

CITY OF EL PASO, TEXAS
DEPARTMENT HEAD'S SUMMARY REQUEST FOR COUNCIL ACTION (RCA)

DEPARTMENT: Information Technology

AGENDA DATE: 04/04/06

CONTACT PERSON/PHONE: Information Technology, Tony Montoya, (915) 541-4288

DISTRICT(S) AFFECTED: All

SUBJECT:

APPROVE: Renew Personal Services Contract for Jose B. Aguirre

BACKGROUND / DISCUSSION:

The Information Technology Department would like to renew the employment contract for Jose B. Aguirre on a full-time basis as an Information Systems Manager. His management skills have been instrumental in the increased support provided to all City departments. Mr. Aguirre has over 20 years of IT management experience that will be vital as we move forward in stabilizing our infrastructure and in implementing new automated system to improve our business processes.

PRIOR COUNCIL ACTION:

AMOUNT AND SOURCE OF FUNDING:

Budgeted for FY06
Funding Source: 39010351-39000-01101-501011

BOARD / COMMISSION ACTION:

Enter appropriate comments or N/A

N/A

*****REQUIRED AUTHORIZATION*****

LEGAL: (if required) _JRB_____

FINANCE: (if required) _____

OTHER: _____

(Example: if RCA is initiated by Purchasing, client department should sign also)

Information copy to appropriate Deputy City Manager

APPROVED FOR AGENDA:

CITY MANAGER: _____

DATE: _____

RESOLUTION

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

That the City Manager be authorized to sign a Contract between the **CITY OF EL PASO** and **JOSE B. AGUIRRE**, to employ Jose B. Aguirre as an Information Systems Manager for the Information Technology Department, at a biweekly rate of \$2,846.15, for 40 hours per week. The term of the contract shall be for the period of April 10, 2006 through April 9, 2007.

APPROVED this _____ day of _____ 2006.

THE CITY OF EL PASO

John F. Cook
Mayor

ATTEST:

Richarda Duffy Momsen
City Clerk

APPROVED AS TO FORM:

John R. Batoon
Assistant City Attorney

STATE OF TEXAS)
)
COUNTY OF EL PASO)

PERSONAL SERVICES CONTRACT

This contract entered into by and between the **CITY OF EL PASO**, a home rule municipal corporation hereinafter referred to as "City," and **JOSE B. AGUIRRE**, hereinafter referred to as "Employee," witnesseth:

WHEREAS, the City, on behalf of the Information Technology Department, desires to employ the Employee as an Information Systems Manager; and

WHEREAS, Employee possesses the skills to render said employment to the City.

NOW, THEREFORE, the parties hereto mutually agree as follows:

1. SCOPE OF SERVICES. Employee shall perform the services found in Attachment A, attached and made a part hereof, under the terms and conditions hereinafter stated, and the Employee hereby accepts and agrees to perform such services for the Information Technology Department, in El Paso, Texas. Contractor agrees to adhere to all relevant rules and policies of the Information Technology Department.

2. TIME OF PERFORMANCE. The services of Employee are to commence on or about April 10, 2006 and be completed by April 9, 2007.

3. COMPENSATION AND METHOD OF PAYMENT. Employee shall be paid biweekly at the rate of Two Thousand Eight Hundred Forty-six and 15/100 Dollars (\$2,846.15) for forty (40) hours per week. The total amount of the contract shall not exceed \$74,000.00 plus benefits. The Employee is classified as an Exempt employee under FLSA and is not eligible for overtime pay. The full time contract employee named in this Agreement shall be eligible for the following benefits:

A. The City's Insurance Plans. The full time contract employee named in this Agreement who is currently enrolled in any of the City's insurance plans shall be eligible to continue to participate in and receive the benefits of those Plans in the same manner as similarly situated full time regular City employees. If Employee is not currently enrolled in any insurance plan, he shall be entitled to enroll in accordance with the provisions of those Plans as they may be amended from time to time.

B. The City's Pension Plan, in accordance with the provisions of the Plan. Election to participate in the City's Pension Plan must be made at the time of signing of this contract.

C. All paid holidays authorized by the El Paso City Council.

D. Accrual of vacation and sick leave in accordance with City of El Paso Civil Service Rules and Procedures. Employee shall be entitled to begin work as a contract employee with the total sick leave and annual vacation time he or she has accrued with the City as a beginning balance as of the date of this Agreement. Seniority for future accrual of vacation leave will be based on number of years of continuous City service immediately prior to the signing of this Agreement.

E. Deferred Compensation Plan in the same manner as similarly situated full time regular City employees.

F. Civil and Military leave in accordance with City of El Paso Civil Service Rules and Procedures.

G. Tuition Assistance Program under the terms of the City of El Paso's Policies/Procedures.

The City will provide no other fringe benefits. Employee agrees that at no time will he make a claim against the City for more than the rate provided under the terms of this

contract.

4. AMENDMENT OF AGREEMENT. This Agreement may not be modified or amended except by an instrument in writing signed by the parties hereto or pursuant to any City Ordinance authorizing contract amendments.

5. LOCATION OF PERFORMANCE. The place where such services are to be performed is in the Information Technology Department, City and County of El Paso, State of Texas, or such other places as may be directed by the City in order to fulfill the terms of this Contract.

6. LAW GOVERNING CONTRACT. For purposes of determining the place of the Contract and the law governing the same, it is agreed that the Contract is entered into in the City and County of El Paso, State of Texas, and shall be governed by the laws of the State of Texas. Venue shall be in the courts of El Paso County, Texas.

7. COMPLETE AGREEMENT. This agreement constitutes and expresses the entire agreement between the parties hereto in reference to the personal services of the Employee for the City, and in reference to any of the matters or things herein provided for, or hereinbefore discussed or mentioned in reference to such services, all promises, representations and understanding relative thereto herein being merged.

8. TERMINATION. Either party may terminate this contract without cause after ten (10) days written notice to the other party of the intention to terminate this contract, or at any time by mutual agreement of the parties. Should the City have cause to terminate this agreement or if Contract Employee is in breach of this contract, the contract may be terminated immediately upon written notification to the Contract Employee of the cause for termination. As a member of the unclassified services for the City, Employee is subject to removal from his or her position pursuant to Section 6.2-3

of the Charter. Employee acknowledges that Employee has no right of appeal with respect to termination of his or her employment.

9. MISCELLANEOUS. The City shall provide such office space for Employee as is necessary, in the sole determination of the City, for Employee to carry out his duties under this Contract.

10. NOTICE. Any notices required under this contract shall be sufficient if sent by Certified Mail, Return Receipt Requested, postage prepaid, to the City or the Employee at the following addresses:

CITY: City of El Paso
Information Technology Department
Attn: Director
#2 Civic Center Plaza
El Paso, Texas 79901-1196

EMPLOYEE: Jose B. Aguirre

IN WITNESS WHEREOF the parties have executed this agreement at El Paso, Texas this _____ day of _____, 2006.

CITY OF EL PASO, TEXAS:

EMPLOYEE:

Joyce A. Wilson
City Manager

Name: Jose B. Aguirre
SSN:

Approved as to Content:

Approved as to Form:

Tony Montoya, Director
Information Technology Department

John R. Batoon
Assistant City Attorney

ATTACHMENT A
SCOPE OF DUTIES STATEMENT

INFORMATION SYSTEMS MANAGER

(EL PASO CONTRACT POSITION)

General Purpose

Under administrative direction, Manage coordination of various information services functions of the City of El Paso as delegated.

Typical Duties

Plan, formulate, implement and direct administrative practices, policies and techniques for information services operations. Involves: Project long and short range information services requirements. Oversee and review designated capital planning and operating budgets. Define capital requirements for new computer systems. Evaluate proposed computer equipment including support requirements, cost/benefits, and suitability to the task. Ensure stability and security of computer systems by developing and enforcing related information services policies and procedures.

Provide advice and direction regarding new developments in information processing, database management and security issues. Involves: Collaborate with users and staff to identify business needs and determine functional requirements. Establish information services goals and priorities. Recommend acquisition of new computer systems and new applications for current computer equipment for any department and improve overall systems effectiveness. Lead multiple projects simultaneously in a variety of matrix and staff situations. Participate in planning committees related to information services. Ensure computer products and services meet current and future business requirements. Interface with city departments, public agencies and other organizations regarding cooperative data sharing projects.

Plan, organize and direct work activities, professional development and training of information services personnel. Involves: Participate in staffing functional units with appropriate managerial, professional and technical personnel. Supervise, mentor and coach information services staff which includes prioritizing and assigning work. Provide subordinates with methods and instruction on cost justification, prioritization, reporting techniques and expectations. Review and evaluate work performance, and ensure compliance with Department and City personnel policies and procedures.

Perform other related managerial and professional work as required.

Minimum Qualifications

Education and Experience: Equivalent to a combination of an accredited Bachelor's Degree in Business or Public Administration, Management Information Systems, Computer Sciences, Mathematics, or related field, plus six (6) years of professional automated information systems experience such as systems analysis, applications programming, relational database administration, network administration or data communications that included two (2) years in a supervisory capacity.

Jose B. Aguirre



Summary

Over twenty years of working in the IT profession. Experience includes IT management, IT consulting, project management, network administration, application development, operating system development, and enterprise systems design and installation. Duties have included managerial and supervisory roles, technical leads and primary support positions. Extensive travel to customer sites for design, installation, troubleshooting and onsite support.

Professional Experience

City of El Paso, El Paso, TX

Information Services Manager

9/03 to Present

Responsible for the continuous availability of the City's Enterprise Information Services System that includes 190 servers, 117 remote sites and 3000+ user workstations. Manage and direct 30+ IT professionals that include application development, database administration, network administration, help desk technicians, and user support technicians. Plan, formulate, implement and direct policies and techniques for information services operations. Project long and short-range information services requirements. Participate in strategic planning for the City's long and short term goals. Evaluate proposed hardware and software implementation and upgrades. Coordinate with other City departments and other sections of the Information Technology department to implement and upgrade required information systems.

- Design, oversee and review multi-million dollar yearly capital and operating budgets.
- Oversee and approve all Information Services projects.
- Lead and direct multiple simultaneous projects including hardware and software implementations and upgrades.
- Managed and supervised the hardware and software implementation of the City's two million dollar Financial and Human Resource information systems.
- Supervised the redesign of the City's Network Operations Center.
- Directed and supervised the redesign of the City's network security infrastructure and configuration.
- Directed and supervised the redesign of the City's E-Mail and virus protection infrastructure and configuration.
- Rewriting the City's Help Desk policies and procedures to provide users the best possible service.

Jose B. Aguirre

- Mentor Information Services Department staff in areas of network design and administration, software development and database administration.

City of El Paso, El Paso, TX

Network Administrator

10/02 to 9/03

Responsible for the operation, maintenance, and upgrade of the City's enterprise network infrastructure. Hardware consists of Dell servers, Cisco routers, 3Com routers, Cisco switches, and 3Com switches. Software consists of Microsoft Windows NT 4.0/2000, Microsoft Exchange Server, Microsoft SQL Server, Microsoft Internet Information Server, Microsoft Proxy Server, and Cisco Internetworking Operating System.

- Manage a team of Network Administrators in the operation, maintenance and upgrade of the City's network infrastructure.
- Provide support and problem resolutions for the City's network users including other member of the City's IT department.
- Assist and participate in the preparation of RFPs for City Information Technology projects.

Notable Projects

- Implemented Computer Associates Unicenter Network and Systems Management software for network monitoring creating the City's Network Operations Center.
- Installed other Computer Associates software such as Asset Management and Argis.
- Directed and supervised server upgrades at MSC, Art Museum, Municipal Court, Zoo and City Hall.
- Directed and supervised router upgrades for upgraded communications lines.
- Generated the specifications for a new core switch to increase the bandwidth of the City's network backbone.
- Supervised the configuration and installation of the core switch for the network backbone.
- Direct and supervise team of Network Administrators in the operation, maintenance and upgrade of the City's network infrastructure.
- Provide support and problem resolutions for the City's network users including other member of the City's IT department.
- Assist and participate in the preparation of RFPs for City Information Technology projects.

Productive Data Systems, Inc./El Paso, TX & Albuquerque, NM

Senior Systems Engineer

9/96 to 10/02

Responsible for designing, installing, configuring, testing and maintaining enterprise-wide Windows NT Network Operating System that includes Alpha and Intel servers, Cisco and 3Com networking equipment, Windows NT 3.51/4.0/2000, and the entire Microsoft Back Office suite of products. Also included are high availability options such as Microsoft Cluster Server and Digital Clusters.

- Design, install, configure and test enterprise-wide Windows NT based Network Operating System. Included are servers, UPC systems, Windows NT domains, Active Directory domains, domain trusts, and user profiles.

- Design, install, configure and test LAN hardware. Included are switches, hubs, and routers.
- Design, install, configure and test WAN hardware. Included are CSU/DSU's, routers, and communications line configurations that include T1's, ISDN, Frame Relay and 56k circuits.
- Install, configure and test Cisco Video Servers.
- Design, install, configure and test Microsoft Exchange Server. E-mail system to include both internal and Internet E-mail configurations. Also included is the configuration of multiple Exchange sites and Web access.
- Design, install, configure and test Microsoft Systems Management Server. Configurations include multiple sites.
- Install, configure and test Microsoft SNA Server. Installations have included IBM mainframes and IBM AS/400 minicomputers. Configurations include redundant connections among multiple servers for high availability of SNA services.
- Install, configure and test Microsoft SQL Server. Configurations include setup for other products like Microsoft Systems Management Server and other customer specific applications.
- Design, install, configure and test Microsoft Internet Information Server. This includes customer specific requirements to include security, access, and monitoring.
- Design, install, configure and test Microsoft Proxy Server. This includes customer-required security, access restrictions and monitoring.
- Design, install, configure and test Watchguard and Alta Vista firewalls. Included are customer specific security, custom access and blocking, logging and monitoring. Also included are special setups for video and voice access.
- Install, configure, and train client staff in the use of system backup application, BackupExec, Arcserve, and NTBackup.
- Document network installation and configuration. This includes all servers, networking equipment and communications. Documentation includes written instructions on use of network, tabular details of equipment and configurations, and network maps.
- Configure user access to the network servers and files. Configure user profiles and access.
- Setup and assist user-training sessions.
- Train client staff on the operation and maintenance of network installation.

Notable Projects

- *City of El Paso at El Paso, TX:* Installed large enterprise network for the City. This was a project to provide the City of El Paso network infrastructure to facilitate the City's move away from their legacy mainframe system. Installed a pair of Digital Alpha servers running Microsoft Windows NT 3.51 and Digital Clustering software. Installed and configured Microsoft Exchange Server, Microsoft SQL Server, and Microsoft Systems Management Server. Also installed and configured redundant Microsoft SNA Servers for access to the

City's IBM Mainframe. Networking equipment installed were 3Com switches and routers. Also configured user network profiles and network file access.

- *El Paso Police Department at El Paso, TX:* Installed a pair of Digital Alpha 4100 servers running Windows NT 4.0 and Microsoft Cluster Server. Installed and configured Microsoft Exchange Server for use with the Cluster Server. Also installed Microsoft SQL Server, Microsoft Internet Information Server, and Microsoft Systems Management Server. Networking equipment consisted of a DEC ATM backbone switch with DEC hubs and switches.
- *Metropolitan Planning Organization at El Paso, TX:* Designed and implemented MPO's LAN for standalone use after they left City Hall. Installed Windows NT Server 4.0 and the latest service pack level. Installed Microsoft Exchange Server and configured for Internet E-Mail. Also installed Microsoft Internet Information Server and Microsoft Proxy Server. Installed and configured WAN connection to City Hall network. Designed and implemented user profiles to mimic City Hall usage for user familiarity. Trained MPO personnel on network administration.
- *State of New Mexico CIO Office, Santa Fe, New Mexico:* Evaluated network design for a statewide high speed ATM backbone. Responsible for evaluating design, protocols, hardware, communications infrastructure, and implementation. Purpose of evaluation is to determine feasibility, cost effectiveness, scalability, and wise use of current technology. Traffic on network backbone will include data, voice and video.
- *DOE Non-proliferation and National Security Institute Operated by Wackenhut Services, Inc. at Kirtland AFB, Albuquerque, NM:* Implement Multicast capability for the broadcasts of live training shows and videos through the internet. Responsible for the requirements analysis, drafting of the requirements document, generating recommendations for infrastructure modifications and implementation of the multicasting facility.
- *County of Taos at Taos, NM:* Re-engineered the County's network infrastructure that was seriously damaged due to hardware failures. Re-designed for redundancy and disaster recovery concerns. Re-designed the disk layout, re-arranged user and shared file access, and re-created user profiles. Also, re-installed SNA access to the existing IBM AS/400 applications.
- *Hagerman Municipal Schools at Hagerman, New Mexico:* Designed and implemented the school district WAN for Internet access to staff and students. Installation includes Windows 2000 Server and the latest service pack, Active Directory domain, Microsoft Internet Server, and Microsoft Proxy Server. Also installed are Cisco 3500 Catalyst switches and Cisco 2600 series router. Network consists of a gigabit backbone and 10/100 to the desktop. Installed and configured Cisco Video Controller and Video Broadcast servers for video creation and network broadcasting.
- *Cibeqe School District at Cibeqe, Arizona:* Designed and implemented the school district WAN for Internet access to staff and students. Installation includes Windows 2000 Server and the latest service pack, Active Directory domain, Microsoft Internet Server, Microsoft Proxy Server, and Microsoft Exchange. Internet access is provided by broadband satellite and remotes sites are connected via wireless radios.

Jose B. Aguirre

- *Mora Independent Schools at Mora NM:* Designed and implemented the school district WAN for Internet access to staff and students. Installed Microsoft Windows NT Server 4.0 and the latest service pack level. Also installed Microsoft Internet Information Server, Microsoft Proxy Server, and Watchguard firewall for Internet service to the school district. The network consists of a gigabit backbone and 10/100 to the desktop using Cisco Catalyst 3500 switches utilizing fiber optics and Category 5 copper cabling. WAN communications consist of Cisco 1700 routers and T1 lines. Other products installed included Microsoft Exchange Server and Microsoft Systems Management Server.
- *Moriarty Municipal Schools at Moriarty, NM:* Designed and implemented the school district WAN for Internet access to staff and students. Installed Microsoft Windows NT 4.0 and the latest service pack level. Installed Microsoft Internet Information Server, Microsoft Proxy Server, Alta Vista firewall, and Sequel Net Access Manager for Internet access, logging and filtering. The networking equipment consisted of 3Com switches utilizing fiber optics and Category 5 copper cabling. Communications installed were 3Com routers and frame relay communications lines. Microsoft Exchange Server was installed and Internet E-mail was configured. SNA Server for access to their AS/400 was also installed. Microsoft Systems Management Server was also installed. Upgraded network with Cisco Catalyst Switches and Cisco 2600/3600 routers from the original 3Com equipment.
- *Pine Hill Schools at Pine Hill, NM:* Designed and implemented the school district LAN for Internet access to staff and students. Installed Microsoft Windows NT 4.0 with the latest service pack level. Install Microsoft Exchange Server and configured Internet E-mail. Internet access consisted of a broadband satellite and Watchguard firewall. Networking equipment consisted of 3Com 3300 switches. Upgraded network with Cisco Catalyst switches from the original 3Com equipment. Installed and configured Cisco Video Controller and Video Broadcast servers for video creation and network broadcasting.
- *Grants Cibola County Schools at Grants, NM:* Installed school district WAN for Internet access to staff and students. Installed Microsoft Windows NT 4.0 with the latest service pack level. Installed Microsoft SNA Server for access to their AS/400. Also installed Microsoft SQL Server and Microsoft Systems Management Server. Microsoft Internet Information Server, Microsoft Proxy Server, Alta Vista firewall and Sequel Net Access Manager were installed and configured for Internet access, logging and filtering. Configured custom WAN access for student reporting application.

El Paso Water Utilities/El Paso, TX

Network Administrator

5/95 to 8/96

Responsible for the operation and maintenance of the utility enterprise WAN. The WAN consisted of six remote sites connected to the central site with T1 communications lines. Equipment used included Cisco routers and Cabletron hubs. Also responsible for the AT&T Definity PBX network. The data and phone networks were configured to share the T1 communications lines.

- Network Operating System supported was Novel Netware 4.1.

Jose B. Aguirre

- Provided network resources to support the Peoplesoft application that the Utility was migrating to.
- Provided network resources to support the legacy IBM mainframe that was in use until the new client/server application was fully implemented.
- Evaluated and tested new software and hardware for possible use by the Utility.
- Administered Utility E-mail, Internet and internal E-mail systems.
- Developed and implemented Utility policies and procedures for network users.
- Evaluated, planned, acquired, implemented and maintained new and current telecommunications systems.
- Acquired, installed, and maintained all computer equipment.
- Directed and supervised computer/network technicians.
- Documented all computer, network, and telecommunications resources.

State National Bank/El Paso, TX

System Support Manager

11/94 to 4/95

Responsible for the support of the Bank's applications. Worked in conjunction with the Bank's data processor to implement and maintain new and current banking applications.

- Managed a staff of System Analysts.
- Coordinated systems development, system enhancements and system maintenance between data processor and the end user.
- Developed and implemented security procedures for network and bank online system access.
- Developed policy and procedures for newly implemented systems.
- Developed and implemented System Support Department policies and procedures.
- Provided project status reports and implementation schedules.
- Supervised end user systems support.
- Coordinated activities between bank and third party vendors.

University of Texas at El Paso/El Paso, TX

8/92 to 11/94

System Analyst – Institute for Manufacturing and Materials Management

Responsible for the development of database and GIS applications relating to socio-economic data of the U.S. – Mexico border. Database applications implemented using Oracle DBMS, GIS applications implemented using ArcInfo and Oracle DBMS, and Sun hardware and operating system.

- Analyzed and designed new database and GIS applications
- Project leader in charge of implementing a GIS for the U.S. – Mexico border region.
- Supervised staff of programmers, clerks and students.
- Installed and maintained Sun OS software, Oracle DBMS, and ArcInfo software.
- Responsible for technical support of IM³ staff, campus staff, subscribers and other Texas Centers staff.
- Trained users on use of E-mail and other Internet network facilities.

Jose B. Aguirre

El Paso Community College/El Paso, TX

Computer Instructor

6/91 to 11/92

- Taught WordPerfect, Lotus 123, and dBase to students in the Summer Youth Employment Training Program.
- Taught QuarkXpress to a publishing house for the Advanced Technology Center.

Software Pursuits, Inc./Alameda, CA

Senior Technical Support Specialist

9/86 to 11/90

Responsible for the technical support and problem resolutions of over 200 customers of Software Pursuits software.

- Project leader for the SPRI Spooling System in the Technical Services Department.
- Managed and supervised technical support and problem resolution for over 200 customers of the SPRI Spooling System.
- Technical support and system programming for over 200 customers of MVT/VSE, SPRI, PLF, JDS-Conman, VSE/XRM and VM/XRM.
- Technical support and system programming for IBM mainframe operating systems DOS/VSE, VSE/SP, and VM.
- Supported third party software that ran on Software Pursuits operating system software.
- Implemented/supported mainframe-to-mainframe, mainframe to PC and remote spooler networking.
- Provided onsite technical support and system programming services.
- Provided onsite operating system software installation and testing.
- Wrote custom Assembler language exits and interfaces.
- Debugged customer hardware/software problems from system dumps.
- Wrote APARS/PTFs to operating system software.

Safeway Stores, Inc./Oakland, CA

VSE System Programmer

1/86 to 8/86

Responsible for the support and system programming for 17 U. S. retail divisions. Also responsible for the operation and maintenance of the corporate development machines. Provided technical support to corporate and division programmers and users.

Safeway Stores, Inc. – El Paso Division/El Paso, TX

Division Programmer

8/81 to 1/86

Responsible for the installation and maintenance of corporate developed applications and operating systems. Also responsible for the development, implementation, and maintenance of division specific applications. Trained division office staff, store personnel and data processing staff on the use of existing hardware and software. Also served as Teleprocessing Coordinator.

Jose B. Aguirre

Technical Skills

Hardware

Cisco routers, switches and video equipment, 3Com routers and switches, Bay Networks routers, Cabletron hubs, T1 CSU/DSUs, ISDN routers, Cisco PIX, Watchguard and Alta Vista firewalls, HP/Compaq/Digital Servers, Dell Servers, Digital Alpha Servers, Compaq desktops, Dell desktops Apple Macintosh, IBM PCs, IBM 43xx/308x/93xx/309x mainframes.

Software

Microsoft Windows NT 3.51/4.0, Microsoft Windows 2000 Enterprise/Server/Professional, Microsoft Exchange, Microsoft SQL Server, Microsoft SNA Server, Microsoft System Management Server, Microsoft Internet Information Server, Microsoft Proxy Server, Microsoft Cluster Server, Computer Associates Unicenter NSM, Veritas BackupExec, Arcserve, Novell Netware 4.1, Linux, Microsoft Windows ME/98/95, MS-DOS, MacOS, Microsoft Excel/Word, VSE/SP, VM, VSAM, Unix, Oracle, Arc/Info.

Education

B.S.C.S., University of Texas at El Paso, El Paso, TX.
Major in Computer Science, Minor in Mathematics

Certifications

Cisco Certified Network Associate – CCNA (640-507)

Cisco Certified Design Associate – CCDA (640-441)

Microsoft Certified Systems Engineer – MCSE

Microsoft Networking Essentials (71-58)

Microsoft Windows NT Workstation (70-073)

Microsoft Windows NT Server (70-067)

Microsoft Windows NT Server In the Enterprise (70-068)

Microsoft Internetworking with TCP/IP (70-059)

Microsoft Implementing and Supporting Exchange Server 5.5 (070-081)

CompTIA Network + (N10-001)