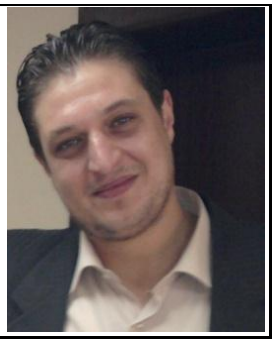
Eng. Qasem Saleh Abu Al-Haija'

❖ PERSONAL INFORMATION

Marital status	*Single*
Nationality	*Jordanian*
Current Address	*Saudi Arabia, Alhasa, 31982, P. O. Box 400*
Date of Birth	*July 16, 1982.*
Gender	*Male*
Mobile	*+966-548300432 (Saudi), +962-799-535-945 (Jordan).*
E-Mail	*Eng_Qasem1982@yahoo.com*
Languages	Arabic (Native) & English (V.Good reading, writing & speaking).



❖ EDUCATIONAL QUALIFICATIONS

Degree	***University***	***Major***	***Years***
Master Degree M.Sc.	*Jordan University for Science & Technology (JUST)*	*Computer Engineering/ Cryptography & Information Security*	*Sep-2007 to Dec-2009 Ranked as the best of my group with* ***GPA 90.2%***
	Master Thesis: *"Efficient Algorithms for Elliptic Curve Cryptography Using New Coordinates systems," Dec/2009 , Supervisor: Prof. Loa'i Tawalbeh – Jordan University of sciences & Tech.*		
Bachelor Degree B.Sc.	*Mu'tah University*	*Computer Engineering*	*Sep-2000 to Jan-2005*
	Graduation Project: *"Distributed Digital Image Processing Via Java and VB.Net", May/2004. Supervisor: Prof. Mokhled Tarawneh, Mu'tah University, Jordan.*		

❖ PERSONAL OBJECTIVE

To be a member of an organization where growth and prospects are unlimited and the individual is recognized by his work. As a professional, I am creative and innovative, looking ahead to work in a challenging environment and strive for excellence. My strong engineering background gives a solid foundation for this goal.

❖ PRACTICAL EXPERIENCES

Job Position	***Brief Description***
Lecturer and Researcher *King Faisal University, College Of Engineering, Electrical Engineering Department, Saudi Arabia Mar/2011 – Current - Full Time Job*	*-Full time lecturer, taught several courses, such as: Microprocessor Systems, Digital Logic Design, Math For EE, Networks and others.* *-Lab Engineer: prepare lab manuals for several courses: Digital logic design – Microprocessor Systems.* *-Researcher in Information Security and Cryptography, Networks, and FPGA Design for Crypto-processors.* *-Administration Duties: Member of Scientific Research Committee, Member of IT and Knowledge Management Committee, Public Relation Committee Coordinator, Member of following up Action plans Implantation Committee and Member of Workplace Safety Inspection Committee.*
Consultant and Researcher *University Putra Malaysia (UPM), Dept. of Info. Sys and Mathematical Research, Jan/2010 - Jan/2012 - Part Time Job*	*Assisting Prof. Azmi in supervising the PhD thesis for Mr. Mohammad Alkhatib and worked as a main researcher and consultant. During this period, we have published 5 papers in the field of Elliptic Curves Cryptography.* **** The papers are mentioned in the PUBLICATIONS & CONFERENCES Section.*
Team Leader (Senior DE Operator) *Al-Oula Company for Maintenance Services and Consultancy, Jordan Aug/2010 - Dec/2010 -Full Time Job*	*Leading a team, troubleshooting the project issues, scientific researching and problem solving. The main duties include: online editing, providing original and innovative editorial, managing several articles, and maintaining high editorial standards.*
Teaching & Research Assistant *Jordan University of Science & Technology (JUST) Feb/2008 - Feb/2010 - Part Time Job*	*-Assisting the faculty members of computer engineering department in the teaching and research.*

Job Position	Brief Description
IT Lecturer, System Administrator and Labs Supervisor. *GRNADA College for Tech., Jordan.* *Sep/2008 - Sep/2009 -Full Time Job*	*- Full Time Lecturer for all IT department courses in the college.* *-Labs supervisor and Network administrator: managing the servers (Internet server, Database server, and Web server), and network security/ solutions of the college and computer labs.*
IT Lecturer *Ibn-Khaldun College, Jordan* *Jan/2008 - Jul/2008 - Part Time Job*	*Instructor at Department of Accounting/ Management Information Systems for the following courses: Computer Maintenance, Database Systems & SQL and Computer Skills.*
IT Lecturer *Jordan College for Sciences & Technology, Jordan* *Sep/2007 To Sep/2008 - Full Time Job* *Jun/2002 - Aug/2005 - Part Time Job*	*Instructor at Department of Accounting/ Management Information Systems for the general computer courses such as: Communication & Networks, Programming using C++, Introduction to Java programming, Visual Basic and Database Systems & SQL.*
IT Lecturer & Network Engineer *Technical College of Hafer El-Batin, GOTEVOT, Saudi Arabia* *Aug/2005 - Aug/2007 -Full Time Job*	*-Full time lecturer for all computer courses for two departments: Technical Support Department and Software Engineering Department.* *-Worked as a team member of the Network Engineers team who prepared the college's computer network.*
Network Admin & Help desk *Global Center - Agent of Middle East Communication Corporation, Jordan* *Jun/2002 - Aug/2005 -Part Time Job*	*Network Installation and Maintenance, Network Components (Repairing-Selling-Setting Up), and Internet Service Providing (ADSL, Dialup, and Leased line).* **** This job was during of B.Sc.****

❖ PROFESSIONAL COURSES & WORKSHOPS

Courses I took:	***Courses I taught:***
1. *Cisco Certified Network Associate (CCNA) Certified (1000/1000).* 2. *Java Programming Language (Java applications & applets).* 3. *Windows 2000 Server – Installation and Managing.* 4. *Computer maintenance & Troubleshooting (H/W & S\W Maintenance) .* 5. *Web Design Applications such as Adobe Flash and Ms-Front Page.* 6. *Internet Security such as firewalls and intrusion detection.* 7. *System Development via Oracle9i.* 8. *Systems Analysis using MC-Design and Ms-Visio professional.* 9. *Web Development Via-ASP.NET 2003 \SQL Server 2000.* 10. *Microsoft C#.net 2003 with SQL Server 2000.* 11. *ICDL (International Computer Driving License).* 12. *Workshop Wireless Communication and Mobile Networks.*	1. *Cisco - CCNA Course.* 2. *CompTIA A+ Course.* 3. *Image Processing Course. (Via-Adobe Photoshop Cs2 Me)* 4. *Video Processing Course. (Via Adobe Premiere 7.0).* 5. *Graphic Design 1, 2 Courses. (Via- Adobe Illustrator Cs2 Me).* 6. *ICDL Course In 40 hours.*
Attended three academic workshops: *1- Thinking Compass. 2- Class Management. 3- Exams Design & Building.*	

❖ RESEARCH INTRESTS

Cryptography & Information Security: *Elliptic Curve Cryptography, Hardware implementations for cryptography, Cryptographic co-processor design using scalable modules, FPGA design, computer architecture, digital arithmetic algorithms.*
Computer Arithmetic and Finite Fields: *Design and implementation of fast algorithms and hardware structures for modular arithmetic and Galois field operations, algorithms for multiplication, division, inverse, exponentiation, greatest common divisor, and finite fields.*

❖ FUNDED RESEARCH PROJECTS

❖ ***KFU Project - Current Research Project:*** *"Cost Effective Design for Elliptic Curve Crypto-processor over GF (2N)", Funded by Deanship of Scientific Research, King Faisal University (KFU), Saudi Arabia, Alhasa (Jul/2011).*
❖ ***JUST Project – M.Sc. Research:*** *"Design and implement an efficient cryptographic processor for internet and wireless security based on elliptic curve cryptography over GF (p)" Funded by ministry of higher education and Jordan university of sciences and technology (JUST), Jordan, Irbid (Feb/2010).*
❖ ***PMC- Project – M.Sc. Research:*** *"Applying Hessian Curves in Parallel to Improve Elliptic Curve Scalar Multiplication Hardware", Funded by Prince Muqrin Chair (PMC) for IT Security, King Saud University, Saudi Arabia, Riyadh (Aug/2009).*

❖ PUBLICATIONS & CONFERENCES

1) ***Qasem Abu Al-Hiaja'***, *"Toward Secure Non-Deterministic Distributed Wireless Sensor Network Using Probabilistic Key Management Approaches," Accepted for publication at Journal of Information Assurance and Security (JIAS), By Dynamic Publishers Inc., USA, July 2010.*

2) ***Qasem Abu Al-Haija'*** *and Loai Tawalbeh, "Efficient Algorithms & Architectures for Elliptic Curve Crypto-Processor Over GF (P) Using New Projective Coordinates Systems," Accepted for publication at Journal of Information Assurance and Security (JIAS), By Dynamic Publishers Inc., USA, July 2010.*

3) ***Qasem Abu Al-Haija'*** *and Mohammad Al-Khatib "Parallel Hardware Algorithms & Designs for Elliptic Curves Cryptography to Improve Point Operations Computations" Accepted for publication at Journal of Information Assurance and Security (JIAS), By Dynamic Publishers Inc., USA, April 2010, Vol.4, Issue 1, Paper6: (588-594).*

4) ***Qasem Abu Al-Haija'*** *et. al. "Choices On Designing GF (p) Elliptic Curve Coprocessor benefiting from Mapping Homogeneous Curves in Parallel Multiplications," Accepted for publication at International Journal on Computer Science and Engineering (IJCSE), Vol. 3 No. 2 Feb 2011.*

5) ***Qasem Abu Al-Haija'***, *et. al. , "Efficient New Design and Verification of Sign-Digit-Adder for Two Symmetric Redundant Radix-4 Numbers," Accepted for publication at International Journal of Computer Science and Engineering (IJCSE), by Engg Journals Publications, April/2010, Volume 2, Issue 4, Paper 11: (972-978).*

6) *Omar BaniMelhem,* ***Qasem Abu Al-Haija'***, *and Ahmad Al-Badawi, "Performance Evaluation of Probabilistic Key Management Approaches for Wireless Sensor Networks," Accepted for publication at 1St International Conference in Information & Communication Systems (ICICS), Ses.3: Networks and Communications, paper 495, Dec/2009: (91: 96).*

7) *Loai Tawalbeh,* ***Qasem Abu Al-Haija'***, *Adnan Gutub and Fahed Bin Mehaya, "Speeding up Elliptic Curve Cryptography Computations by Adopting Edwards Curves over GF (P)," Accepted for publication at International Journal of Security (IJS), CSC Journals, Malaysia, Vol.3, Issue.4, IJS-19 Aug/2009.*

8) *Fahed Bin Mehaya,* ***Qasem Abu Al-Haija'*** *and Loai Tawalbeh "Applying Hessian Curves in Parallel to Improve Elliptic Curve Scalar Multiplication Hardware" Accepted for publication at International Journal of Security and Its Applications (IJSIA), By SERSC (Science & Engineering Research Support Center), Vol.4, No.2. April 2010.*

9) *Mohammad Al-Khatib,* ***Qasem Abu Al-Haija'*** *and Ramlan Mahmod, "Performance Evaluation of Projective Binary Edwards Elliptic Curve Computations with Parallel Architectures," Accepted for publication at Journal of Information Assurance and Security (JIAS), By Dynamic Publishers Inc., USA, July 2010.*

10) *Loai Tawalbeh and* ***Qasem Abu Al-Haija'*** *"Enhanced FPGA Implementations for Doubling Oriented and Jacobi-Quartics Elliptic Curves Cryptography," Accepted for publication at Journal of Information Assurance and Security (JIAS), By Dynamic Publishers Inc., USA, July 2010.*

11) *Mohammad Al-Khatib,* ***Qasem Abu Al-Haija'*** *and Azmi B Jaafar, "Hardware Architectures & Designs for Projective Elliptic Curves Point Addition Operation Using Variable Levels of Parallelism," Accepted for publication at International Review on Computers and Software, By Praise Worthy Prize, March 2011, Vol. 6. n. 2, pp. 227-236.*

12) *Ahmad Q. Al-Badawi, Ahmad M. Baset, and* ***Qasem S. Abu Al-Haija'*** *, "A Novel Digital Adder Design Based on* Residue Number System *with Special Set of Moduli {2n+1, 2n, 2n–1}", Accepted for publication at International Journal of Research and Review in Applied Science (IJRRAS), By Academic Research Publishing Agency, July 2010, Vol.4, Issue 1, Paper 6: (55:62).*

❖ RECOGNITIONS

- *Ranked as the first of my batch of graduates students in my M.Sc. in computer engineering with a GPA of 90.2%.*
- *Published 12 research paper during my career.*
- *JUST Scholarship for TA/RA in Jordan university of science and technology due to the superior GPA.*

❖ MASTER COURSES

• *High Performance Computer Architecture.*	• *Advanced Computer Networks.*
• *Advanced Operating Systems.*	• *Advanced Digital Arithmetic.*
• *Advanced Computer Algorithms.*	• *Multimedia Networking and Communication*
• *Networks and Information Security.*	• *Information Retrieval Systems*

❖ PROFESSIONAL SKILLS

Networks, Communications and Servers	*Network Installation & Troubleshooting, Routing & switching.* *Internet/ Intranet/LAN/Wireless Network (Wi-Fi, WI-Max).* *Network Security through: ISA2000, Proxy Server, Win 2003 Server Security.* *Servers Knowledge: Active Directory & DHCP Server, Backup Server (Symantec Backup Exec 12.5),Internet Server (Ms ISA 2004), Altiris Server (Altiris Console 8.5), Security Server (Symantec End point protection Manager).*
Operating Systems	*Microsoft Windows (All Versions).* *Excellent experience in Windows 2003 Server.* *Very Good knowledge in UNIX OS, Linux.*
Hardware Design	*Hardware definition language and FPGA design: VHDL Language.* *Hardware Simulation Tool: ModelSim6.5g, Multisim 11, EMU 8086 Emulator.* *Hardware Verification & Test: Synthesizer ISE Foundation, MDA-Win8086.*
Programming Languages	*Assembly, Java, C++, SQL, Visual Basic and Visual Basic For application (VBA).*
Database Systems	*Modeling Using ER-Diagrams, Oracle9i, MS-SQL Server 2000, Ms-access, Ms-FoxPro 6.0.*
Web/Graphic Design	*Graphic Design applications: Adobe Photoshop Cs2 Me, Illustrator Cs2 Me.* *Web design applications: Ms-FrontPage, and Ms-publisher.* *Video Processing Application: Adobe Premiere 6.5, Windows Movie Maker2.*
Other skills	*Mathematical Verification: Maple soft 12.5 for Cryptography, Matlab for Eng.* *Surveillance systems: Digital Cams/Installation & Configuration.* *Technical reports and scientific papers design Using Latex.* *Projects Planning Using Ms-Visio 2003, Mind Manager 2008.*

❖ GENERAL

- Member of Jordanian Institute for Engineering – From Feb/2005.
- Good Experience in ABET requirements and course outcomes assessment for accreditation purposes.
- Excellent communication skills, hardworking ability to adopt and get along with people.
- Eager to learn new things and willing to work as an individual or as a part of the team.
- Have an Excellent Organization and coordination skills, Fast learner and can travel extensively.
- Can work in Challenge Environment, can take valid Decision, and able to handle multiple tasks.
- I prepared two important reports for National Center of Security & Crisis Management (NCSCM), Royal Court dependant, Jordan: 1. Toward Scalable-Managed-Secured Internal NCSCM Network Infrastructure.
  2. Risk Analysis Report for NCSCM Network. (From Oct/2009 to Jan/2010).

❖ REFERENCES

Prof. Lo"Ai Tawalbeh: *Computer Engineering, Faculty of Computer and Information Technology, Jordan University of Science & Technology, Tel: +962-2-7201000 Ext 22517, Email: Tawalbeh@just.edu.jo .*

Prof. Mazen M. Kharbutli: *Chairman of Department of Computer Engineering , Faculty of Computer and Information Technology, Jordan University of Science & Technology, Tel: +962-2-7201000, Email: kharbutli@just.edu.jo .*

Prof. Saed Jaradat: *Chairman of Princess Haya Biotechnology Center, Department of Biotechnology and Genetic Engineering, Jordan University of Science & Technology, Tel: +962-2-7201000 Ext 26684, Email: sjaradat@just.edu.jo .*

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