

# **YORK UNIVERSITY**

## **JOB POSTING - YUSA**

**JOB TITLE:** Application Programmer

**POSITION CONTROL NUMBER:** 5035

**DEPARTMENT/FACULTY:** LDSI/YUL

**JOB CODE:** 951320

### **I. JOB PURPOSE:**

Reporting to the Manager of Library Digital Systems and Initiatives, this role will work independently or as a part of a team to coordinate projects, research solutions, develop, design, implement and support in-house (original) and 3rd party software applications.

### **II. MAJOR AREAS OF RESPONSIBILITY:**

#### **1. Application Development and Programming**

**Percentage of time: 55%**

1. Research, develop and design new software using current web technologies and programming languages to meet the library and/or project requirements.
2. Create programs/scripts to provide an interface to the Integrated Library System and electronic resource databases.
3. Administer the library's Content Management System for the creation and maintenance of all content used on the library website.
4. Create new or re-design existing Wordpress (CMS) websites for the York Libraries
5. Develop and administer PHP applications
6. Administrator and manage the library's room booking system (MRBS).
7. Create and maintain computer programs to add functionality to existing library applications.
8. Coordinate with colleagues the analysis and development of new library applications, which involve web or database solutions.
9. Create new or modify existing graphic designs, templates, layouts and style sheets for the library website or application (e.g. Learning Commons, Omeka, Libguides).
10. Tests code before and after integration into the parent application.
11. Maintains a thorough knowledge and understanding of the major computing systems of York University Libraries and how they are integrated.
12. Maintains up-to-date knowledge on current and emerging technologies.

#### **Contacts:**

Library Computing Services staff, Librarians/faculty, Library Computing management and administration  
Library support staff, Other technical support staff

**Reason for Contact:** Project specification and requirements, Project leadership, Project updates, Team coordination, Integration with Library Web presence, Assure conformity and compatibility of Library software applications, End-user feedback, Technical advice, Liaison with other computing groups

#### **2. System Administration**

**Percentage of time: 15%**

1. Responsible for installing, testing, and maintaining the Libraries' web server operating system (Linux).
2. Build, configure and maintain virtual linux servers.

3. Create and maintain new file shares in linux via open filer (network storage software)
4. Install and maintaining web server software.
5. Complete backup/recovery of all programs and data used for library web applications.
6. In conjunction with Senior Unix Administrator or Manager, design systems and procedures for maintenance activities, such as, start-ups/shutdowns, backup, recovery and application and system monitoring of Library servers.
7. System Administrator of library database management systems (dbms) and databases

**Contacts:** Library Computing Services staff, Librarians/faculty, Library Computing management and administration  
Library support staff, Other technical support staff

**Reason for Contact:** Project specification and requirements, Project leadership, Project updates,  
Team coordination, Integration with Library Web presence, Assure conformity and compatibility of Library  
software applications, End-user feedback, technical advice, Liaison with other computing groups

### **3. Application Support** **Percentage of time: 15%**

1. Resolves problems related to the rendering of library web pages in Web browsers.
2. Provides technical support and assistance to library's content management system (*Wordpress*)
3. Provides technical support to library's legacy PHP applications
4. Provides primary or secondary support for any Ruby on Rails (RoR) applications developed by Library Information Systems (E.g. Workshop Registrations, York Undergrad Research Fair App, Coral, Papyrus, Electronic Theses Database and other future RoR applications.)
5. Provides technical support to 3rd party or open source licensed library applications.
6. Assist other Library Computing staff in creating new software
7. Secondary contact used for web applications support by library faculty and staff.

**Contacts:** Library Computing Services staff, Librarians/faculty, Library Computing management and administration, Library support staff, Other technical support staff

**Reason for Contact:** Interview users on user experience and technical failures, Project specification and requirements, Project leadership, Project updates, Team coordination, Integration with Library Web presence, Assure conformity and compatibility of Library software applications, End-user feedback, technical advice, Liaison with other computing groups

### **4. Consultation** **Percentage of time: 5%**

1. Consult with department heads, library staff, and library committees for enhancements to any Library application, in-house or 3rd party.
2. Participate in working groups / committees associated to the re-design of architecture of the library website / applications.
3. Consult with department heads, library staff, and library committees for resolution of problems with any Library application, in-house or 3rd party.
4. Train faculty and library staff in the use of the Content Management System or other library applications (e.g. Wordpress, Room Booking, Omeka, ILBooking).
5. Provide technical consultation to non-technical users to illustrate the options / opportunities.
6. Analyze University and Library business requirements and work alongside with other team members to develop technical solutions to meet business requirements.

**Contacts:** Library Computing Services staff, Librarians/faculty, Library Computing management and administration, Library support staff, Other technical support staff

**Reason for Contact:** Project specification and requirements, Project leadership, Project updates, Team coordination, Integration with Library Web presence, Assure conformity and compatibility of Library software applications, End-user feedback, Technical advice, Liaison with other computing groups

## **5. Documentation**

**Percentage of time:** 5%

1. Produces documentation for all assigned applications and programs.
2. Documents subsequent modifications, updates and changes.
3. Documents the technical maintenance and debugging procedures for applications.
4. Writes end-user documentation.

**Contacts:** Library Computing Services staff, Librarians/faculty, Library support staff, Other technical support staff

**Reason for Contact:** Project specification and requirements, Project leadership, Project updates, Team coordination and support, End-user feedback

## **6. Other duties as assigned**

**Percentage of time:** 5%

### III. COMMUNICATIONS:

	Level English
Basic reading skills (e.g., scanning text, reading forms, etc.)	<input checked="" type="checkbox"/>
Basic writing skills (e.g., writing brief notes, completing forms, etc.)	<input checked="" type="checkbox"/>
Basic speaking skills (e.g., asking & answering simple or repetitive questions, etc.)	<input checked="" type="checkbox"/>
Comprehends written material (e.g., extracting information/details, reading reports/correspondence, etc.)	<input checked="" type="checkbox"/>
Writes non-complex documents (e.g., composing factual information/short routine correspondence, taking minutes, etc.)	<input checked="" type="checkbox"/>
Sustains conversation on specific topics (e.g., explains standard policies/procedures/services, etc.)	<input checked="" type="checkbox"/>
Comprehends complex texts (e.g., reading & interpreting policy papers/research papers/technical reports, etc.)	<input checked="" type="checkbox"/>
Composes documents (e.g., drafting reports/recommendations/research papers/summaries, etc.)	<input checked="" type="checkbox"/>
Sustains in-depth conversation (e.g., interpreting & expressing complicated ideas, making presentations, etc.)	<input checked="" type="checkbox"/>

### IV. PHYSICAL & SENSORY DEMANDS/ENVIRONMENTAL CONDITIONS:

<input checked="" type="checkbox"/> VDT Use	70%
<input checked="" type="checkbox"/> Prolonged visual attention	60%
<input checked="" type="checkbox"/> Prolonged audio attention	30%
<input checked="" type="checkbox"/> Hand/finger dexterity	60%
<input checked="" type="checkbox"/> Prolonged sitting	60%
<input checked="" type="checkbox"/> Prolonged standing	5%
<input checked="" type="checkbox"/> Lifting and/or carrying (approx.   lbs/5 kg)	5%

### V. RESPONSIBILITY FOR OTHERS:

*Does this job have responsibility for others?*  No

## VI. QUALIFICATIONS:

### **Minimum level of formal education required:**

University Degree in Computer Science or equivalent of 4 years recent experience (defined as within the last five years) working at York University and performing the same or similar tasks. This education equivalency is in addition to the experiential requirements outlined below.

### **Minimum number of years and type of relevant work experience required:**

This role requires 4-6 years recent programming experience. Experience with programming library systems is an asset.

### **Skill(s) required:**

Excellent analytical and problem-solving skills, Excellent interpersonal skills in working with faculty and staff to define business needs and resolving problems, Working effectively as a member of a team and setting priorities among other concurrent projects, Able to effectively work under pressure of high volume and meet short/long term deadlines, Exercising tact and diplomacy. Maintaining confidentiality, Ability to communicate technical ideas both orally and in writing to technical and non-technical audiences, Aptitude with keeping up to date on computer systems development, Good written communications skills, Quality Assurance knowledge and testing Procedures, Software development methodologies

Programming Languages: Ruby on Rails, PHP, Perl, Shell scripting, JavaScript, MS Visual Basic, Java  
Database Management Systems: Oracle DBMS, MySQL, PostgreSQL, MS Access.

Web Technologies: Wordpress (Content Management System CMS), Apache Web Server, HTML, XML, XSL, Smarty Templates, Solr

Operating Systems: Unix/Linux, OS-X, MS Windows Platforms

Library Technologies: Marc21, SirsiDynix API, Sirsi Workflows, Vufind

Applications: Vufind (Library's Open Source Search and Discovery Layer), Wordpress Multi-User Content Mgmt. System), Open Journal System, DSpace (digital repository management software), OMEKA (web publishing system for online digital archives), LibGuides, Apache/Tomcat web server, VMware (Virtual Management Software), Eclipse, SirsiDynix, CVS / GIT, Word Processing, e-mail etc.

Please note: This position requires the candidate to produce a verification of degree(s), credentials(s), or equivalencies from accredited institutions and/or international equivalents at the time of interview.

## VII. JOB SPECIFICATIONS:

Hours of work: **9am-5pm Monday - Friday**

Summer: 9:00 a.m. to 4:00 p.m., every Friday, effective the Friday before Victoria Day and ends the Friday before Labour Day

Requests to work overtime may occur periodically throughout the year