POSITION SUMMARY
QUEEN’S UNIVERSITY – Postdoctoral Fellow

POSITION TITLE: Post-Doctoral Fellow in Cognitive Analytics Development
DEPARTMENT: Centre for Advanced Computing
RENUMERATION: $57,732/yr. EFFECTIVE DATE: Fall 2016

JOB SUMMARY:
The successful Post-Doctoral Fellow (PDF) in Cognitive Analytics Development will report to the Executive Director of the Cognitive Analytics Development Hub (part of the Centre for Advanced Computing). Over the course of a 2-year postdoc fellowship, they will collaborate with an extended team which will include academic researchers and industrial partners to design, develop and troubleshoot a series of cognitive applications in support of 2-to-4 month projects. They will be expected to analyze system requirements and develop a cognitive (a.k.a. IBM Watson) proof-of-concept (POC) application. Projects will cover a range of research areas and will involve an industrial partner who ultimately may choose to develop a full scale implementation of the POC.

KEY RESPONSIBILITIES:
- Work with university research teams and their industrial partners to determine application requirements and translate into actionable work plans.
- Participate in application design meetings, preparing requirements and design specifications.
- Design, code, test and debug a POC using IBM Watson technologies and related analytics tools.
- Assist in establishing project schedules, and ensure assigned projects stay on schedule.
- Report on project status at regular meetings and when requested by management.
- Work with members of the IBM Watson team to optimize the POC.
- Depending on evolving organizational requirements, other duties may be assigned.

REQUIRED QUALIFICATIONS:
- PhD in computing science and/or analytics, or equivalent areas of concentration.
- Relevant experience working with cognitive computing and/or analytics applications.
- Demonstrated proficiency in the development, implementation and maintenance of cloud-based applications.
- Must pass a criminal background check (CPIC).
- Must be fluent in English.
- Must have excellent communication and presentation skills.

SPECIAL SKILLS:
- Demonstrated deep analytical skills.
- Familiarity with IBM’s Watson cognitive technologies is an asset.
- Artificial intelligence, expert systems, machine learning and other natural language processing tool experience.
- Experience with cloud and virtualization technologies, networking and Linux.
- Knowledge of system availability, scalability, resilience, and security.
• Thorough knowledge of programming techniques and languages such as Python, Java, RESTful applications, SQL, JavaScript, Perl, HTML, Hadoop, and SPARK.
• Highly developed interpersonal skills to deal with both technical and non-technical members of the project team, researchers, industrial partners, and technology providers.
• Constant attention to detail.
• Desire to enable “research excellence”.

DECISION MAKING:
• Determine how best to meet the client’s research and/or business requirements.
• Determine appropriate problem-solving procedures and decide how to best rectify the problem. Decide when others need to be engaged to resolve issues.
• Allocate time, prioritize tasks and determine work flow. Continually assess and adjust priorities and manage tasks in a fast-paced and demanding environment.
• Evaluate and make recommendations such as the acquisition and/or adoption of new cognitive tools.

PROJECT MANAGEMENT:
• Prepare requirements and develop a project schedule.
• Track project schedule and report on progress.
• Coordinate diverse teams to meet scheduled objectives.

RESEARCH ASSESSMENT QUESTIONS:

(must be completed)
1. Is this position technical in nature in a teaching or research lab or lab-related area?  
   X □
2. Does this position support a research project? 
   X □
   If yes, indicate name of the project: Centre for Advanced Computing
3. Does this position report directly to a Principal Investigator (PI)? 
   X □
   If yes, indicate name of the PI: Don Aldridge

SIGNATURES:

________________________________________________________________________
Incumbent

________________________________________________________________________
Manager

________________________________________________________________________
Department Head/Director or Designate

Date

Page 2 of 3
PDF in Cognitive Analytics Development
July 5, 2016
Anticipated Start Date: January 1, 2017

Duration of Appointment: Two years

Required Documentation: Cover letter and CV

Closing Date: December 15, 2016

Apply to:

Dr. Ken Edgecombe, CTO; CAC; Ken.Edgecombe@queensu.ca

EMPLOYMENT EQUITY: The University invites applications from all qualified candidates. Queen’s is committed to employment equity and diversity in the workplace and welcomes applications from women, visible minorities, Aboriginal peoples, persons with disabilities, and persons of any sexual orientation or gender identity.

c. PSAC Local 901, Unit 2 - info@psac901.org