Nouman Bantan, Ph.D.
+966-500-596-252
nbantan@yahoo.com

Professional Statement

I am a highly skilled IT expert with 15 years in the telecommunication and the information technology industries and I have progressive experience in leading and directing information-technology operations across broad disciplines, including networking (hardware and software), satellite communication, research and development, testing, support services, project management, customer satisfaction, vendor relationships, strategic planning, staff development, promoting change and improvement, and technology implementation.

Objective

Seeking a position as a faculty member in the fields of Computer Science, Networking and/or Satellite Communication

Key Strengths

- Customer focused and solutions driven
- Ability to visualize any process, regardless of size, from different perspectives
- Analytical ability and attention to detail
- Team player with cross-functional awareness
- Ability to interact with people from different backgrounds
- Excellent problem solving skills
- Outstanding written and verbal communication skills in Arabic and English

Career Achievements

- Increased the sales volume of Telecom Special Services (Jeddah, KSA) by 600% in a period of 5 months
- Received Outstanding Achievement Award from Jeddah Municipality, 2010
- Developed a new communication system for satellites , space crafts, and space stations with NASA's cooperation which yielded to a Ph.D. in satellite communication
- Received the Ohio Board of Regents Reward of $24,000 for accomplished research at Kent State University, 2006
- Critical member of the Saudi IBM team to install the first ATM machines in Saudi Arabia
- Configured and installed networking solution for 200+ clients in a period of three and a half years.
- Received Outstanding Contribution Award from IBM Saudi Arabia, 1997
- Received Outstanding Achievement Award from IBM Saudi Arabia, 1998
- Received Outstanding Achievement Award from Sam Houston State University Computer Science Club, 1993
- Extensive teaching experience including current faculty teaching appointments (details available on request)
- Published eight publications worldwide in the course of six years

Education

Jan. 2000 - May 2007	**Kent State University** Computer Science (*Ph.D.*)	**Kent, OH, USA**
	• Area of Concentration: Satellite and Spacecraft Networking	
Sep. 1991 - Aug. 1994	**Sam Houston State University** Computer Science (*Master of Science*)	**Huntsville, TX, USA**
Jan. 1989 - May 1991	**Indiana State University** Computer Science and Mathematics (*Bachelor of Science*)	**Terre Haute, IN, USA**

PhD's Research Projects

Space Open Shortest Path First Routing Protocol (Dissertation topic)

This research incorporates the development of a routing protocol for space that creates an infrastructure which enables routers on board spacecrafts to calculate near optimum routing tables ahead of time and on-demand when network changes occur. Our routing protocol for space communication, Space Open Shortest Path First (SOSPF), divides the routing domain (e.g., our solar system) into areas within areas which provides an orderly fashion of transmitting routing information throughout the routing domain. The concept of areas within SOSPF allows routing information of one area to be hidden within that area. In addition, since the trajectory of space crafts are either predictable (e.g., satellite constellation around Earth), preset (e.g., the International Space Station), or set on demand (e.g., a space shuttle), a router on board those spacecrafts calculates the time intervals where spacecrafts are in direct view with the calculating router and the propagation delays to those spacecrafts using the location of those spacecrafts and the local transmission capabilities. Then, those calculated values are dispersed throughout the routing domain.

Shortest Delay Intermittent Pathway (Dissertation topic)

This research incorporates the development of a new routing algorithm which allows routers on board spacecrafts to use the received routing information (i.e., the time intervals and the propagation delay) in computing routing tables. This routing algorithm can compute shortest delay paths over conventional concurrent-link as well as intermittent-links using a store-and-forward communication scheme.

3 Dimensional Rendering

This research incorporates the development of the design of an application that allows researchers to monitor chemical element/components in three dimensions. The application itself is being built by project's programmers. The project is a joint venture between the Computer Science department at Kent State University and the Chemistry department at the University of New Mexico.

Interactive Smart Paper

This research is a team project which developed of an application which distributes data sources of a single document in different locations. Using this method avoids bottleneck of retrieving all required information from one source.

Constraint Resource Planning: Intelligent Routing

This research incorporates the development of a fast near linear run-time algorithm for deadline-satisfying packet forwarding and route lookup. This algorithm has been designed after a Constraint Resource Planning (CRP) methodology of approximation algorithm design. The algorithm uses scheduling and forwarding heuristics to produce near optimal performance. These heuristics execute within a generic shell which can be used for other than the suggest algorithms.

Master's Research Projects

TCPIPX (Practicum)

This research incorporates the development of the TCP client server application using the Novell NLM Development Kit. This research included a small application, similar to FTP to test the TCP application. Both applications were built under C++. TCP server application is run in two servers that are connected serially. The semi-FTP application residing on server #1 and server #2 are connected to server #2 and server #1 respectively. The application contains no negative acknowledgment. The application is 10000 lines of code, without the documentation. The title of the thesis is "TCP under Novell."

SHSU Help (Software Engineering)

This research incorporates the development of an application that provided help on all the software available to the students at Sam Houston State University. Fellow students provided the input files which include sixteen different applications, like C++, Pascal, FORTRAN, Word, and many more. The application is built in C. The project was built with a prototype as required by the software engineering course. The application is 2,000 lines without documentation and contains hashing data structure. The project was proposed by the computer science department to the school government.

Professional Experience

Jun. 2009 – Current	Jeddah Municipality
Jun. 2009 - Current	*IT Director of Branches and Districts*

- Direct the acquisition, implementation and use of different technologies and services needed by the different Jeddah Municipality branches.
- Align and implement IT strategic objectives for the different branches with the main Jeddah Municipality IT Strategic Plan
- Participate in the development of KPIs and Balance Score Cards for the IT department
- Participate in developing IT strategies and priorities for the Jeddah Municipality
- Coordinate the delivery of projects and services between the main Jeddah Municipality headquarters and the multiple branches across the Jeddah region, and act as the main liaison for all such efforts
- Assure that the different branches across the Jeddah region receive all electronic services, have efficient technical support, exhibit robust infrastructure and appropriate security standards, and have sufficient Data repositories
- Develop user empowerment and employee technical training plans and ensure they are appropriately executed in coordination with the Amanah Training Academy
- Assure compliance of branches with Jeddah Municipality standards, policies and procedures
- Communicate any infrastructure, hardware or software needs of the branches to the Jeddah Municipality headquarters

	– Develop SLAs with the Jeddah Municipality Headquarters and measure service performance for the different branches and develop plans to overcome obstacles of success	
Jan. 2010 - Current	*IT Director of Technical Units*	

- Direct the acquisition, implementation and use of different technologies and services needed in Jeddah Municipality for the following areas
  - Two-Way Radio System
  - PBX Systems
  - Access Control and Low Current Solution Systems
  - CCTV Systems
  - Signage Systems
  - One/Two Dimensional Barcode and Secret Signature

Oct. 2007 - Jan. 2009	**Telecom Special Services**	**Jeddah, KSA**

Chief Technical Officer

- **Managerial Responsibilities**
  - Created and managed policies and processes to ensure effective communication
  - Created and managed documentation control system
  - Provided recommendations regarding investments and cash strategies
  - Oversaw preparation of annual budget, regular variance statements and annual audit.
  - Managed the execution of 100+ projects in the field of Networking and Low Current systems
  - Worked as Acting General Manager for a period of six months

- **Technical Responsibilities**
  - Oversaw the selection of suppliers and subcontractors in line of business goals
  - Advised customers with the required technologies in the areas of digital communication and low current system
  - Distributed the tasks among the technical team with the involvement of all engineers
  - Trained the technical staff on hardware troubleshooting techniques

- **Human Resources Responsibilities**
  - Revised staff job descriptions when necessary to increase efficiency and achievement of the company's goals
  - Assisted all staff members with the long range development plans and appropriate training to perform their jobs effectively
  - Introduced the recruitment process of technical and sales staff which includes:
    - International technical examination
    - International assessments examination
    - Work under pressure examination

- **Achievements**
  - After being appointed the Acting GM, I restructured the company which made the company profitable after more than three loss-making years
  - Reorganized the project execution scheme which led to successful installation of IT installations in 22 cities in 45 days with a team of 9 engineers

Jun. 2007 - Current	**Arab Open University**	**Jeddah, KSA**

Lecturer (part time)
- Taught Digital Communication which includes most current technologies such as SDH, ATM, Fiber optics, and Multiplexers
- Taught Graduation Research Project

Mar. 2007 - Jun. 2007	**King Abdul Aziz University**	**Jeddah, KSA**

Lecturer (part time)
- Taught a course in Introduction to Computers (Freshman level)

Mar. 2000 - Feb. 2007	**Kent State University**	**Kent, OH, USA**
Jan. 2007 - Feb. 2007	*Lecturer*	

- Taught a course in Computer Communication (Masters level)

Jan. 2006 - Jan. 2007   *PhD Candidate*
- Perform funded work in cooperation with NASA to develop an infrastructure for a network which encompasses satellites, space shuttles, space stations and space colonies

Mar. 2000 - Dec. 2005   *Research Assistant*
- Built the interface design of a three dimensional rendering software for chemical element (Joint venture between Computer Science, Chemistry, and Liquid Crystal departments)
- Prepared and presented a networking workshop for the Department
- Developed part of a browser for scientific information sharing (Joint venture between

Computer Science and Library Science)

- **Achievements**
  - Received the Ohio Board of Regents Reward of $24,000 for accomplished research

Sep. 1996 - Jan. 2000	**IBM Saudi Arabia**	**Jeddah, KSA**

Feb. 1998 - Jan. 2000	*Senior Product Support Services Representative*

- Configured IBM routers for all supported technologies
- Configured and maintained IBM bridges, and switches for Ethernet, Token ring, and ATM
- Configured IBM Mainframe VTAM definitions in VSE and VM systems
- Configured CISCO routers for Ethernet
- Installed, configured, and operated LAN traffic monitoring/managing software
- Designed LAN solutions and TCP/IP schemes for customers

Sep. 1996 - Jan. 1998	*Product Support Services Representative*

- Configured IBM routers for all supported technologies
- Configured and maintained IBM bridges, and switches for Ethernet, Token ring, and ATM
- Installed, configured, and operated LAN traffic monitoring/managing software
Designed LAN solutions and TCP/IP schemes for customers

- **Achievements**
  - Received Outstanding Contribution Award
  - Received Outstanding Achievement Award

Sep. 1994 - Aug. 1996	**International Airports Projects**	**Jeddah, KSA**

Technical Analyst II
- Installed, maintained and administered network hardware and network software

Jan. 1992 - Jul. 1992	**Sam Houston State University**	**Huntsville, TX, USA**

Research Assistant at the Computer Science Department
- Developed remote procedure call (RPC) applications between a Macintosh and a PC

Aug. 1990 - May 1991	**Indiana State University**	**Terre Haute, IN, USA**

Lab Assistant

Conferences

Oct. 2009	GITEX Global Conference	Dubai, UAE
Oct. 2008	GITEX Global Conference	Dubai, UAE
Mar. 2008	CeBit	Hanover, Germany
Apr. 2007	25th AIAA International Communications Satellite Systems Conference	Seoul, South Korea
Sep. 2006	Fifth Space Internetworking Workshop	Baltimore, MD, USA
Jun. 2006	Ohio ICE Technical Conference	Cleveland, OH, USA
Oct. 2004	IEEE ICCCN Conference	Chicago, IL, USA
Jul. 2002	3rd International Conference of Wireless and Optical Communication	Banff, Canada
Jun. 2000	Fifth ACM Conference on Digital Libraries	San Antonio, TX, USA
Jun. 2000	Anniversary ALCOM Seminar	Kent, OH, USA

Training

Feb. 1999	IBM 2216 NWAYS Multi-access Connector	IBM Germany	Mainz, Germany
May 1998	Time for Time Management	IBM Saudi Arabia	Jeddah, KSA
Apr. 1998	Internetworking MS TCP/IP	CompuBase	Jeddah, KSA
Mar. 1998	MSS (Multiprotocol Switch Services) V2	IBM France	Paris, France
May 1997	Building a Winning Team Workshop	IBM Saudi Arabia	Jeddah, KSA
May 1997	Problem Determination with IBM Routers	Manufacturing Services	Valencia, Spain
Feb. 1997	IBM ATM Campus Workshop	IBM Belgium	Brussels, Belgium
Feb. 1997	IBM ATM in Campus,	Manufacturing Services	Valencia, Spain

Technologies

I am highly proficient in the following technologies:
- MS Office
- C/C++
- SDH
- TCP/IP
- OSPF
- BGP

Association and Memberships

Jan. 2006 - May 2006	Member of Technology Committee	Kent State University	Kent, OH, USA
Jan. 2006 - May 2006	Representative of Graduate Student Senate	Kent State University	Kent, OH, USA
Jan. 2004 - Feb. 2007	Manager of Kent Mosque	Islamic Society of Akron and Kent	Kent, OH, USA
Oct. 2004	Moderator of an IEEE Conference	IEEE ICCCN2004 Conference	Chicago, IL, USA
Dec. 2000 - Jul. 2001	Social Director of ISAK	Islamic Society of Akron and Kent	Kent, OH, USA
Feb. 1999 - Dec. 1999	Vice President of IBM Club	IBM Saudi Arabia Club	Jeddah, KSA
Jun. 1992 - Dec. 1993	President of Computer Science Club	Sam Houston State University	Huntsville, TX, USA
Jan. 1992 - May 1992	Vice President of Computer Science Club	Sam Houston State University	Huntsville, TX, USA
Jan. 1992 - Aug 1994	President of Muslim Student Association	Sam Houston State University	Huntsville, TX, USA

Personal

- Nationality: Saudi
- DOB: 11 April 1968
- Languages: Fluent in Arabic and English and Moderate fluency in French