
MUHAMMAD ZUBAIR

School of Information and Communication Engineering

Dalian University of Technology, Dalian, China

E-mail: m.zubairpaf@gmail.com, **Mobile:** 008615998557184

PhD Scholar

Telecommunication expert with vast experience in both academia and industry lines. An accomplished IT professional with demonstrated success implementing strategic. Takes initiatives that improve business functionality with positive impacts on the bottom line. Skilled project manager, with proven ability to lead and motivate teams to maximize productivity. Extensive experience in technology savvy, a self-starter, readily adapts new environments and extrapolate from existing experience to quickly acclimatize to new technology. Possess first-rate communications and collaboration skills to lead and work in concert with diverse groups effectively.

QUALIFICATION HIGHLIGHTS

- Telecommunication Engineering
- Telecommunication Strategy Development
- Multiple Platform Networking
- Operations Management
- System integration
- Migration/ Upgrades
- Information Technology
- Project Management
- Technical Analysis

TECHNICAL EXPERTISE

- Certifications:** JNCIA-EX, JNCIA-ER, JNCIS-ER, MCSE (Traine by PLDC), CCNA (Traine by PLDC)
- Operating Systems:** Andriod, Windows 9X & ME, Windows NT Workstation & Server 4.0, Windows 2000 Professional & Server, Novell NetWare 4.11, Linux, Unix.
- Hardware:** Wireless handheld devices (iPHONE, Samsung, Blackberry, Lenovo, Nokia, Cisco 4000m/3600/3000/2600/1600 series Routers, Cisco 2900 series Switches, 3Com & Netgear Switches, Hub, Laptops & Workstations & Servers (HP, Dell, Micron, Compaq, IBM), Raid, SCSI, Modems, Network Cards, Memory, Printers, Plotters, Scanners and other peripherals
- Software:** Opnet Simulation Tool, MATLAB, Endnote, Exchange 5.5 & 2000, Lotus Notes Client and Server R4 & R5, Rumba, Citrix Client & Server, Windows Terminal Server, MS Proxy Server, MS IIS Server, Pervasive SQL 7.0 & 2000, Cisco IOS, Seagate Backup Exec, McAfee, Norton, PC Anywhere, Reachout, MS Office Suit, Primavera Project Planner P3 2.0 & 3.0, Visio 5.0 & 2000, Acrobat
- Networks/Protocols:** MIPv6/FMIPv6/HMIPv6/ProxyMIPv6/SIP/LAN/WAN, TCP/IP, IPX/SPX, WLINK, NETBEUL, WINS, DNS, DHCP, POP3, SMTP, FTP, TELNET, VPN, ICMP, RIP, NAT, IGRP, TFTP, Ethernet

EDUCATION

PhD in Information System and Communication Engineering

Faculty of Electronics and Electrical Engineering
Dalian University of Technology, China

MS in Computer Networks

Department of Computer Science, University of Peshawar, Pakistan

Master in Computer Science

Department of Computer Science, University of Peshawar, Pakistan

Bachelor in Computer Science

Department of Computer Science, University of Peshawar, Pakistan

HSSC - Computer Science

Federal Board of Intermediate and Secondary Education (FBISE), Islamabad, Pakistan

SSC

Federal Board of Intermediate and Secondary Education (FBISE), Islamabad, Pakistan

RESEARCH EXPERIENCE

Research Interests

- Wireless Communication
- Mobile Networks
- Next Generation Networks(4G Networks)
- QoS and Security in Next Generation Networks
- Mobility Management in NGNs (Mobile IPv6, HMIPv6, IDMP, FMIPv6, Proxy MIPv6)
- Application Layer protocol (Session Initiation Protocol)
- Combination of SIP with the above mentioned mobility protocols to enhance the QoS in NGN.
- Comparison of the above combinations in order to achieve single best combination which provides best performance among the all.
- Characteristics of Packets delays and characteristics of information rate in NGN.
- Protocol operation based performance analysis.

Reviewer

- EURASIP Journal on Wireless Communications and Networking
- 2013 IEEE Symposium on Computers & Informatics
- 2012 IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE 2012)
- 2012 IEEE Symposium on Wireless Telecommunications Applications (ISWTA2012)

Publications

- Zubair, M.; Mahfooz, S.; Khan, A.; ur Rehman, W.; , "Providing end-to-end QoS in Next Generation Networks (NGNs) using combined SIP HMIPv6 (CSH)," *Computer Networks and Information Technology (ICCNIT), 2011 IEEE International Conference on* , pp.113-118, 11-13 July 2011 doi: 10.1109/ICCNIT.2011.6020916

Submitted Manuscripts

- Muhammad Zubair, Kong Xiangwei, Saeed Mahfooz, Irum Jamshed, "Cross-layer Localized Mobility Management based on SIP and HMIPv6 in Next Generation Networks", Submitted to *International Journal of Electronics and Communications, 2012*.
- Muhammad Zubair, Kong Xiangwei, Saeed Mahfooz, Irum Jamshed, "Secure Session Mobility using Hierarchical Authentication Key Management in Next Generation Networks," Submitted to *The Arabian Journal for Science and Engineering, 2012*.
- Muhammad Zubair, Kong Xiangwei, Saeed Mahfooz, Irum Jamshed, "A Lightweight Reciprocal Authentication Mechanism to Secure Mobility in Next Generation Networks", Submitted to *Computer Communications, 2012*.
- Muhammad Zubair, Kong Xiangwei, Saeed Mahfooz, Irum Jamshed, "CLAM: Cross-layer Localized Authentication Mechanism based on Proxy MIPv6 and SIP in Next Generation Networks" Submitted to *IEEE System Journal, 2013*.

Research Topics Presented in Seminars/Conferences

- *Enhanced EAP-Based Pre-Authentication in WiMAX Networks*, presented in School of Information and Communication Engineering, Dalian University of Technology, China, Jan, 2013
- *Intensifying QoS and Security in Next Generation Network*, ETIT-2012.
- *Authentication Mechanism in NGNs*, presented in School of Information and Communication Engineering Dalian University of Technology, Dalian, China.
- *Providing end to end QoS in NGNs using Combined SIP HMIPv6(CSH)*, IEEE Conference ICCNIT-2011
- *Information Security model of NGN* presented in Department of Computer Science, University of Peshawar January, 23th 2010
- *QoS issues in 4G* presented in Department of Computer Science, University of Peshawar April, 27th 2010
- *Mobility protocols in NGN* presented in Department of Computer Science, University of Peshawar May, 18th 2010
- *SIP based QoS in NGN* presented in Department of Computer Science, University of Peshawar June, 16th 2010
- *My 12 views of NGN* presented in Department of Computer Science, University of Peshawar December, 05th 2009
- *Research issues in NGN* presented in Department of Computer Science, University of Peshawar December, 12th 2009
- *Analysis of first 4G by Teliasonera* presented in Department of Computer Science, University of Peshawar December, 19th 2009
- *Packet format of NGN* presented in Department of Computer Science, University of Peshawar December, 26th 2009

PROFESSIONAL EXPERIENCE

Pakistan Air Force (Fazaia) Degree College, Peshawar, Pakistan

Teacher (Feb 2006- Aug 2008)/ Head of Computer Science Department (Aug 2008 – Aug 2011)

Held multifaceted responsibilities to configure, install and administer network infrastructure and telecommunications systems that supported staff of 250 employees and 2500 students. Established net IT policies, which defined acceptable use of IT assets within the organization. Fulfilled administrative responsibilities including the additions and changes to user desktop, email and PBX accounts. Installed and configure servers including RAIDI & 5 arrays in addition to facilitating backup & restoration using NT utility. Configured and monitored status of printers utilizing HP jet admin in addition to upgrading printer firmware and handling installation of other peripherals. Actively provided desktop, configuration and phone support for software and hardware. Carried out full installation of Cisco routers and cabling for routers, switches, hubs and new workspaces.

- Three Labs each with 30 nodes are working under my supervision. We are running Both Linux (RHEL4) and Windows (2003 Advance server) machines for Web caching and domain controller, Exchange server respectively.
- Successfully engineered a Virtual Private Network (VPN) solution utilizing Windows 2000 Server.
- Effectively consolidated multi-domain Windows NT network into a single, homogeneous domain.
- We have established a LAN controlled by a Cisco 4000m series router and Cisco 2900 switches with efficiently working Access Controlled List.
- We are also connected with Pakistan Air Force Headquarters which are controlling all Fazaia colleges Database Software.
- Implementation of E-Testing in Fazaia Chains of Schools/Colleges in Pakistan.
- Supervision of Computer Science Department staff.
- Assessment and evaluation of Computer Science Department Staff.

University of Peshawar, Pakistan

March 2008 – Aug-2011

Visiting Lecturer

Training of Graduate and Post Graduate Students in Data Communication and Computer Networks

Pakistan Literacy Development Center (PLDC)

Nov 2005 - March 2006

Project Manager

Project Management and Training employees practically in Labs

Projects

Pakistan Air Force, Peshawar, Pakistan

Key Responsibilities

- My job was to establish a secure and reliable network. I have managed a 90 node network for 40 days in which candidates were registering and giving online test.
- SIMS (Student Information Management System) Management.
- I have assigned to implement E-Testing in Fazaia Chains of School/Colleges.
- Implementation of **EUREKA** software in Pakistan Air Force Chains of Schools and Colleges.
- Arranged and Supervised In-Service Teacher Training program summer 2007 in PAF Degree College, Peshawar
- Arranged and Supervised In-Service Teacher Training program summer 2008 in PAF Degree College, Peshawar.
- Arranged and Supervised In-Service Teacher Training program summer 2009 in PAF Degree College, Peshawar.
- Arranged and Supervised In-Service Teacher Training program summer 2010 in PAF Degree College, Peshawar.

P.A.F Teacher Training Institute, Islamabad

Key Responsibilities

- I suggest and made a frame work to implement Oxford Syllabi for Computer Science in FAZAIA Chains of Schools/Colleges in Pakistan.
- I have assigned to make Computer Science Papers for exams.

Library Information Management System, Central Library University of Peshawar

Key Responsibilities

- Coding and Designing of software for central Library University of Peshawar.

Intel Education , Pakistan <http://engage.intel.com/index.jspa>

➤ Master Trainer

Key Responsibilities

- I trained staff members of my institution (Pakistan Air Force Degree College Peshawar, Pakistan) about using computer technologies which includes Microsoft PowerPoint, Microsoft Word, internet and digital encyclopedia.
- Then I have trained them how to use these technologies in teaching practices.

Achievement

- Obtained Chinese Government Scholarship for PhD
- Selected in youth delegation Pak-China Youth Exchange Program by the Ministry of Youth, Government of Pakistan.
- Best employee for the year 2008-2009 by Base Commander P.A.F Base Peshawar.
- Position Holder in Master of Science - Computer Science
- Position Holder in Bachelor of Science - Computer Science

- Position Holder HSSC - Computer Science
- Celebrity on Hunan official website (<http://3us.enghunan.gov.cn/>)

Membership

- Member, IEEE
- Member of Doctor's Association Dalian University of Technology, Dalian China.
- Member of Future Youth Group Pakistan as General Secretary for Khyber Pukhtunkhwa.
- Member of Career Management Society Pakistan.
- Former Member of IT Society University of Peshawar as a President.

Personal Information

⇒ Father Name: Abdul Hameed
⇒ Date of Birth: February 1, 1986
⇒ Marital Status: Single

References

Prof. Kong Xiangwei (Ph.D)

School of Information and Communication Engineering
Dalian University of Technology, Dalian, China
E-mail: Kongxw@dlut.edu.cn
Cell: 008613019459205

Dr. Saeed Mahfooz

Chairman
Department of Computer Science,
University of Peshawar, Pakistan