



CURRICULUM VITAE

Dr Sanaa H. AlMoumen

الدكتورة / سناء حسن محمد المؤمن

NATIONALITY: Kuwaiti

TELEPHONE NUMBERS: +965 22212666 (ext. 5433)

E-MAIL: sh.almoumen@paaet.edu.kw

WORK ADDRESS

Office 3012, T7 Department of Computer Science & Information Systems
College of Business Studies
The Public Authority for Applied Education and Training (PAAET)
Ardhiya, Kuwait.

QUALIFICATIONS

- 2003** *Ph.D. in Computer Science* from the University of Lancaster, UK.
Thesis title: Requirements Engineering for E-Commerce.
A Principle-Driven Analysis and Assessment Approach and Guidelines on Good Practices for Developing Multicultural E-Commerce systems.
- 1997** *Certificate of Merit in Curriculum Driven Systems* from Canedcom International (Canada Education Commission International), University of Toronto, Canada.

1996 *Certificate of Merit in Task Analysis – Applied Education & Training* from, Canedcom International (Canada Education Commission International), University of Toronto, Canada.

Description: An Approach for developing professional programs and writing course specifications.

1996 *Certificate of Merit in Curriculum Design Training Program* from Durham College, Canada.

Description: Certified in DACUM (Developing Approach for Curriculum).

1992 *MSc. in Computer Science* from the University of Sheffield, UK.

MSc. Program: Software Systems Technology.

Dissertation project: "An Electronic Diary for the Computer Science Department of Sheffield University".

1987 *BSc. in Computer Science and Mathematical Statistics. Minor in Industrial Management* from Kuwait University. Kuwait University, Kuwait.

LANGUAGES

Arabic Native Speaker. Perfect ability to speak, read and write.

English Second Language Speaker. High level speaking and writing.

PROFESSIONAL AND EMPLOYMENT HISTORY

2003-Present Full-time *Assistant Professor* in the Department of Computer Science and Information Systems at the College of Business Studies of PAAET, Kuwait.

2006-Present Part-time *Assistant Professor* in the Department of Art and Design, College for Women, Kuwait University, Kuwait.

- 2005-2006** Part-time *Assistant Professor* in the Department of Information Science, College for Women, Kuwait University, Kuwait.
- 2005-Present** Part-time *professional consultant* with "Human Factors International, Inc."
- 2003-2005** Part-time *professional consultant* with "del Galdo Consulting Ltd." New York, NY.
- 2003-2004** Part-time *Assistant Professor* in the Department of Computer Science of Gulf University of Science and Technology (GUST), Kuwait.
- 1998-2003** *PhD research student* at the Computing Department of Lancaster University, UK. Field of research is Software Engineering / Requirements Engineering.
- 1990-1992** *MSc. student* at the Computing Department of Sheffield University, UK.
- 1990-2003** *Instructor* of Computer Science in the College of Business Studies, the Public Authority for Applied Education and Training (PAAET), Kuwait.
- 1995-2003** *IT Consultant* at the Arab Research Centre (ARC), Kuwait.
- 1987-1990** *Programmer* at the Public Authority for Applied Education & Training, Kuwait.
- 1985 Summer** *Trainee programmer* at the Computer Department of Kuwait Institute for Scientific Research (KISR) – students training program.

TEACHING EXPERIENCE and RESPONSIBILITIES

- Teaching courses of Computer Science and Information Systems in the *College of Business Studies* (PAAET), Program of Diploma degree of Computer Science and Information Systems, Kuwait.

- Teaching courses of Computer Science in the *College of Education* (PAAET), Program of bachelor's degree of Computer Science Educator, Kuwait.
- Teaching Computer Science courses for the *College of Health Sciences* (PAAET), Kuwait.
- Teaching Computer Science courses for the for the *College of Nursing* (PAAET), Kuwait.
- Teaching Computer Science courses for Kuwait University, College for Women – Department of Information Science.
- Teaching Computer Graphics, Designing for the Web, and Capstone course for the Department of Art and Design in Kuwait University.
- Teaching courses of Computer Science in GUST University, Kuwait.
- Develop and Design: Curriculums, professional training programs, courses, outcomes, assessment tasks, outcome assessment plans, learning plans, teaching plans. Analyse skills requirements and writing course specifications. Link multiple types of outcomes and standards and assign assessment tasks. Certified in DACUM (Developing Approach for Curriculum); Task Analysis Approaches – Canada; and WIDS (Instructional Design Software, Services, and Training).
- Participation in developing two curriculums for a certified Diploma in Computer Science and Information Systems for the College of Business Studies (PAAET), Kuwait. This curriculum has been developed based on analysing real data based on market research. This research included an analysis for the requirements and needs of major sectors of employment in Kuwait, specifically for IT and Computer related jobs in banks, ministries, and major private companies in Kuwait.

- Training courses of computer applications, such as several Microsoft applications, Web-based design (graphical interfaces, animation, and multimedia applications), programming and computer fundamentals and architecture. Dealing with trainees from different levels of experience and background, such as professionals, academic students, employees from different governmental sectors, and secondary school students - summer training programs (KISR-Kuwait Institute for Scientific Research).
- Developing training programs and teaching adults in society service programs of PAAET. This includes teaching Computer courses and hands-on training for participants as part of society service.
- Developing training programs and teaching in Adults Programs for society service in Kuwait University.
- Supervised and evaluated many student's graduation projects and empirical or field training for students placed in industry and market projects.
- Participated in many formal committees for PAAET administration, College of Business Studies and for the department of Computers Science and Information Systems (PAAET). Example of important committees: Facts finding, Certification and Equivalency Committee, Academic Accreditation Committee, Curriculum and Books Committee, Exams Committees, Registration Committees, Course Scheduling Committee, Students Appealing Committees, Committee of Scholarships, Committee of Research and Conferences, Faculty Employment Committee, Committee of staff promotions, and the Cultural and Social Committee.
- Supervise the Computer Science Society in the College of Business Studies, PAAET.
- Participate as a College Committee member in the Evaluation Program for the College of Business Studies (PAAET). This job includes several phases: Developing different surveys questionnaires, collecting data, conducting interviews, Statistical data processing and analysis, and Writing recommendation reports. This study included

several levels of evaluation within the College: Students, teaching faculties, college departments, major curriculum, college services and facilities, and Information and equipment resources).

- Developing training programs for several courses in computer science and design. I have involved in many training programs for different audience, such as: University students, College academic faculties, professionals, and employees from different governmental and private sectors. I have also involved in training for society.

COURSES -TAUGHT.

Designing for the Web, Developing Web sites: HTML, XHTML, CSS, XML and JAVA Script. Programming Fundamentals, and Advanced Programming Languages: JAVA, C++, C, PASCAL, OO COBOL and COBOL. Data Bases, SQL, and ACCESS. Software Engineering and Systems Analysis. Operating Systems. Graphics Principles, Advanced Graphics and Design Capstone Project. Computer Systems Fundamentals, Introduction to Computers, Computer Concepts, Information Technology" I also taught and supervised Project courses, Field training. I taught also different Software Applications such as Microsoft Windows, MS Office Applications, MS Project, managing class work electronically, Applications for Tracking Student's performance, MS Teams and MOODLE LMS (Learning Management Systems).

WORKSHOPS – PRESENTED

- Managing Classroom Electronically.
- Usability Testing of Web-based E-learning.
- Testing Systems for Usability (design, interface, and content).
- Marketing for e-commerce, Internet for Home.
- Presentation Technology and communication skills.
- Project Management - MS Project.

- Employing the Internet in Job Development.
- Developing effective Web sites & *Development tools*
- *MS Office* Applications.
- Research Methods.

RESEARCH INTRESTS

- Research in the field of Requirements and Software Engineering.
- Interested in designing RE approaches and methods for Web based systems, based on cultural and social influences that affect systems design and usability.
- Research interest in developing Analysis and Assessment Methods of Requirements Engineering, specifically for global, international Web-based Applications and e-commerce systems.
- Developing Guidelines on good marketing practices for developing multicultural e-commerce systems.
- Developing innovative teaching and learning processes, for applied computer courses and training.
- Development and assessment of E-Learning systems, specifically Web-based applications.
- Systems Usability Tests and Human Computer Interaction.
- Participating in organising conferences, workshops and seminars related to the field of interest as author, member of Scientific and Organizing Committees of several conferences and scientific seminars.
- Provide consultations and working on systems design and software development.

CONSULTATION & SCIENTIFIC EXPERIENCES

IROS 2017, International Conference on Intelligent Robots and Systems, IEEE/RSJ, Vancouver, BC, Canada, 2017.

The Second Kuwait Conference on e-Services and e-Systems (5-7 April 2011), Kuwait University, Kuwait, 2011.

e-Learning Regional Conference (eRC2011)", "e-Learning Education for All", (28-30 March 2011), Kuwait. Organized by Regional Center for Development of Educational Software (ReDSOFT), Kuwait Foundation for the Advancement of Sciences (KFAS), and Ministry of Education – State of Kuwait, 2011.

Participated as a head of Best Paper Committee" and as a member of the Scientific Committee member in the "e-Learning Regional Conference", State of Kuwait 28 – 30 March 2011.

Head coordinator of the Arbitration Committees of the *Annual Informatics Award of H. H. Sheikh Salem Al-Ali Al-Sabah*, 2009.

The *Annual Informatics Award of H. H. Shaikh Salem Al-Ali Al-Sabah*, 2008.

Design Principles and Practices an International Journal, Common Ground (CG) Publisher, 2008.

Participated, as a member, in the Arbitration Committee of *the Annual Informatics Award of H. H. Shaikh Salem Al-Ali Al-Sabah*, 2007.

Provided consultations and documented studies for the Management Developing Centre of PAAE and the *Assessment Evaluation Professional Development Centre - PAAET*.

Participated in PAAET approval committees for evaluating computer and graphics programs proposed by private training institutes and companies.

Worked in analysing and specifying the requirements to design *Students' Admission System* for PAAET. This project included system design and development, data control, evaluation, testing and documentation.

Software system analysis, design, and programming.

Participated in SEED Website International Usability Study and consultation for Schlumberger Ltd - SEED project.

Participated in many *Scientific Committees*, such as:

- Participated in the organization of many international conferences:
 - "*Petrochemicals in Kuwait Investment Opportunities Conference*" (26-27 October 1998); ARC, Kuwait.
 - "*Media Press & Economy Conference*" (18-19 May, 1998); ARC, Kuwait
 - "*Marketing in Kuwait: Challenges & Opportunities Conference*" (4-5 May, 1998); ARC, Kuwait
 - "*Scientific Research Methods Conference*", (28-29 December 1997); ARC, Kuwait
 - "*Organisation barriers facing Kuwait Trade and Industry Conference*" (9-10 June 1997); ARC, Kuwait.
 - "*First Annual middle East Business Conference:*" The Globalisation of Arab Business (6-8 January 1997); ARC, Kuwait.

SKILLS AND SOFTWARE

- Web design and authoring: *HTML and CSS, XML, Java script, Adobe Dreamweaver, MS Publisher.*

- Graphics and animation tools: *Adobe Suit: Adobe Illustrator, Photoshop InDesign., Paint Shop Pro, and Animation shop.*
- 3-D Architectural modelling and rendering using *form.Z.*
- Requirements Engineering tools: *Rational Rose UML, SSADM, and Automate Plus case tool.*
- Programming languages: *JAVA, C++, C, OO COBOL, Small Talk, LISP, Pascal, Fortran, SQL, MS- Access, Fox Pro/DBase, and Modula2.*
- Developing graphical user interfaces: *Personal Dialogue System.*
- Statistics software: *SPSS and SAS.*
- Operating Systems/platforms: *Windows, UNIX, Mac, Novell Netware* (Previous experience on legacy systems: *Mainframes (VAX & PDP).*
- Applications software: *Microsoft Office: Word, Excel, Access, and Power point.*
- Projects management - *MS Project.*
- Consultations including running usability tests on different software systems and writing requirements specification and documentations.
- Task analysis and Curriculum design - using *WIDS.*

PUBLICATIONS & TECHNICAL REPORTS

AlGhannam, B. Almoumen, S. and Almayyan, W. (2018). Web Development in Applied Higher Education Course: Towards a Student Self-Regulation Approach. International Journal of Computer Science and Information Security (IJCSIS), Vol. 16, No. 9, September 2018.

Commented [SHA1]:

Almoumen, S. (2010). Guidelines on Usability Tests for Users. The 2nd Workshop of e-Services in GCC Countries., Kuwait Institute of Scientific Research (KISR), Kuwait. KISR, Kuwait Foundation of Scientific Advancement (KAFAS), and Kuwait Society of Engineering. Kuwait.

Alostath, J.M., Almoumen, S., Alostath, A.B. (2009). Identifying and Measuring Cultural Differences in Cross-Cultural User-Interface Design. In: Aykin, N. (eds) Internationalization, Design and Global Development. IDGD 2009. Lecture Notes in Computer Science, vol 5623. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-02767-3_1.

Alostath J M, Almoumen S, Alostath A B. Identifying and measuring cultural differences in crosscultural user-interface design[C]. 3rd International Conference on Internationalization, Design and Global Development, San Diego, 2009: 3-12.

Alostad J. and Almoumen S. (2008). Integrating Cultural Models into Cross-Cultural Design Usability Evaluation. The 2nd International Conference on Design Principles and Practices, Miami, Florida USA, University of Miami Conference Center, Common Ground Publisher, USA.

Almoumen, S. (2004). *SEED Website International Usability Study*. Muscat, Oman. SEED Foundation, Schlumberger Ltd. New York. Del Galdo Consulting Ltd. UK.

Almoumen, S. (2003). "Requirements *Engineering for E-Commerce - A Principle-Driven Analysis and Assessment Approach and Guidelines on Good Practices for Developing Multicultural E-Commerce Systems*". PhD thesis, Computing Department, Lancaster University.

Almoumen, S. and I. Sommerville (2003) "A Culture-specific Method for the Analysis and Design of E-Commerce Systems", 5th Annual International Workshop on Internationalisation of Products and Systems, IWIPS 2003, Berlin.

Almoumen, S. and I. Sommerville (2002b). Guidelines on Good Practices for Developing Multicultural E-Commerce Systems. Presented at Culture and Website Usability - Strategies For Internationalisation and Localisation HCI2002 / EUPA2002, South Bank University, London.

Almoumen, S. and I. Sommerville (2002a). Guidelines on Good Practices for Developing Multicultural E-Commerce Systems. Lancaster, UK, Computing Department, Lancaster University: 1-83 (CSEG/2/02) <http://www.comp.lancs.ac.uk/computing/research/cseg>, <http://info.comp.lancs.ac.uk/publications/index.html>.

Almoumen, S. and I. Sommerville (2001b). Globalisation Mix Analysis and Assessment Method (GMAAM): International Marketing Approach to Design Multicultural E-Commerce Systems. Lancaster, England. Lancaster University. Part 2: 1-54 (CSEG/7/02) <http://info.comp.lancs.ac.uk/publications/index.html>

Almoumen, S. and I. Sommerville (2001a). Cultural Specific Analysis and Assessment Method (CSAAM) International Marketing Approach to Requirements Engineering for Multicultural E-Commerce System Design. Lancaster, England. Lancaster University. Part 1: 1-65 (CSEG/6/02) <http://www.comp.lancs.ac.uk/computing/research/cseg>, <http://info.comp.lancs.ac.uk/publications/index.html>.

Almoumen, S. and I. Sommerville (2000). "Innovation through E-Commerce: Marketing for E-Commerce." *International Journal of New Product Development and Innovation Management* 2(1): 45-56.

Almoumen, S. and I. Sommerville (1999d). Innovation through Electronic Commerce: Marketing for E-Commerce. Proc. 2nd International Conference IeC'99, Leng P., Grant S.,

Keane J., Macaulay L. & Wood B. (Editors), The Centre of Expertise in Electronic Commerce, UMIST, Manchester, UK, pp. 6-17.

Almoumen, S. and I. Sommerville (1999c). Guidelines on Good Practices for Developing an E-Commerce Web Site from Marketing Viewpoints. Lancaster, UK, Computing Department, Lancaster University: 1-41 (CSEG/5/02)
<http://www.comp.lancs.ac.uk/computing/research/cseg>
<http://info.comp.lancs.ac.uk/publications/index.html>.

Almoumen, S. and I. Sommerville (1999b). Marketing for E-Commerce. Managing Information Technology Resources in Organizations in the Next Millennium Conference, Hershey PA, USA, Idea Group Publishing, USA.

Almoumen, S. and I. Sommerville (1999a). Requirements Analysis and Assessment: Case-British Airways Web Site. Lancaster, UK, University of Lancaster. 1999: 1-129 (CSEG/4/02)
<http://www.comp.lancs.ac.uk/computing/research/cseg>
<http://info.comp.lancs.ac.uk/publications/index.html>.

Almoumen, S. and I. Sommerville (1998c). Annual Report: Marketing for E-Commerce. Lancaster, UK, University of Lancaster: 1-43 (CSEG/3/02)
<http://www.comp.lancs.ac.uk/computing/research/cseg>
<http://info.comp.lancs.ac.uk/publications/index.html>.

Almoumen, S. and I. Sommerville (1998b). Requirements Analysis and Assessment: Case-Tiny Computers Web site. Lancaster, UK, University of Lancaster. 1998: 1-47 (CSEG/17/99)
http://www.comp.lancs.ac.uk/computing/research/cseg/98_rep.html
<http://info.comp.lancs.ac.uk/publications/index.html>.

Almoumen, S. and I. Sommerville (1998a). Requirements Analysis and Assessment: Case-Dell Computer Corporation Web site. Lancaster, UK, University of Lancaster 1998: 1-48 (CSEG/18/98) http://www.comp.lancs.ac.uk/computing/research/cseg/98_rep.html
<http://info.comp.lancs.ac.uk/publications/index.html>.

S. Almoumen et. al " A Curriculum for the Degree of Diploma in Computer Science: Programmer Program” Project Report and Documentations, Curriculum Committee (PAAET), Computer Science Department of College of Business studies, PAAET, Kuwait 1995.

S. Almoumen et. al " A Curriculum for the Degree of Diploma in Computer Science: Operator program” Project Report and Documentations, Curriculum Committee (PAAET), Computer Science Department of College of Business studies, PAAET, Kuwait 1995.

MEMBERSHIPS and INTERESTS

- Member of the *ACM*, *IEEE* Computer Society, *IEE*, and *Kuwait Educators Society*.
- Coordinator of Refereeing Committee and a member of the Arbitration Committee of the Annual Informatics Award of H. H. Sheikh Salem Al-Ali Al-Sabah.
- Writing poetry, drawing, and travelling.
- Swimming, Tennis, and horse riding.

INVENTIONS AND NOVEL CONTRIBUTIONS

- **Silver Medal** of a Voluntary Work awarded 2014 for the participation as a coordinator and a member the Scientific Referee committee of H.H. Sheikh Salem Al-Ali Al-Sabah Informatics Award, Kuwait.
- **Bronze Medal** of a Voluntary Work awarded 2011 for the participation as a coordinator and a member the Scientific Referee committee of H.H. Sheikh Salem Al-Ali Al-Sabah Informatics Award, Kuwait.

- Certificate of Appreciation and gratitude "*Thank You My Teacher 2010, شكرا معلمي*" Certificate awards by his Highness Amir of State of Kuwait. Organised by "Kuwait Teachers Society", a non-profit Society, sponsored by Kuwait Government.
- Develop *Guidelines on good marketing practices for developing multicultural e-commerce systems*. In the guidelines document the author introduces good or best practices in applying marketing principles and strategies in developing an e-commerce Web site, 2003.
- *Telescope Model*, an efficient RE processing has been developed to achieve correct requirements definition and complete processing, 2003.
- *MMAAM¹, CSAAM², and GMAAM³*, *Analysis and Assessments Methods* developed according to the cultural requirements. These methods have contributed to the early phases of the Requirements Engineering process, from the marketing and the multiculturalism perspectives. These methods support the evolutionary process of *Requirements Engineering*, 2003.

¹ *Marketing Mix Analysis and Assessment Method.*

² *Cultural-Specific Analysis and Assessment Method.*

³ *Globalisation Mix Analysis and Assessment Method.*