framework and strategic directions can prioritize his/her work. As required, the position consults with: Head, Digital Initiatives, members of the Library Managers Group and others across campus as appropriate
 - **Physical and Sensory Demands:** Minimal exposure to disagreeable conditions typical of an office position.
 - **Working Environment:** Minimal exposure to disagreeable conditions typical of an office position exposed to stress and pressure associated with those responsibilities. The position requires balancing competing demands of short and long term projects, periodic interruptions when engaged in focused work, and the awareness that any errors may affect the ability of clients and peers throughout the Library to accomplish their jobs.
- Special conditions:** occasional after-hours and weekend support for unexpected application outages or emergency changes.