canadianavalancheassociation

Canadian Avalanche Association

JOB TITLE: **Software Developer**

EFFECTIVE: **October 19, 2012**

The Canadian Avalanche Association (CAA) and the Canadian Avalanche Centre (CAC) are both non-government organizations that support and serves the professional avalanche community in Canada.

The purposes of the CAA are:

- To represent persons who are professionally engaged in avalanche work in Canada.
- To establish and maintain high standards of professional competence and ethics for persons engaged in avalanche safety programs.
- To exchange technical information and maintain communications between persons engaged in avalanche safety programs.
- To establish and maintain standards of education in avalanche safety.
- To organize training courses in all aspects of avalanche hazard control for professionals.
- To promote and act as a resource base for public awareness programs about avalanche hazards and safety measures.
- To promote research and development in avalanche safety, and
- To carry out such complementary purposes as are not inconsistent with these objects.

The purposes of the CAC are:

- To coordinate public avalanche safety programming;
- To provide public avalanche safety warnings;
- To deliver public avalanche awareness and education;
- To provide avalanche training for non-professional winter recreation;
- To serve as point of contact for public, private and government avalanche information;
- To encourage avalanche research, and
- To carry out such complementary purposes as are not inconsistent with these objects.

JOB SUMMARY/OVERVIEW

The Software Developer, under the general direction of the Director of Information Technology, is primarily responsible for the development, testing and implementation of software related to InfoEx (professional observations), Public Avalanche Bulletins, online membership services, and general website design and structure.

ESSENTIONAL JOB FUNCTIONS

Technical

- Responsible for technical development of the following systems (list not exhaustive):
    1. InfoEx & SnoInfo
    2. Public Avalanche Bulletins and Avalx
    3. Industry training Program registration systems
    4. Membership services and portal
- Ensures the CAA/CAC websites are maintained to corporate design standards.
- Liaises with stakeholders to determine software requirements.
- Liaises with graphic design and other consultants.
- Designs, codes and debugs applications in various software languages.
- Conducts software analysis, code analysis, requirements analysis, software review, identification of code metrics, system risk analysis, software reliability analysis
- Develops software modeling and simulation
- Ensures software is appropriately tested for optimal usage and quality
- Supports, maintains and document software functionality
- Integrate software with existing systems
- Evaluates and identifies new technologies for implementation
- Project Planning and Project Management
- Maintain standards compliance
- Manage web and internet services management (hosting, DNS, domain names, SSL certificates)

General

- Provide appropriate training to software users
- Provide InfoEx user support during winter season
- Maintains general oversight of system administration and supports Network and Systems Administrator.

QUALIFICATIONS

Education:

- Post-secondary education in Information Technology or equivalent combination of work experience, education and training

Experience:

- Minimum of 2 years of experience in software development
- Knowledge of software coding according to standards that have been published and the guidelines for the design as set out by stakeholders and users.
- Experience with interpretation of specifications and requirements documents

- Expertise in some or all of the following platforms and technologies
    - ASP .NET development environment including C# programming language
    - SQL databases
    - XML (including custom XML standards)
    - JAVA SCRIPT/HTML5
    - jQuery
    - AJAX
    - Working with 3rd party API's including, but not limited to, Google Maps, InfoEx Web Services
    - GIS and geomatics data

Assets/Special Abilities

- Flexibility
- Clear criminal record
- Excellent verbal and written communications skills
- Exceptional interpersonal and collaborative skills
- Self-motivated
- Able to work in a stressful, demanding public safety environment
- Knowledge of avalanche safety issues and needs
- Ability to conceptualize complex snow, weather and avalanche data
- Experience in high reliability environments with potential impact on public safety

Interested in applying?

Please submit a cover letter and resume to Kristina Welch at kwelch@avalanche.ca.