

## Employee Details

Employee First Name:	
Employee Last Name:	Open Position
Employee ID:	

## Classification

Payroll Title:	PROGRAMMER V UCD
Payroll Title Code:	7287
Job Group:	B10
Overtime Eligible: (FLSA)	Exempt
Employee Relations Unit: (Bargaining Unit)	99
Representation:	Uncovered
PSS Salary Grade:	5

## Position Description

Position Number: (Assigned when added to Library)	02009242
Dept:	IET DATA CENTER & CLIENT SVCS - 061424
Position:	DATA CENTER SECURITY ADMINISTRATOR
HEERA/Union Representation:	This position is not represented by a collective bargaining unit
<b>IMMEDIATE SUPERVISOR</b>	
Supervisor Name:	Jatinder Singh
Supervisor Payroll Title:	Manager (FA)
Supervisor Phone Number:	754.8213
<b>POSITION DETAILS</b>	

Job Summary:	Under the general supervision of the Infrastructure Systems Manager, this position is to provide technical leadership for security and system administration for Information and Educational Technology (IET) central computer systems that support the University's mission of instruction, research, and outreach.
Campus Job Scope:	
Department Specific Job Scope:	This is one of eight DC Security Administrators working to maintain security of the servers.
Positions Supervised:	N/A
Essential Responsibilities:	<p>35% Security Administration</p> <p>Using advanced conceptual understanding of data center system architectural requirements, direct and implement host and network security for a large, complex data center with hundreds of systems of varying architectures and operating systems that provide services to over 50,000 campus clients. Install, configure, and maintain appropriate security applications and systems including, but not limited to, Kerberos, AFS, Distributed Authentication, PKI, encryption, vulnerability scanners, honey pot, and intrusion detection systems. Conduct host security monitoring and follow-up of security related incidents for the Campus Data Center infrastructure, business, and academic systems. Work with the Incident Response Team to conduct campus departmental security responses. Work with IET staff to design and implement IT and campus-wide security policies. Work with IET Client Services, the NOC, Student Judicial Affairs, Internal Audit, and the Campus Police in resolving incidents involving campus computers or computer users.</p> <p>25% System Administration</p> <p>Provide leadership and primary technical support for hardware and operating system software problems on the various IET UNIX and Windows servers. Monitor and optimize system and network performance. Diagnose operational, hardware, or operating system problems; coordinate appropriate solutions with vendors and appropriate staff. Develop and maintain programs, scripts, and procedures for the automation of system administration tasks. Direct the installation and maintenance of complex distributed service applications. Conduct the installation and upgrade of the operating systems of infrastructure UNIX and Windows systems. Perform system hardware installation and upgrades. Research and provide budget input for new hardware and purchases as needed.</p> <p>20% System Programming</p> <p>Provide system programming services for support of centralized Data Center UNIX and Windows systems and for maintenance and configuration of vendor supplied software on various UNIX and Windows systems. Provide system programming for distributed security applications. Design, develop and maintain specialized support software such as monitoring utilities or complex distributed services for automation of security and system administration functions.</p> <p>20% Consultation</p> <p>Assist users of variants of UNIX and Windows systems in-person, via electronic mail or telephone. Work with the Data Center Operations staff, Network Operations staff, and IT Client Services staff to resolve client problems.</p>

Physical Demands:	
Work Environment:	<p>This position is a critical position and subject to a background check. Employment is contingent upon successful completion of background investigation including criminal history and identity check.</p> <p>Work alternate or extended hours on short notice.</p> <p>Be routinely on-call and carry a pager and/or cell phone.</p> <p>Travel to and from meeting venues and client sites on and off campus.</p> <p>Due to the mission-critical services provided by this department, this position may work hours other than M-F 8-5, especially during system development, hardware or software installation, or in response to system problems.</p>
<b>QUALIFICATIONS</b>	
Minimum Qualifications:	<p>Experience with installation and configuration of complex security software and hardware applications such as firewalls, intrusion detection systems, honey pots, PKI, Nessus, Crack, and Tripwire.</p> <p>Experience using Kerberos, SSH, SSL and other methods of providing security for passwords and network communications. Experience implementing host and network security on UNIX operating systems.</p> <p>Experience with daily system administration of several UNIX operating systems including Solaris and Linux. Experience using the UNIX operating system including UNIX internals, disk file systems, interprocess communications, devices and device drivers, and memory management. Experience with system administration of a complex distributed and integrated UNIX environment including configuration and maintenance of Sendmail, NIS, LDAP, AFS, and SNMP.</p> <p>Experience using networking, networking protocols, and distributed computing environment concepts.</p> <p>Experience with configuration of AFS, NIS, SNMP, and HTTP.</p>
Preferred Qualifications:	<p>Experience to plan, design and implement small and medium programs or subsystems in a UNIX or Windows operating environment.</p> <p>Experience with the installation and configuration of medium to complex applications in a UNIX or Windows operating environment.</p> <p>Experience of UNIX shells including C-shell, Bourne shell, and Korn shell.</p> <p>Experience with shell scripting in several shells on UNIX systems.</p> <p>Experience with daily system administration of several UNIX operating systems including Solaris and Linux.</p> <p>Experience with platform issues, scalability, system bus technology and throughput, I/O subsystem technology and throughput, RAID, SCSI, SANs, server operating systems, memory management, threads, file systems, disk and network I/O, file and print services, system monitoring, and administration.</p> <p>Experience with a programming language and Perl at the systems programming level on more than one UNIX operating systems and on Windows for development and maintenance of applications ranging from complex distributed services to utilities for automation of system administration functions and for maintenance and configuration of complex vendor supplied software.</p> <p>Experience with CGI programming and HTML.</p> <p>Experience using the Windows operating system and integrated security.</p> <p>Experience with daily system administration of Windows operating systems in a complex production setting which includes the configuration of Active Directory, Windows Registry, disk filesystems, devices and device drivers, data communications with TCP/IP networking, and the implementation of host security and network security.</p> <p>Experienced Windows network system administration and knowledge of intricate</p>

networking essentials for coordination with hosts for DNS, DHCP, Kerberos and related enterprise network services.  
Experience with and knowledge of Oracle RDBMS or other relational database management systems and principles. Experience working with others in designing effective databases, referential integrity, and SQL performance tuning.  
Experience of use, operation and maintenance of most types of computers, including servers and desktop systems used on campus.  
Experience using UNIX workstations and personal computers on a large, complex enterprise Intranet.  
Organizational and analytical experience to establish priorities, organize tasks, and direct implementation of tasks in a high-pressure environment.  
Experience providing creative solutions and apply innovative concepts to systems programming.  
Experience documenting systems and procedures. Experience with at least one word processor from UNIX or Windows  
Experience leading and participating in workgroups focusing on the technical aspects of implementing campus wide distributed computing and computing security.  
A degree in information technology or a related field.  
Documentation skills for reports and work flow processing.

SIGNATURES

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**Employee**

I have read this position description and understand its contents.

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Supervisor**

This position description accurately describes the essential responsibilities assigned to this position..

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Department Head**

This position description accurately describes the essential responsibilities assigned to this position..

\_\_\_\_\_  
**Date**

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