

Application Developer

Who We Are

The Canadian Research Knowledge Network (CRKN) is a partnership of Canadian universities, dedicated to expanding digital content for the academic research and teaching enterprise in Canada. Through the coordinated leadership of librarians, researchers, administrators and other stakeholders in the research community, CRKN undertakes large-scale content acquisition and licensing initiatives in order to build knowledge infrastructure and research and teaching capacity in Canada's universities.

On April 1st, 2018 CRKN merged with Canadiana.org which has allowed our teams to cohesively pursue a united and coordinated strategy to leverage Canadian heritage and scholarly content. As a merged organization, CRKN will continue its core licensing activities for scholarly journal content, while expanding support for the digitization, access and preservation of Canadian heritage content through the services of Canadiana.

CRKN operates the Canadiana Trustworthy Digital Repository (TDR). The Canadiana TDR, one of six in the world, provides a permanent preservation solution for Canada's digital documentary heritage in which deposited content can be identified, collected, managed, and kept secure over time. The Canadiana TDR is an essential component of CRKN's heritage and preservation services portfolio that serves a member community of 75 academic libraries as well as researchers, and museum, gallery and public library stakeholders.

The Role

Through the Canadiana platform, CRKN preserves digital Canadian documentary heritage content and makes it discoverable and accessible. The Application Developer extends the Canadiana platform by building new features and capabilities to enhance the value and usability of the content for CRKN members, researchers, and members of the public. In addition, these features and capabilities facilitate the management and administration of the content by CRKN staff and to ensure the ongoing reliability, security, and authenticity of the Canadiana platform and its content.

Reporting to the Lead Application Developer and working with the other members of the platform team, the Application Developer designs, implements, tests, deploys and maintains tools and features for both internal staff and public end users. The Application Developer engages in a range of full-stack web development activities, with a particular focus on front-end tools, features and interfaces, both internal and public-facing. The Application developer also designs and develops data structures, APIs and middleware for the administration, manipulation, discovery and retrieval of CRKN's digital content.

The Application Developer is an active member of a dedicated platform team operating within an agile framework. The Application Developer collaborates with the team and various stakeholders to define and scope projects, gather and elaborate requirements, and execute project plans.

Duties and Responsibilities

1. Software development (50%)

- Write, test, debug and document software to meet functional requirements and specifications
- Deploy applications to testing and production servers

2. Software maintenance and support (30%)

- Evaluate bug reports and determine solutions
- Implement, test, deploy and verify bug fixes and solutions to problems
- Update web application templates, databases and content

3. Analysis and design (15%)

- Assist the Lead Application Developer to analyze functional requirements and develop technical specifications
- Design software and data structures based on requirements and specifications
- Research software development tools and practices for integration with the overall development direction of the organization

4. Other (5%)

- Keep current in standards, practices and technologies in the gallery, library, archives and museum (GLAM) technical sector, by attending talks or webinars, and engaging in self-directed research
- Other duties as required

In a small team environment everyone is expected to work towards overall CRKN goals and at times a team effort is required that may involve taking on tasks outside the normal or expected scope of their role. Other duties may be assigned as required.

Qualifications

The ideal candidate will have a degree in computer science and two to five years of software development experience. An equivalent combination of education and experience would also be acceptable. The ideal candidate will possess or be eligible for Reliability Status from PWGSC. Skills and experience particularly relevant to this position include:

- Programming in JavaScript
- JavaScript frameworks, such as React
- Programming using a variety of other client and server-side programming languages, especially Ruby and Python
- Web development technologies and languages, including HTML and CSS
- User Interface and User Experience (UI/UX) design
- Working in and developing for Linux/Unix environments
- Code management using revision control systems, especially Git
- Managing and deploying Docker containers
- Test-driven and agile development practices
- Verbal and written communication, especially relating to documenting code and specifications
- Collaborating with team members
- RESTful programming and the OpenAPI specification
- Understanding of the Galleries, Libraries, Archives and Museum (GLAM) community and its metadata standards and practices
- Principles and practices of digital preservation and digital object management
- XML applications and documents

Benefits

CRKN offers a generous benefits package including vacation, health and dental benefits, and pension match.

Location

Ottawa, Ontario

Note: CRKN encourages proposals from its member or stakeholder institutions for a secondment or academic leave to fill this position.

To Apply

Please send a letter of application and resume via email to:

Canadian Research Knowledge Network

Attn: Sascha Adler, Lead Application Developer

Email: hr@crkn-rcdr.ca

(Please reference **Application Developer** in the email subject)

Closing date: April 19, 2019

We thank all applicants for their interest in CRKN, however only those candidates selected for an interview will be contacted.

CRKN is an equal opportunity employer, with policies and practices intended to build an inclusive and accessible work environment. If you require accommodation during the recruitment process, please include in your cover letter when applying for the position and all efforts to provide the appropriate accommodation will be put into place.