



Canadian Research
Knowledge Network

Réseau canadien
de documentation
pour la recherche

Application Developer

Who We Are

The Canadian Research Knowledge Network (CRKN) represents 81 institutions across Canada that include world-class academic libraries and research institutions, two national libraries, and Canada's largest public library system. For our member organizations and the diverse communities that they serve, CRKN empowers researchers, educators, and society with greater access to the world's research and Canada's preserved documentary heritage, now and for future generations.

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 and access platforms are essential components of CRKN's heritage and preservation services portfolio that serves its member community 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 Software Architect 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

Software development (60%)

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

Software maintenance and support (20%)

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

Analysis and design (15%)

- Assist the Software Architect 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

Other (5%)

- Remain current in standards, practices and technologies in the gallery, library, archives, and museum (GLAM) technical sector by attending talks or webinars, and by engaging in self-directed research
- Other duties may be assigned 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 has a degree in computer science and two to five years of software development experience. An equivalent combination of education and experience is also acceptable. Skills and experience particularly relevant to this position include:

- Front-end programming in HTML, CSS, and JavaScript; familiarity with Svelte is an asset
- Server-side programming, especially using NodeJS/JavaScript
- Ability to learn and adapt to new programming languages, frameworks, tools, and environments
- User Interface and User Experience (UI/UX) design
- Working in and developing for Linux/Unix environments
- Code management using revision control systems
- 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
- 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

CRKN's offices are in Ottawa, Ontario. The platform team works primarily in a virtual environment. Applications are welcome from candidates anywhere in Canada, however occasional travel to Ottawa will be required.

To Apply

Please send a letter of application, resume, and links to examples of prior software development work via email to:

Canadian Research Knowledge Network
Attn: William Wueppelmann, Manager, Canadiana Platform
Email: hr@crkn-rcdr.ca

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

Closing date: January 31, 2022

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.