

THE UNIVERSITY OF WYOMING JOB DESCRIPTION

This is a description of a staff position at the University of Wyoming not a job opening announcement. Look for current job openings at the following link: [UW Human Resources](#).

The following statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

Title: LEAD HPC SYSTEMS ARCHITECT

Reports To: Designated Supervisor

UW Job Code: 5411

UW Job Family: 38 - Computer Professional

SOC Code: 11-3021

FLSA: Exempt

Pay Grade: 26

Date: 9-1-21

JOB PURPOSE:

Under limited supervision, lead the technical efforts to design, implement, support, and maintain UW's overall research-focused cyber-infrastructure, including High Performance Compute clusters, high-performance digital storage, and networking.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Oversee the technical design of HPC Compute clusters and supporting systems for ARCC. This includes researching available technology, working with vendors to procure hardware/software, working to understand how to implement different technologies together, and ultimately supporting as a service for campus.
- Document all systems and services for the HPC team so that all team members may address issues that crop up and generally support the system.
- Ensure assigned backup personnel are adequately trained to support entire suite of HPC team's critical systems and services.
- Assist other technical team members with their own design, and troubleshoot for advanced system issues.
- Respond to systems outages on a 24x7 basis.
- Assist with management of technical work assignments within HPC team.
- Professional development for continued support of new technology. Must research and learn about new technologies that affect high-performance computing as they are developed.

SUPPLEMENTAL FUNCTIONS:

- Other duties as assigned.
- Regular, predictable attendance is required to perform the essential duties of this position.

COMPETENCIES:

- Analysis/Problem Identification
- Collaboration
- Attention to Detail
- Quality Orientation
- Strategic Planning
- Technical/Professional Knowledge
- Work Prioritization & Management

MINIMUM QUALIFICATIONS:

Education: **Bachelor's degree in Business Management, Management Information Systems, Computer Science or related field**

Experience: **6 years work-related experience**

Required licensure, certification, registration or other requirements: **None**

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Computer Science principles, theories, and concepts of computer programming.
- Project management.
- Management information systems/processes/procedures.
- Computer programming languages in use in the area.
- Computer programming software and hardware applications.
- Computer systems operation and network administration.
- Data processing equipment and programming tools.
- Design technology and techniques to create, enhance, and maintain computer system design.
- Operating systems and network/systems protocol.
- Maintenance and enhancements of computer programs.
- Current technology advances.

Skills and Abilities to:

- Develop and work within project budget, goals and objectives.
- Monitor project work.
- Maintain effective supervisory relationships.
- Manage projects to meet multiple and conflicting project timelines.
- Determine labor/equipment costs on projects.
- Provide project leadership.
- Mentor and coach.
- Effective oral and written communication skills.
- Translate technical information into user-friendly program documentation.
- Make effective decisions impacting projects.
- Interpret processes, flow charts and schematics.

- Test new data processing equipment and computer system applications and recommend purchases and standards.

WORKING CONDITIONS:

No major sources of discomfort, standard office environment.

Authorized by Classification/Compensation, Human Resources

Employees may be requested to perform job-related tasks other than those specifically presented in this description. Participating in the University's hazardous waste minimization program is part of the job of each employee who uses (or may come in contact with) hazardous materials. Fair Labor Standards Act (exempt/non-exempt) is designated by position. University of Wyoming actively supports Americans with Disabilities Act and will consider reasonable accommodations.