Job Description

Job Title:	SHARCNET Systems Administrator – Cyber Security
Department:	Office of Research
Reports To:	Director, Institutional Research
Jobs Reporting:	None
Salary Grade:	USG 11
Effective Date:	November 2019

Primary Purpose

This position is part of the technical team that manages all aspects of the SHARCNET distributed high performance computing: hardware, software and networking infrastructure. The technical team is responsible for ensuring the ongoing operation and effective use of SHARCNET resources and participates in planning for new systems and services.

SHARCNET, a partner organization in Compute Canada, offers a challenging opportunity for a Systems Administrator – Cyber Security, based at the University of Waterloo. SHARCNET and Compute Canada provide advanced computing resources and services for researchers. This is a full-time position contingent on funding.

Key Accountabilities

Support and Administration of SHARCNET
- Provides support and administration of SHARCNET computer systems, interconnections and software consistent with the requirements of the integrated SHARCNET infrastructure
- Initiates preventative and corrective actions on systems and operational problems or potential problems independently and completing security incident reports as required
- Monitors and maintains SHARCNET computational, storage, networking and security hardware
- Installs OS revisions and security patches
- Manages user accounts, identities and maintains user and system security and data integrity to ensure the efficient and secure operation of the computer systems

*All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.

Required Qualifications

Education
- Completion of a university degree in computer-related field or equivalent education and experience

Experience
- 3+ years of relevant experience
- Experience in working with Linux/Unix systems preferably in a technical environment
- Cyber security best practices, familiarity with tape backup solutions, parallel file systems, networking, cloud computing, parallel computing, development and maintenance of web-based information, and experience in the university research environment are strong assets

Knowledge/Skills/Abilities

- Strong skills scripting languages
- Ability to resolve complex problems that may arise in operating a complex, multi-processor, parallel, Linux computing environment
- Ability to adapt to current and future trends in the field
- Excellent written and oral communication skills
- Excellent interpersonal, customer service, project management, and troubleshooting/problem-solving and analytical skills
- Demonstrated ability to work independently and as part of a cross-functional team in a dynamic and busy environment

Nature and Scope

- **Contacts:** Local and remote SHARCNET and greater Compute Canada team, vendors for hardware replacements, and researchers from across Canada.
- **Level of Responsibility:** Recommend direction to SHARCNET management, leadership on specific technical topics, primarily in the area of cyber security, across SHARCNET peers.
- **Decision-Making Authority:** None.
- **Physical and Sensory Demands**: Machine room environments, working with computer hardware.
- **Working Environment:** office-based with occasional travel, daily work in machine rooms, and some work outside regular business hours.