



IT Systems Engineer

Department: 10308 - Engin Dn-Integratd Teachng Lab

Requisition Number: 52931

Location: Boulder, Colorado

Employment Group: University Staff

Schedule: Full-Time

Posting Date: 11/08/2023

Posting Close Date: 11/26/2023

Job Summary



College of Engineering & Applied Science
UNIVERSITY OF COLORADO BOULDER

The Integrated Teaching and Learning (ITL) Program welcomes applications for our IT Systems Engineer position! The Systems Engineer (SE) develops and supports Windows-based systems and services offered across the College of Engineering and Applied Science (CEAS) at CU Boulder. This position supports the IT enterprises of the ITL Program, Idea Forge, Integrated Design Engineering Program, the TeachEngineering digital library, the educational spaces in the Aerospace, Mechanical, and Electrical Engineering departments, and the CEAS cloud computing platform. In total, this role serves up to 11k users at CU Boulder and 3M globally across a broad portfolio of tailored IT services. This position will independently engage with engineering collaborators and translate their unique requests to sustainable solutions that align with organizational and IT industry best-practices.

Who We Are

The ITL Program at CU Boulder is a nationally recognized engineering education leader. Our mission is to provide curriculum and support for hands-on engineering education, across all engineering subject areas, for students from kindergarten to graduate school (K-22), with a focus on students from underserved populations and communities. We operate the 35,000 square-foot Integrated Teaching and Learning Laboratory on the Boulder campus, where we support hands-on experiences for over 3,500 undergraduate and graduate students each year. We also lead and manage TeachEngineering.org and the Denver-Metro Engineering Consortium (DMEC). TeachEngineering.org is a NSF-funded digital library that provides free, hands-on K-12 STEM curriculum to over 2.5M educators annually. The DMEC is a DoD-funded partnership between CU Boulder, CU Denver, and five community colleges in the Denver-Metro area to increase the number of students from underrepresented groups earning associate degrees and transferring to undergraduate engineering programs.

The ITL Program is committed to honoring unique backgrounds and experiences. Join our team and help us build a more inclusive and diverse academic and engineering culture – apply today!

What Your Key Responsibilities Will Be

Microsoft Windows Systems Engineering and Systems Administration:

- Contributes to—and occasionally leads—the technical development of specialized technologies and systems, some with national or global reach, used throughout the departments and programs of the College of Engineering and Applied science.
- Collaborates with the campus-level Office of Informational Technology (OIT) and uses their central IT services, systems, and support.
- Maintains professional-level knowledge of core technologies including, but not

limited to public cloud providers/services, virtualization/clustering, disaster recovery, domain services, storage, and application licensing/packaging among others.

- Uses Azure DevOps in a Windows environment, using tools such as PowerShell, Git, and Octodeploy for automation.
- Ensures exceptional system uptime, security, and performance through proactive updates and maintenance, monitoring, and knowledge of the best industry practices. Implements additional tools and security measures autonomously. Stays abreast of system threats and vulnerabilities, and self-implements software and procedural changes when prudent.
- Develops and supports uniquely configured instances of enterprise applications such as Atlassian JIRA and Confluence.
- Handles identity management and integration of various services (SSO), including within a proprietary ERP developed in-house.
- Designs and manages complex group policy objects, configurations, and settings within Active Directory and Azure Active Directory.

Enterprise and Action Support:

- In addition to traditional IT support, provides distributed and specialized user, server, and cloud computing support.
- Manages specific aspects of over 100 client-facing applications including licensing, configuration, update management, and testing.
- Provide tier 2 support through ITSM tool (JIRA).
- Contributes to the yearly life cycle of software images—a multi-month project that includes partner engagement/communication, advanced technology evaluation and testing, and coordination across different departments, programs, and laboratories, each with their own needs and operational schedules.

Technical Strategy and Oversight:

- Assists the ITLP IT director in budget development, requirements gathering, and support assessment of all future system-wide upgrades or migrations. Suggests, reviews, and assesses the technical efficacy and strategy of all projects and initiatives with system-wide impact.
- Proactively collaborates with the ITLP IT director on software and hardware needs, many of which are custom, ensuring the reliability and security of all systems, servers and the network. Identifies design improvements, and cost-saving strategies.
- Assists with IT-related crisis situations, which may involve complex technical hardware or software issues including collaboration and relationship management with vendor experts. May operate as primary contact and conduit between IT and impacted customers.
- In collaboration with the ITLP IT director, develops, maintains and updates IT policy and processes.

Customer and Vendor Relationship Management and Communication:

- Tactfully listens to and engages with collaborators of all levels regarding future needs, technologies, or services. Proactively leverages relationships with collaborators and other partners to help position IT ahead of anticipated requests. Develops sustainable IT solutions aligned with the best industry practices.
- Authors and coordinates relevant mass communications to partners, including incident management, off-hours maintenance periods, or systematic changes and improvements.
- Partners with OIT to ensure services and solutions complement those provided by central IT.
- Manages vendor relationships and coordinates activities involving 3rd-party vendor support, as needed.

Professional Development:

- Stays apprised and current on relevant University and State of Colorado policies and procedures.
- Participates in professional development activities and serves on unit, college or

campus committees as applicable.

What You Should Know

This position may be eligible for a hybrid work modality consistent with the [College of Engineering and Applied Science Hybrid Work Policy](#).

What We Can Offer

The hiring ranges by position level are:

- *Professional Level III*: \$83,000 - \$90,000
- *Professional Level II*: \$65,000 - \$75,000

Relocation assistance is available within CEAS guidelines.

Be engaged. Be impactful. Be Boulder.

What We Require

Professional Level II:

- Graduation from an accredited college or university with a bachelor's degree. An equivalent combination of education and experience may substitute for the degree requirement.
- At least one year of broad hands-on experience as a Windows systems engineer/administrator implementing and supporting cloud-based technologies, virtualized infrastructure, end-user computing, servers, and disaster recovery systems in a distributed enterprise at scale.

Professional Level III:

- Graduation from an accredited college or university with a bachelor's degree. An equivalent combination of education and experience may substitute for the degree requirement.
- At least three years of broad hands-on experience as a Windows systems engineer/administrator implementing and supporting cloud-based technologies, virtualized infrastructure, end-user computing, servers, and disaster recovery systems in a distributed enterprise at scale.

What You Will Need

- Demonstrated technical leadership in a customer-focused environment with shifting priorities.
- Experience with system and infrastructure strategy and design.
- Demonstrated expertise managing and supporting Microsoft Active Directory and Azure AD.
- Experience with clustered, virtualized, or cloud-based server environments.
- Experience deploying and supporting Windows-based operating systems (Server 2016+ and Windows 10+).
- Ability to diagnose and solve complex server and workstation hardware and software problems.
- Ability to work independently and as well as on a team and lead projects, migrations, and upgrades.
- A consistent willingness to innovate, challenge the status quo, and improve.
- Proficiency with fundamental networking concepts, diagnostic techniques, and tools.
- Good communication, interpersonal and organizational skills.
- Ability to thrive in an aerobic and fast-paced environment where quick decision-making and multi-tasking are demonstrated daily.
- Sensitivity to and appreciation of cultural, political, and geographical differences, with the ability to work well with students, faculty, and staff from around the world.

What We Would Like You to Have

- Experience with the management of specialized, equipment-based workstations and their associated configurations.

- Experience with automated system and software deployment tools.

Special Application Instructions

To apply, please submit the following materials:

1. A current resume.
2. A cover letter that briefly describes how your background and experience align with the requirements, qualifications and responsibilities of the position.

You will not be asked to upload references at this time.

Please apply by **November 26, 2023** for consideration.

Note: Application materials will not be accepted via email. For consideration, applications must be submitted through [CU Boulder Jobs](#).

Posting Contact Name: Boulder Campus Human Resources
Posting Contact Email: Recruiting@colorado.edu

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