

# KASSEM A. SALEH

Kuwait University
College of Life Sciences
Department of Information Sciences
Tel.: 965-60386264

Email: kassem.saleh@ku.edu.kw

## Academic Background:

- Ph.D. in Computer Science (Electrical Engineering), University of Ottawa, Ottawa, Canada (9/86-1/91).
- M.Sc. in Computer Science, University of Ottawa, Ottawa, Canada (1/85-8/86)
- B.Sc. in Computer Science, Magna Cum Laude (8.9/10) University of Ottawa, Canada (9/81-12/84)

# **Professional Certifications:**

- PECB Certified Trainer, September 2021.
- PECB Certified ISO 31000 Senior Lead Risk Manager, August 2021.
- IBM Data Science Professional Certification, Online courses, IBM and Coursera, 2020.
- Business Analysis Professional by the Project Management Institute (PMI-BA, 2071016, since August 2017).
- Project Risk Management Professional by the Project Management Institute (PMI-RMP, 2041370, since May 2017).
- Project Management Professional (PMP, 1789591, since February 2015).
- Certified Quality Engineer (CQE, 100372, since April 2017).
- Certified Information Systems Security Professional (CISSP, 78673, since July 2005).
- Certified Software Quality Engineer (CSQE, 6133, since December 2016).
- IEEE Professional Software Engineering Master Certification (PSEM) converted from Certified Software Development Professional (CSDP), since June 2014.
- Data Science Certifications (9 online courses), Coursera and John Hopkins University, February 2016 to September 2016.
- Oracle Certified Associate, Java SE 7 Programmer (OCA Java SE 7, since December 2015).

# Academic Experiences:

- Professor (9/2007-), Department of Information Science, College of Life Sciences, Kuwait University.
- Professor (6/2002, 8/2007), Associate Professor (9/2000-5/2002), Department of Computer Science, American University of Sharjah, United Arab Emirates.
- Visiting Research Associate Professor (8/98-7/99) [on sabbatical from Kuwait University], Department of Informatics and Operational Research (DIRO) at the University of Montreal, and School of Information and Software Technology (SITE) at the University of Ottawa.
- Associate Professor (3/1996-8/2000), Assistant Professor (9/1992-3/1996), Department of Electrical and Computer Engineering, Kuwait University, Kuwait.
- Assistant Professor (6/1991-8/1992), Concordia University, Department of Electrical and Computer Engineering, Montreal, Canada.
- Part-time Lecturer (1986-1991), University of Ottawa, Department of Computer Science, Ottawa, Canada. (Taught senior level computer science courses)

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#### Administrative Experiences:

- Chair of the College of Life Sciences Research Ethics Committee (9/2020 present).
- Chair of the Department of Information Sciences Curriculum Committee (9/2019 present).
- Director of Graduate Program in Computing Information Systems, College of Computer Science and Engineering (1/2018 present).
- Acting Chair of the Department of Information Sciences (11/2018 7/2019).
- Acting Dean, College for Life Sciences, Kuwait University (9/2008 8/2017)
- Vice Dean for Planning and Technical Support, College for Life Sciences, Kuwait University (9/2007 8/2017)
- Chair of the Graduate Programs committee at the College of Life Sciences, Kuwait University (2012-2017)
- Coordinator of ABET accreditation for the Computer Science program at the American University of Sharjah (AUS) (1/2004-7/2005)
- Founding Chair of the Department of Computer Science at AUS (9/2001-12/2003).
- Coordinator of the Computer Science program at the AUS (9/2000-8/2001).

## Industrial and Consulting Experiences:

- Java / Internet Consultant, TouchNet Canada, Consultancy for IBM and Toronto Real Estate Board (9/1998-8/1999)
- Computer Systems Specialist, Bell Canada (6/1985-8/1991)
- Software Design Engineer, Northern Telecom (5/1984-9/1984)

## **University Teaching:**

Graduate level: Advanced algorithms, e-Commerce design and implementation, IT Project Management, IT Management, Software Engineering, Protocol Engineering, Software Testing, Security Engineering and Management, Information Technology for Engineering Managers, The Unified Modeling Language and Object-Oriented Analysis and Design, Advanced Algorithms, Advances in Information Systems Architecture and design, Analysis, Modeling and Design of Information Systems, Ethics and Professionalism, Technical Writing and Communication Skills, Information Systems Quality, Testing and Maintenance, Information Systems Strategies and Risk Management, Disaster Recovery Planning, Introduction to Information Technology, Knowledge Management and Decision Support, Ethical and Professional Issues in Health Informatics.

*Undergraduate level:* Database Systems, Compiler Design, Programming Languages Principles, Introduction to Computer Science courses, Software Engineering, Software Systems, Operating Systems, Digital Systems, Sequential Machines, Computer Architecture, Data Structures, Computer Networks, Discrete Mathematics, Statistics for Engineers, Design and Analysis of Algorithms, Java Programming, Software Testing, Advanced Software Engineering, Internet Computing, Object-oriented Software Engineering, Computer Security, Information Systems Development, Information Systems Security, Information Systems: Theory and Practice, Introduction to Bioinformatics.

#### Continuing Education Training and Teaching:

Delivered courses on C, Java, Unix, JavaScript, Cobol, Computer Networks, Database Design, Client/Server Computing, Oracle, Software Development, Software Documentation, Software Requirements Engineering, The Electronic Office, Decision Support Systems, Project Management, Software Quality Assurance, Security+, IT Risk Management, Business Feasibility Analysis.

#### Professional & Academic Activities:

- Presented many tutorials at conferences in USA, Canada, Saudi Arabia, Singapore, Egypt, Kuwait, and Jordan.
- Presented invited seminars and keynote speeches in Canada, Hong Kong, United Arab Emirates, and Germany
- Member of the UAE Ministry of Higher Education Accreditation Team for computer-related programs, February 2000.

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- Chair and co-chair of many conferences in Kuwait (KCESS, KICLS, KICCSE), and Japan (ICESA).
- Program committee member at international conferences and editorial board member.
- Referee for journals, conferences, promotion cases and research proposals.
- Editorial Advisory Board of Computer Communication Journal (1999-2005), and editorial board of Journal of Communications (2005-2010) and Journal of Software (2005-2014).
- Guest Editor for special issues in the J. of Systems and Software (1999), J. of Information and Software Technology (1999), and Computer Communications J. (1996 and 2001).
- Master and Ph.D. theses examiner in Canada, Hong Kong, Kuwait, Bahrain and UAE.
- Supervised Master and PhD student theses and projects in Canada, Kuwait and UAE.
- Reviewed research project proposals and reports, and promotion cases for universities in Kuwait, Bahrain, Australia, Palestine and Jordan.
- Editor-in-Chief, Journal of Software, Academy Publisher, (2008 2015).

#### Research Activities and Publication Record:

- Research on Protocol and Distributed Systems Engineering, Software Engineering, Systems Security Engineering and Management, Security Requirements, Object Oriented Software Development, Electronic Commerce, Mobile Object Computing, and Wireless Sensor Networks, Environmental Informatics.
- Published more than 130 journal and conference papers and one university textbook titled *Software Engineering*.

#### Awards and Honors:

- Best Paper Award for the paper presented at the 11<sup>th</sup> Colloquium on Information Systems Security Education (CISSE'07), Boston, USA, June 2007.
- Best Paper Award for the paper presented at the *International Research Conference on Innovations in Information Technology (IIT 2004)*, Dubai, Oct 2004.
- Ranked in 8th position in the Assessment of Top Systems and Software Engineering Scholars (1999-2003) published by the Journal of Systems and Software in April 2005.
- Ranked in 5th position in the Assessment of Top Systems and Software Engineering Scholars (1998-2002) published by the Journal of Systems and Software in 2003.
- Ranked in 4th position in the Assessment of Top Systems and Software Engineering Scholars (1997-2001) published by the Journal of Systems and Software in 2002.
- Ranked in 3rd position in the Assessment of Top Systems and Software Engineering Scholars (1996-2000) published by the Journal of Systems and Software in 2001.
- The National Bank of Sharjah and the American University of Sharjah Excellence in Research and Scholarship Award, Second Prize, May 2001.
- Ranked in 3rd position in the Assessment of Top Systems and Software Engineering Scholars (1995-1999) published by the Journal of Systems and Software in 2000.
- Listed in The Barons 500 Leaders for the New Century, December 2000.
- Ranked in 8th position in the Assessment of Top Systems and Software Engineering Scholars (1994-98) (93-97) (93-96) published by the Journal of Systems and Software in 1999, 1998 and 1997, respectively.
- Distinguished Young Researcher Award (1994) and Distinguished Teacher Award (1996), College of Engineering and Petroleum, Kuwait University.

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# ACADEMIC BACKGROUND

University of Ottawa, Ottawa, Ontario, Canada.

Ph.D. in Computer Science (Electrical Engineering). (Sept. 1986 - Jan. 1991).

Field of Research: Communications Software Engineering.

Thesis: Synthesis Methods for the Design and Validation of Communication Protocols.

University of Ottawa, Ottawa, Ontario, Canada.

Master of Science in Computer Science (Jan. 1985 - Aug. 1986).

Thesis: Graphical System for Logical Relational Database Design.

University of Ottawa, Ottawa, Ontario, Canada.

Bachelor of Science. Honors degree in Computer Science.

Magna Cum Laude. (Sept. 1981 - Dec. 1984).

#### PROFESSIONAL CERTIFICATIONS

PECB Certified Trainer, September 2021.

PECB Certified ISO 31000 Senior Lead Risk Manager, August 2021.

IBM Data Science Professional Certification, Online courses, IBM and Coursera, 2020.

Business Analysis Professional by the Project Management Institute (PMI-BA, 2071016, since August 2017).

Project Risk Management Professional by the Project Management Institute (PMI-RMP, 2041370, since May 2017).

Project Management Professional (PMP, 1789591, since February 2015).

Certified Quality Engineer (CQE, 100372, since April 2017).

Certified Information Systems Security Professional (CISSP, 78673, since July 2005).

Certified Software Quality Engineer (CSQE, 6133, since December 2016).

Professional Software Engineering Master Certification converted from Certified Software Development Professional (CSDP), since June 2014.

Data Science Certifications (9 online courses), Coursera and John Hopkins University, February 2016 to September 2016.

Oracle Certified Associate, Java SE 7 Programmer (OCA Java SE 7, since December 2015).

## TECHNICAL AND MANAGEMENT TRAINING

Applied Data Science: An Introduction, Syracuse University, 2014.

3-Day Workshop on Principles of Photography, Kuwait, June 2012.

5-Day Workshop on Bioinformatics, Kuwait University, March 2009.

Sustainability and Design Workshop, Cambridge Seven Associates, Boston, USA, Feb. 2009.

Data communications. Bell Northern Research (Sept. 1985).

TAL programming language. Tandem Computers. Chicago (June 1985).

Performance Tuning for Tandem Computer Systems. Chicago (Mar. 1986).

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GUARDIAN operating systems for Tandem Computers. Dallas (June 1986).

Introduction to Datapac. Bell Canada (Oct. 1988).

Introduction to SDLC/SNA. Bell Canada (Jan. 1989).

Oracle RDBMS, PL/SQL, FORMS (July 1995).

Workshop on eBooks: Enhance your Teaching, Learning and Research with Online Book, (Oct. 06).

Workshop on Online Tests: iLearn Best Practices, (Nov. 2006).

Telecommunications Project Management Workshop, IEEE, AUS, (April 2006).

Teaching Enhancement Workshop, AUS, (September 2000).

Presentation skills workshop. Bell Canada (Feb. 1986, Mar. 1988).

Writing skills workshop. Bell Canada (Mar. 1986).

Time management. Bell Canada (Sept. 1985).

Project management. Bell Northern Research (Sept. 1986).

Decision models in project management. UQAH (Dec. 1987).

Project management and organizational changes. UQAH (May 1988).

Quantitative Methods for Project Management. UQAH (Sept. 1987).

## HONORS, AWARDS AND SCHOLARSHIPS

Best Paper Award for the paper presented at the 11<sup>th</sup> Colloquium on Information Systems Security Education (CISSE'07), Boston, USA, June 2007.

Best Paper Award for the paper presented at the *International Research Conference on Innovations in Information Technology (IIT 2004)*, Dubai, Oct 2004.

Ranked in 8th position in the Assessment of Top Systems and Software Engineering Scholars (1999-2003) published by the Journal of Systems and Software in October 2004.

Ranked in 5th position in the Assessment of Top Systems and Software Engineering Scholars (1998-2002) published by the Journal of Systems and Software in October 2003.

Ranked in 4th position in the Assessment of Top Systems and Software Engineering Scholars (1997-2001) published by the Journal of Systems and Software in October 2002.

The National Bank of Sharjah Excellence in Research and Scholarship Award, Second Prize, May 2001.

Ranked in 3rd position in the Assessment of Top Systems and Software Engineering Scholars (1996-2000) published by the Journal of Systems and Software in 2001.

Ranked in 3rd position in the Assessment of Top Systems and Software Engineering Scholars (1995-1999) published by the Journal of Systems and Software in 2000.

Listed in The BARONS 500 Leaders for the New Century, December 2000.

Ranked in 8th position in the Assessment of Top Systems and Software Engineering Scholars (1994-1998) published by the Journal of Systems and Software in 1999.

Ranked in 8th position in the Assessment of Top Systems and Software Engineering Scholars (1993-1997) published by the Journal of Systems and Software in 1998.

Ranked in 8th position in the Assessment of Top Systems and Software Engineering Scholars (1993-1996) published by the Journal of Systems and Software in 1997.

Distinguished Teacher Award, College of Engineering and Petroleum, Kuwait University, 1996.

Listed in Marquis Who's Who in Finance and Industry, 30th Edition.

Listed in Marquis Who's Who in the World, 1997.

Distinguished Young Researcher Award, College of Engineering and Petroleum, Kuwait Univ, 1994.

Award by the Canadian Interest Group on Open Systems (CIGOS), 1990.

IBM Telecommunications Software Award. Dec. 1988.

Natural Sciences and Engineering Research Council Scholarship. 1987-1989.

Student Merit Award from the Association of Professors, Univ. of Ottawa, 1982.

Dean's Honour List for three academic years, University of Ottawa, 1981-1984.

#### II INDUSTRIAL AND CONSULTING EXPERIENCES

# September 1998 - August 1999

Java / Internet Consultant, TouchNet Canada. Ottawa, Canada.

- Designed and implemented payment solutions for electronic commerce.

E-commerce value-added service specification for Toronto Real Estate Board.

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Developing high-yield testing strategies for IBM E-commerce software.

## June 1985- August 1991

Computer Systems Specialist, Bell Canada. Ottawa, Canada.

- Software Design Engineer: Software Development for the iNet 2000 Project.
- System performance manager: Introducing the iNet performance enhancement and monitoring program.
- Design team leader for the development of iNet 2000 software.
- Design and development of ALEX, a videotex-based information system.

# Sept 1988 - August 1992

Les Consultants TransData, Montréal, Canada.

- Consultancy for communication software engineering projects.

## May 1988 - July 1988

Protocol Standards and Communications, Ottawa, Canada.

- Consultancy on Distributed Data Placement Strategies for Bell Canada.

# May 1984- Sept 1984

Software Design Engineer, Northern Telecom Cor., Ottawa, Canada.

- Development of telephony software for the DMS switches.

# III ACADEMIC, TEACHING AND TRAINING EXPERIENCES

# <u>ADMINISTRATIVE EXPERIENCES</u>

## Sept. 2019 – present

Chair of the College of Life Sciences Research Ethics Committee (9/2020 – present).

Chair of the Department of Information Sciences Curriculum Committee (9/2019 – present).

#### January 2018 - present

Director of Graduate Program in Computing Information Systems, College of Computer Science and Engineering.

#### Dec. 2018 - July 2019

Acting Chair of the Information Systems Department, College of Computing Sciences and Engineering, Kuwait University.

# Sept. 2008 – August 2017

Acting Dean of the College of Life Sciences, Kuwait University.

Leading the college and involved with strategic planning, recruitment and human resources decisions, assessment and accreditation, budgeting and representing the college at the University Council and the Council of Deans.

# Sept. 2007 – August 2017

Vice Dean for Planning and Technical Support, Kuwait University, College of Life Sciences.

#### Oct. 2007 – August 2008

Chair of the Graduate Programs committee at the College of Life Sciences, Kuwait University.

#### Oct. 2007 – August 2008

Director of the Office of Assessment & Accreditation, Kuwait University, College of Life Sciences.

#### Jan. 2004 - Dec. 2005

Coordinator of Program Accreditation and Assessments Activities at the Department of Computer Science

Leading the accreditation efforts for UAE, ABET and MSA.

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#### Sept. 2000 to Dec. 2003

Coordinator and Chair of the Department of Computer Science

Make recommendations to the Dean on promotion cases, contracts renewals, annual merit increases and budget allocation.

Prepare the schedule of course offering.

Ensure the quality of course offerings and oversee the status of the curriculum.

Manage program accreditation procedures.

## **UNIVERSITY SERVICES**

# Kuwait University (2007- present)

## **University Level:**

Member of the University Council (Sept 2008-present)

Member of the Dean's Council (Sept 2008-present)

## **College Level:**

Chair of the College Committee for Planning (2007-)

Chair of the College Committee for Assessment and Accreditation (2007-2008)

## American University of Sharjah

# **University Level:**

Member of the Steering Committee for Middle States Self-Study (2006-2007).

Co-chair of the University Committee on Rolling Contracts and Promotions, Sept 05-June 06.

Director of the Third UAE National Programming Contest, held at AUS, March 2003.

Director of all AUS Programming Contests, February 2002, 2003, 2004 and 2005.

Member of the Steering Committee for Middle States Self-Study, Chair of the

Subcommittee on Integrity, Governance and Administration (2002-04).

Elected Member of the Faculty Senate (2001-03)

Secretary of the Senate Executive Committee (2001-02)

Chair of the Senate Subcommittee on Curriculum and Academic Affairs (2002-03)

Member of the Information Technology Director Search Committee (2003)

# **College Level:**

Member of the Faculty Personnel Committee (2004-05)

Member of the Committee for Redesign of Introduction to Engineering (2004-05)

Feasibility Study Leader for New Areas in the School of Engineering (2004)

Member of College Research Committee (2000-2002)

Member of the College of Arts and Sciences Chairs/Coordinators Council (2000 - present)

Member of the Faculty Promotion Committee, School of Engineering (2002-03)

#### **Department Level:**

Coordinator for ABET accreditation activities planned for 2005-06.

Coordinator and Chair of the Department of Computer Science (9/2000- 12/2003)

Chair of the curriculum committee for Computer Science and the faculty search committee (2000-01)

Coach for the programming teams participating in the ACM Regional Programming Contests (Cairo 2001 and 2002, and Kuwait 2003 and 2004)

Advisor for the ACM Student Chapter (2001-07)

# Kuwait University (1992-2000)

#### **University Level:**

Member of the Distance Learning Committee (1996-97).

#### **College Level:**

Member of the College Engineering Training (1993-95).

Chair of the College Networking and Office Automation Committee (1995-96)

Member of the Faculty Teaching Evaluation Committee (1999)

Chair of the Best Teacher Award Committee (1997-98)

Member of the College Research Committee (1999-2000)

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Member of the Consultation and Career Development Committee (1999-2000)

#### **Department Level:**

Member of the Computer Engineering Program Committee (1994-97) Coordinator for Engineering Training (1993-95)

## **UNIVERSITY TEACHING EXPERIENCES**

#### Sept. 2007 - present

Professor of Information Science, Kuwait University, Dept. of Information Science

## • Undergraduate courses:

Information Systems Security, Information Systems Development, IS Theory and Practice, Introduction to Bioinformatics, Networks and Telecommunications, Technical Writing.

#### Graduate courses:

Advanced algorithms, e-Commerce design and implementation, IT Project Management, IT Management, Advanced Algorithms, Advances in Information Systems Architecture and design, Analysis, Modeling and Design of Information Systems, Ethics and Professionalism, Technical Writing and Communication Skills, Information Systems Quality, Testing and Maintenance, Information Systems Strategies and Risk Management, Disaster Recovery Planning, Introduction to Information Technology, Knowledge Management and Decision Support, Ethical and Professional Issues in Health Informatics.

#### June 2002 – June 2007

Professor of Computer Science (6/2002 to 8/2007) – Associate Professor (9/2000 to 5/2002) American University of Sharjah, Department of Computer Science

## • Undergraduate courses:

Java Programming for MIS, Introduction to Computer Science I (Java), Introduction to Computer Science II (Java), C Programming for Engineers, Software Engineering, Computer Security, Computer Systems, Statistics for Engineers, Digital Systems, Design and Analysis of Algorithms, Object-oriented Software Engineering, Introduction to Java programming, Data Structures, Digital Systems, Programming Languages Concepts, Introduction to Computer Science I and II (Java and C++), Database Systems, Computer Networks, Internet Computing.

#### • Graduate course:

Information Technology for Mechatronics, Security Engineering and Management, Information Technology for Engineering Managers.

# September 1998 – July 1999

Visiting Associate Professor

University of Ottawa, School of Information Technology and Engineering, Government Institute for IT Professionals, and the Universite de Montreal.

## September 1992 – July 2000

Associate Professor (from 3/1996) - Assistant Professor (9/1992 to 2/1996)

Kuwait University, Department of Electrical & Computer Engineering.

# • Undergraduate courses:

Operating Systems, Design and Analysis of Algorithms, Programming Languages Principles, Programming for Engineers Using Pascal, Software Engineering, Compiler Design, Software Systems, Data Structures, Discrete Mathematics, Engineering Training and Senior Projects, Computer Design Workshop I and II.

# • Graduate courses:

Software Testing: Theory & Practice, Protocol Engineering, Advanced Topics in Software Engineering

#### June 1991 - August 1992

Assistant Professor, Concordia University, Department of Electrical and Computer Engineering.

# • Undergraduate courses:

Software Engineering, Sequential Machines

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#### • Graduate courses:

Protocol Design and Validation, Software Engineering

#### Fall 1986 - Fall 1990

Part-time academic staff. University of Ottawa, Department of Computer Science.

• Undergraduate courses (in French and English):

Database Design, Software Engineering, Operating Systems, Principles of Programming Language, Compiler Design, Selected Topics: Distributed Databases, Logic Circuits II

## CONTINUING EDUCATION COURSES AND OTHER TEACHING

Crisis and Risk Management, Nazaha, 13-16 March 2022.

Medical Ethics and Professionalism, Dar Al Shifa Hospital (DASH), 17-18 February 2022.

Object-oriented Software Development, Boubyan Bank, 26-28 October 2021.

Training on Security+, Ministry of Youth and Kuwait University, August 2016.

Software Quality Assurance, Kuwait Petroleum Corporation (KPC), July 2016.

Software Documentation, Kuwait Petroleum Corporation (KPC), January 2016.

IT Risk Management, Kuwait Petroleum Corporation (KPC), October 2016.

IT Solutions Feasibility Analysis, Kuwait Petroleum Corporation (KPC), November 2016.

Project planning and management, Center for Excellence in Management, Kuwait, January 2013.

Decision Support Systems, Center for Excellence in Management, Kuwait, January 2012.

AUS Continuing Education Center (2000-2007)

Java Programming, Introduction to Computers and Computing, Software Development Project, Oracle PL/SOL

WiseScope Software Technologies, Dubai (September 2001).

Three-Days Workshop on Software Requirements Engineering.

Three-Days Workshop on Software Documentation.

Lebanese American University, Software Institute (July 2001):

6-Days Master level course on Object-oriented Software Engineering and the UML.

Kuwait University Continuing Education Training Courses (1992-2000):

The C Programming Language, The UNIX Operating Systems, DBASE IV, Systems Analysis and Design, Data Communications and Networks, Introduction to Computers and Programming, Windows Programming using C/C++, DOS, Windows, Word and Excel, The Java Programming Language (10), Advanced Java Programming

Kuwait University Computing Services - Al-Khawarizmi Training Center (1996-97):

Programming in Java I and II and JavaScript

Kuwait University - Office of Consultation and Career Development:

Internet/Intranet Programming in Java (Five Days Intensive Course), January 1998.

Client/Server Internet Computing in Java (Five Days Intensive Course), June 1999.

Thin-Client/Server Computing (Three Days Intensive Course), November 1999.

College of Business Studies, Kuwait (1995-98):

Database Systems, Cobol Programming II.

# <u>TUTORIALS, WORKSHOPS AND KEYNOTE SPEECHES AT INTERNATIONAL</u> <u>CONFERENCES & SYMPOSIUM</u>

- Invited Keynote at the 8<sup>th</sup> IEEE Intern. Conf. on Information Technology Trends (ITT), *Integrated Management Systems for Business Excellence in Industry 4.0*, Dubai, UAE, May 25-26, 2022.
- Workshop on Ethical Principles for Research, co-presented with Dr F. Boujarwah, November 2019.
- Tutorial at the 10<sup>th</sup> IEEE GCC Conference, IT Risk Management, Kuwait, April 21-23, 2019.
- Invited Talk at the 11<sup>th</sup> Kuwait Information Security Conference, On the Intertwining of Quality and Security Risk Management in Information Systems, Kuwait, April 10-11 2019.
- Invited Talk at the Second Kuwait International Conference on Computing Sciences and Engineering (ICCSE'2018), Kuwait, March 2018.
- Project Management in Higher Education Institutions, May 2016.
- Tutorial on Agile Software Requirement, The 14th International Conference on Hybrid Intelligent

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- Systems (HIS-2014), Kuwait, December 2014.
- Half-day Tutorial on *Agile Software Requirements Specifications for Successful Software Development*, First Africa and Middle East Conference on Software Engineering (AMECSE'2014), Cairo, Egypt, October 2014.
- Java Certification Workshop (8 sessions), February 2003.
- Java Animations, 2D and 3D, an 8-hour workshop, ACM@AUS Student Chapter SIGGRAPH, March 2002.
- Plenary Speaker at TESOL Arabia, Educating and Researching: Two Complementary Aspects of our Profession, Sharjah, Nov. 15, 2002.
- Half-day Tutorial on Electronic Commerce at the ACS/IEEE International Conference on Computer Systems and Applications, Beirut, Lebanon, June 2001.
- Half-day Tutorial on the Unified Modeling Language (UML) at the ACS/IEEE International Conference on Computer Systems and Applications, Beirut, Lebanon, June 2001.
- Half-day Invited Tutorial at the Lebanese American University, *Electronic Commerce Research*, Beirut, Lebanon, January 4, 2001.
- Half-day Tutorial at the 10<sup>th</sup> Intern. Conference on computing and Information (ICCI'2000), *Electronic Commerce Research*, Kuwait, Nov. 18-21 2000.
- Half-day Tutorial at the IFIP 13<sup>th</sup> Intern. Conf. On testing of Communicating Systems (TestCom 2000), *Electronic Commerce Testing*, Ottawa, Ontario, Canada, August 2000.
- Keynote Speech at Information Technology 2000, *Electronic Commerce: Challenges and Opportunities*, Dubai, March 2000.
- Plenary Session Speaker at the 11<sup>th</sup> International Conference on Microelectronics (ICM'99), *Research and Development in Electronic Commerce*, Kuwait, November 24, 1999.
- Half-Day Workshop on *Testing Issues in Electronic Commerce*, The impact of architecture on testability and testing for electronic commerce systems, Beijing, China, May 1999.
- One-Day Tutorial on Internet Computing in Java, Internet Gulf'98, Saudi Arabia, June 1998.
- Half-day Tutorial on *Intranets and Java, IASTED Parallel and Distributed Computing and Systems* 1997, Washington, USA, October 1997.
- Half-day Tutorial on *Object-Oriented Software Engineering*, 15th IEEE Intern. Phoenix Conf. on Computers and Communications, Arizona, USA, March 1996.
- Half-day Tutorial on *Object-Oriented Software Analysis, Design and Implementation, 2nd Intern. Conf. on Electronics, Circuits and Systems* (ICECS'95), Amman, Jordan, Dec. 1995.
- Half-day Invited Tutorial on Synthesis of Discrete Event Systems, 8th Intern. IFIP Conf. on Formal Description Techniques for Distributed Systems and Communications Protocols, Montreal, Canada, October 1995.
- One-day Tutorial on Software Testing Techniques: Theory & Practice, 14th IEEE Intern. Phoenix Conf. on Computers and Communications, Arizona, USA, March 1995.
- One-day Tutorial on *Open Communications Systems: Standards & Interfaces, Open Systems Symposium,* Dhahran, Saudi Arabia, November 1994.
- One-day Tutorial on Current Advances in Protocol Engineering, 11th IEEE Intern. Phoenix Conf. on Computers and Communications, Arizona, USA, April 1992.

# SEMINARS AND INVITED PRESENTATIONS

- Building Kuwait University Innovation Management System using ISO 56000, Kuwait University Innovation Zone (KUIZ), Kuwait University, January 2022.
- Building Cybersecurity Knowledge and Capabilities in Kuwait, InfoSec Summit'2021, Kuwait University, June 2021.
- On the Intertwining of Quality and Risk in Information Systems Development and Evolution, Kuwait University, February 2019.
- Risk Management for Successful Software Development Projects, Kuwait University, March 2018.
- Stakeholder Management for Successful Projects, American University of Kuwait, December 2017.
- The Business Analysis Profession An Abridged Tale, Kuwait University, December 2017.
- Protecting Human Research Participants: three basic ethical principles, Kuwait University, November 2017.
- An Abridged Roadmap to Trustworthy Services, Kuwait University, October 2012.

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- Cost estimation of medium to large software projects, Kuwait University, April 2012.
- Non-Functional Software Requirements Engineering for e-Systems and e-Services, Invited Talk, 9<sup>th</sup> Intern. Conf. on Frontiers of Information Technology (FIT 2011), Islamabad, Pakistan, Dec. 2011.
- Understanding Comprehensive System Assurance the Case of Mobile Agent-Based Wireless Sensor Networks, Invited Talk, 8<sup>th</sup> Intern. Conf. on Frontiers of Information Technology (FIT 2010), Islamabad, Pakistan, December 2010.
- Roadmap for the Development of Trustworthy Services and Systems, Invited Talk, 7<sup>th</sup> Intern. Conf. on Frontiers of Information Technology (FIT 2009), Abbottabad, Pakistan, December 2009.
- Using Feedback from Students to Improve Learning, Kuwait University, April 2009.
- Presentation Skills for Professionals, Kuwait University, March 2009.
- Developing outcome-based courses for assessment, accreditation and continuous improvement, Kuwait University, December 2007.
- A Roadmap to Trustworthy Services, Kuwait University, November 2007 and January 2008.
- A Roadmap to Trustworthy Services, AUS, April 2006.
- e-Voting: Issues and Trends, e-World 2004 Forum, AUS, April 2004.
- Objectives and Outcomes for Assessments and Use for Continuous Improvement, AUS, April 2004.
- Information Technology and Electronic Commerce, UAE Careers Fair 2003, April 2003.
- Finite State Machines: Theory and Practice, AUS Mechatronics Seminar, April 2003.
- M-UML for the Modeling of Mobile Agent-Based Software Systems, AUS, November 2002.
- Mobile Object Computing Paradigm and its Applications in Electronic Commerce, AUS, May 2002.
- Teaching Computer Science in the UAE: Reality and Prospects, University of Sharjah, March 2002.
- A Taste of Distributed Computing using Java, ACM Student Chapter at AUS, April 2001.
- Protocol Engineering using UML, American University of Sharjah, February 2001.
- Electronic Commerce: Challenges and Opportunities, American University of Sharjah, October 2000.
- Electronic Commerce Research, University of Ottawa, SITE, and Universite de Montreal, IRO, January 2000. (invited seminars)
- Research and Development in Electronic Commerce, Kuwait University, October 1999.
- Internet-based Distributed Computing, Lebanese American University, February 1999.
- Introduction to Software Quality Engineering, University of Ottawa, September 1998.
- Distributed Object Computing in Java, University of Ottawa, October 1998.
- Petri Net Model for System Specification and Verification, University of Ottawa, June 1998.
- Presentation Skills for Engineers, College of Engineering, Kuwait University, May 1998.
- Distributed Computing in Java, IEEE Kuwait Section, May 1998.
- Nomadic Computing and Java, Kuwait University, December 1997.
- Software Testing, Department of Mathematics (Computer Science), Kuwait University, November 1997 and April 1998 (invited lecture).
- Client/Server Network Programming in Java, University of Ottawa and Universite de Montreal, October 1997, (invited presentations).
- A Taste of Java, City University of Hong Kong, January 1997, (invited presentation).
- A Taste of Java. IEEE Kuwait Section, December 1996.
- Presentation Skills for Engineers. Kuwait University, November 1996.
- Recovery of Protocol and Service Design with Their Timing Behaviour from Protocol Execution Traces, University of Ottawa, August 1996, (invited presentation).
- Synthesis of Communications Protocol Design from Run-time Traces, City University of Hong Kong, January 1996, (invited presentation).
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- **25.** M. K. Dhodhi, I. Ahmad and **K. Saleh**, "Task Scheduling Using an Evolutionary Technique", Proc. of the *Seventh IASTED International Conference on Parallel and Distributed Computing and Systems*, Washington D.C., USA, pp. 21-23, October 1995.
- **24.** I. Ahmad, M. K. Dhodhi and **K. Saleh**, "An Evolution-based technique for local microcode compaction", Proc. of the *IFIP conference on VLSI*, Cheba, Japan, pp. 729-734, August 1995.
- **23. K. Saleh**, N. Al-Seif and A. Boujarwah, "Modelling multitasking facilities of Concurrent C using Petri nets", Proc. of the *Conference on Parallel and Distributed Computing*, Kuwait, March 1995.
- **22.** M.K. Khan, I. Ahmad and **K. Saleh**, "Multiprocessor scheduling based on an evolutionary approach", Proc. of the *Conference on Parallel and Distributed Computing*, Kuwait, March 1995.
- **21.** H. El-Gendy and **K. Saleh**, "Open application layer interface for intelligent networks, multimedia, and network management", Proc. of the *Open Systems Symposium*, Saudi Arabia, pp. 136-146, November 1994.
- **20. K. Saleh** and M. Jaragh, "Synthesis of communications converters using the Petri-Net model", Proc. of the *Intern. Conference on Communications Systems ICCS-94*, Vol. 3, pp. 1213-1217, November 1994.
- **19. K. Saleh,** "Distributed systems extensions and their diagnostics capabilities", Proc. of the *Intern. Conf. on Parallel and Distributed Computing and Systems*, October 1994.
- **18. K. Saleh,** M. Dhodhi, A. Boujarwah and I. Ahmad, "Automatic translation of system-level specifications in Estelle to VHDL", Proc. of the *Intern. Conf. on Parallel and Distributed Computing and Systems*, October 1994.
- 17. K. Saleh, O. Rafiq and M. Jaragh, "Synthesizing communication converters from formal protocol and service specifications", Proc. of the *Intern. Phoenix Conference on Computers and Communications IPCCC-94*, April 1994, pp. 141-147.
- **16. K. Saleh,** O. Rafiq and M. Jaragh, "Synthesizing communication gateways for network interoperability", Proc. of the *International Conference on Telecommunications ICT'94*, Dubai, January 1994, pp. 159-162.
- **15.** I. Ahmad, M. Dhodhi, **K. Saleh** and R. Storer, "High-level synthesis of self-recoverable ASICs", Proc. of the *International Conference on Microelectronics (ICM'93)*, 1993, pp. 266-269.
- **14. K. Saleh**, I. Ahmed, K. Al-Saqabi and A. Agarwal, "A recovery-based stabilization procedure for communication protocols", Proc. of the 8th International Symposium on Computer and Information Sciences, Istanbul, pp. 71-79, November 1993.
- **13. K. Saleh**, I. Ahmed, K., and Al-Saqabi, "Procedures for the design of responsive communication protocols", Proc. of the *Singapore International Conference on Networks (SICON'93)*, pp. 183-187, September 1993.
- **12. K. Saleh** and A. Agarwal, "Efficient and fault tolerant checkpointing procedures for distributed systems", Proc. of the *Twelvth IEEE International Phoenix Conference on Computers and Communications (IPCCC-93)*, pp. 161-167, March 1993.
- **11. K. Saleh**, and H. Ural, "Definition of a switch-computer service interface in Estelle", Proc. of the *International Conference on Communication Systems (ICCS'92)*, vol. 1 of 3, pp. 193-198, November 1992.

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- **10. K. Saleh**, H. Ural and A. Agarwal, "A distributed snapshots algorithm and its application to protocol stabilization", Proc. of the *Second Intern. Work. on Responsive Computer Systems*, Japan, pp. 92-97, October 1992.
- **9. K. Saleh**, "Testability-directed service definitions and their synthesis", Proc. of the *Eleventh IEEE International Phoenix Conference on Computers and Communications (IPCCC-92)*, pp. 674-678, March 1992.
- **8.** R. Probert, **K. Saleh** and H. Yu, "Relative-clock based specification and test result analysis of distributed systems using trace assertions", Proc. of the *Eleventh IEEE International Phoenix Conference on Computers and Communications (IPCCC-92)*, pp. 687-694, March 1992.
- 7. **K. Saleh** and R. Probert, "An extended service-oriented method for the synthesis of protocols", Proc. of the *Sixth International Symposium on Information and Computer Sciences*, Antalya, Turkey, October 1991, pp. 547-557.
- **6. K. Saleh**, "On the formal definition of communication services", Proc. of the *International Conference on Parallel and Distributed Computing and Systems (PDCS'91)*, Washington, October 8-11 1991.
- **5.** H. Yu, **K. Saleh** and R. Probert, "Testability-directed trace specifications of communications services", Proc. of the *Telecommunications Research Institute of Ontario (TRIO)*, May 8-9 1991.
- **4. K. Saleh** and R. Probert, "Automatic synthesis of protocol specifications from service specifications", Proc. of the *Tenth IEEE International Phoenix Conference on Computers and Communications (IPCCC-91)*, March 1991, pp. 615-621.
- 3. K. Saleh, "On the suitability of synthetic methods for the design of communications protocols", 1990 Conference of the Canadian Interest Group on Open Systems (CIGOS), Vancouver, October 1990.
- 2. K. Saleh and R. Probert, "A method for the synthesis of protocol specifications from service specifications", Proc. of the *International Conference on Parallel and Distributed Computing and Systems (PDCS'90)*, New York, October 10-12 1990, pp. 106-110.
- **1. K. Saleh**, "Automatic synthesis of protocol specifications", Proc. of the *1990 Canadian Conference on Electrical and Computer Engineering*, Ottawa, September 4-6 1990, pp. 7.4.1-7.4.4.
- **0. K.** Saleh and T. Oren, "ORADA: Organized representation of ADA programs", Proc. of the Association Canadienne Française pour l' Avancement des Sciences (ACFAS), May 1984.

#### RESEARCH GRANTS

2022 Applied to KFAS research grant (PI: Dr Dari Alhuwail)

25000 KD - Cyber Resilience in Small and Medium Enterprises - Assessment and Assurance.

2009-2010 Securing Mobile Agents Based Wireless Sensor Networks Applications (P.I.)

2500 KD - Operating Grant (WI04/09), Kuwait University.

2002-2003 A Fault-Tolerant and Secure Platform for Internet-Based Mobile Agents. (P.I.) 2000 USD – Operating Grant, American University of Sharjah.

2001-2002 Documenting and Prototyping Mobile Agent-Based E-Commerce Business Models (P.I.) 2000 USD - Operating Grant, American University of Sharjah.

1998-2000 Java-Based Graphical Tool for Protocol Development (P.I.)

2000 KD - Operating Grant (EE107), Kuwait University.

1997-1998 Java-Based Protocol Engineering Environment (P.I.)

2000 KD - Operating Grant (EE099), Kuwait University.

1996-1997 Protocol Design Recovery from Run-Time Traces (P.I.)

2000 KD - Operating Grant (EE085), Kuwait University.

1995-1996 Synthesis of Testable and Responsive Protocol Design (P.I.)

2000 KD - Operating Grant (EE080), Kuwait University.

1994-1997 Research on Stabilization of Communication Protocols (P.I.)

20400 KD - Equipment and Operating Grant (EE059), Kuwait University.

1995-1998 Research on Communication Gateways Design (Co-Investigator)

18400 KD - Equipment and Operating Grant (EE064), Kuwait University.

**1993-1996** Research on High Level Synthesis (Co-Investigator)

20400 KD - Equipment and Operating Grant, Kuwait University.

**1991-1994** Faculty Research Development Program

40000 \$ - Equipment and Operating Grant, Concordia University.

1991-1993 Canadian Institute for Telecommunications Research

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20000 \$ - Research Associate on Telecom Software Testability, Concordia University.

**1992-1995** FCAR Research Project Grant

100000\$ - Joint Operating Grant with 4 other Professors, Concordia University.

# **RESEARCH INTERESTS & PROJECTS**

Communications Protocol Engineering and Distributed Systems

Software Engineering: Requirements, Design, Implementation and Testing

Internet Computing, Electronic Commerce, Mobile Agents.

Information Security Engineering and Management.

Project Management and risk Management.

Wireless sensor networks security.

Business Analysis and Stakeholder Management.

Quality Engineering and Management.

## V PROFESSIONAL ACTIVITIES

#### PROGRAM COMMITTEE MEMBER IN CONFERENCES

- REWBAH 2020, 2021 and 2022, Requirements Engineering for Well Being, Aging and Health.
- CITS 2014, Intl. Conference on Computer, Information, and Telecommunication Systems, July 7-9, 2014, in Jeju, Korea.
- ITSE 2013, The 2013 International Conference on Information Technology and Software Engineering, Beijing, China, November 2013.
- MUSIC-13, The 4rd FTRA International Conference on Mobile, Ubiquitous, and Intelligent Computing (MUSIC-13), Korea, 2013.
- CITS 2013, The 2013 International Conference on Computer, Information and Telecommunication Systems, Athens, Greece, May 2013.
- SoMeT 2013, The Twelvth International Conference on Intelligent Software Methodologies, Tools and Techniques, Budapest, Hungary, September 2013.
- GTSE 2013, The SEMAT International Workshop on General Theory of Software Engineering, San Francisco, USA, May 2013.
- ITSE 2012, The 2012 International Conference on Information Technology and Software Engineering, Beijing, China, December 2012.
- NTMS 2012, The Sixth IFIP International Conference on New Technologies, Mobility and Security, November 2012.
- SoMeT 2012, The Eleventh International Conference on Intelligent Software Methodologies, Tools and Techniques, Genoa, Italy, September 2012.
- CITS 2012, The 2012 International Conference on Computer, Information and Telecommunication Systems, Athens, Jordan, May 2012.
- SoMeT 2011, The Tenth International Conference on Intelligent Software Methodologies, Tools and Techniques, Russia, September 2011.
- NTMS 2011, The Fifth IFIP International Conference on New Technologies, Mobility and Security, November 2011.
- ICSECS 2011, The Second International Conference on Software Engineering and Computer Systems, Malaysia, June 2011.
- ISDE 2011, Third International Workshop on Information Systems in Distributed Environment, Greece, October 2011.
- DICTAP 2011, The Intern. Conf. on Digital Information and Communication Technology and its Applications, France, June 2011.
- KCESS 2011, The Second Kuwait Conference on e-Services and e-Systems, Conference Chair, Kuwait, April 2011.
- NTMS 2010, The Fourth IFIP International Conference on New Technologies, Mobility and Security, November 2010.
- KCESS 2009, The First Kuwait Conference on e-Services and e-Systems, Program Chair, Kuwait, November 2009.
- NTMS 2009, The Third IFIP International Conference on New Technologies, Mobility and Security,

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- November 2009.
- ICISTM 2008, The Second Intern. Conference on Information Systems, Technology and Management, March 2008, Dubai, UAE.
- NTMS 2008, The Second IFIP International Conference on New Technologies, Mobility and Security, Morocco, November 2008.
- SoMeT 2008, The Seventh International Conference on New Software Methodologies, Tools and Techniques, UAE, October 2008.
- CISSE 2008, The 12<sup>th</sup> Colloquium for Information Systems Security Education, Dallas, USA, June 2008.
- SPAC2007, The First IEEE International Workshop on Software Patterns: Addressing Challenges, Beijing, China, July 2007.
- NTMS 2007, The 2007 International Conference on New Technologies, Mobility and Security, France, April 2007.
- SPAC 2007, The first IEEE Intern. Workshop on Software Patterns, Beijing, China, July 2007.
- SoMeT 2007, The Sixth International Conference on New Software Methodologies, Tools and Techniques, Rome, Italy, October 2007.
- SoMeT 2006, The Fifth International Conference on New Software Methodologies, Tools and Techniques, Quebec City, Canada, October 2006.
- AICCSA 2006, ACS Intern. Conf. On Computer Systems and Applications, Tutorial Co-Chair, Dubai, 2006.
- IIT 2005, The 2005 International Research Conference on Innovations in Information Technology, Dubai, UAE, October 2005.
- SoMeT 2005, The Fourth International Conference on New Software Methodologies, Tools and Techniques, Tokyo, Japan, September 2005.
- IRMA 2005, The 16<sup>th</sup> IRMA International Conference on Resource Management, San Diego California, May 2005.
- Wireless Security, IEEE First International Conference on Wireless Communications (WIRELESSCOM'05), Hawaii, June 2005.
- WOCN 2005, Second IEEE and IFIP International Conference on Wireless and Optical Communications and Networks, Dubai, March 2005.
- IEEE MWCN The Sixth IEEE International Conference on Mobile and Wireless Communications Networks, Paris, France, October 2004.
- IIT 2004, The 2004 International Research Conference on Innovations in Information Technology, Dubai, UAE, October 5-7, 2004.
- SoMeT 2004, The Third International Conference on New Software Methodologies, Tools and Techniques, Leipzig, Germany, September 2004.
- NOTERE 2004, Colloque International sur Les Nouvelles Technologie de la Repartition, Morocco, June 2004.
- WOCN 2004, First IEEE and IFIP International Conference on Wireless and Optical Communications and Networks, Muscat, Oman, June 2004.
- IEEE MWCN 2003, The Fifth IEEE International Conference on Mobile and Wireless Communications Networks, Singapore, October 27-29 2003.
- Lyee W03, The International Workshop on Lyee Methodology, Stockholm, October 2003.
- Program Committee Member of the ACS/IEEE International Conference on Computer Systems and Applications (ICCSA), June 2003, Tunis, Tunisia.
- Lyee W02, The International Workshop on Lyee Methodology, France, October 2002.
- AICCSA 2001, ACS Intern. Conf. On Computer Systems and Applications, Beirut, Lebanon, June 2001.
- ICECS'2K, The 7<sup>th</sup> IEEE International Conference on Electronics, Circuits and Systems, Beirut, December 2000.
- SEA 2000, IASTED Intern. Conference on Software Engineering Applications, Las Vegas, USA, November 2000.
- NOTERE'2000, Colloque International sur Les Nouvelles Technologie de la Repartition, Paris, France, November 2000.
- IEEE Middle East Symposium on Networks, Beirut, Lebanon, November 1999.

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- ICYCS'99, 5th International Conference for Young Computer Scientists, Beijing, China, October 1999.
- NOTERE'98, Colloque International sur Les Nouvelles Technologie de la Repartition, Montreal, Canada, October 1998.
- 6th French Symposium on Protocol Engineering (Colloque Francophone sur l'Ingenierie des Protocoles CFIP'97), Belgium, October 1997.
- NOTERE'97, Colloque International sur Les Nouvelles Technologie de la Repartition, Pau, France, November 4-6, 1997.
- 5th French Symposium on Protocol Engineering (Colloque Francophone sur l'Ingenierie des Protocoles CFIP'96), Morocco, October 1996.
- Chair of the Organizing Committee of the *Intern. Symp. on Engineering Education*, Kuwait University, November 15-16, 1995.
- 2nd Intern. Conf. on Electronics, Circuits and Systems, (ICECS'95), Jordan, Dec. 1995.
- 8th Intern. IFIP Conf. on Formal Description Techniques for Distributed Systems and Communications Protocols, (FORTE'95), Montreal, Canada, October 1995.

# JOURNAL EDITORIAL BOARD / GUEST EDITOR

- Editor-in-Chief, Journal of Software, Academy Publisher, (10/2008-12/2014).
- Member of the Editorial Advisory Board for the book: Cyber-Security and Global Information Assurance: Threat Analysis and Response Solutions, IGI Global.
- Member of the Editorial Board of the Journal of Software (2005-2014) and of the Journal of Communications by Academy Publisher.
- Member of the Editorial Advisory Board of the Computer Communication journal (1998-2008).
- Member of the Editorial Board of the Journal of Computer Science and Engineering in Arabic (2006).
- Electronic Journal on Networks and Distributed Processing (1992-2000).
- Adhoc reviewer for the Editorial Advisory Board of the Intern. Journal of Cases on Electronic Commerce.
- Computer Communications Journal, *Guest Editor*, Special issue on *Protocol Engineering*, December 1996.
- Journal of Systems and Software, Guest Editor, Special Issue on Current Issues in Systems and Software Engineering, 1999.
- Journal of Information and Software Technology, *Guest Co-Editor*, Special issue on *Communications Software Engineering*, 1999.
- Computer Communications Journal, *Guest Co-Editor*, Special issue on *Optical High-Speed Networking*, 2001.

# CONFERENCE CHAIR/SESSION CHAIR / PANEL DISCUSSION IN CONFERENCES

- Co-organizer of InfoSec Summit'2021 and 2022, Kuwait University.
- Panelist at Kuwait Hackers Conference, February 2020.
- Conference chair, Third *International Conference on Engineering, Sciences and Applications (ICESA'2019)*, Osaka, Japan, August 2019.
- Conference co-chair, Third Kuwait International Conference on Life Sciences (KICLS 2018), November 2018.
- Conference chair, Second *International Conference on Engineering, Sciences and Applications (ICESA'2018)*, Tokyo, Japan, August 2018.
- Conference chair, First International Conference on Engineering, Sciences and Applications (ICESA'2017), Tokyo, Japan, August 2017.
- Conference chair, Second Kuwait International Conference on Life Sciences (KICLS 2016), April 2016.
- Conference co-chair, First International Conference on Computing Sciences and Engineering (ICCSE 2015), March 2015.
- Conference chair, First Kuwait International Conference on Life Sciences (KICLS 2014), April 2014.
- Session chair, *Third Intern. Conf. on Next Generation Information Technology (ICNIT'2012)*, Seoul, Korea, April 2012.
- Conference chair, Third Kuwait conference on e-Services and e-Systems (KCESS 2012), Dec. 2012.

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- Session chair, Eighth Intern. Conf. on Information Processing and Management (ICIPM'2013), Seoul, Korea, April 2013.
- Conference chair, Second Kuwait conference on e-Services and e-Systems (KCESS 2011), April 2011.
- Conference chair, First Kuwait conference on e-Services and e-Systems (KCESS 2009), Nov. 2009.
- Panelist on "Challenges in Information Technology", 7<sup>th</sup> Intern. Conf. on Frontiers of Information Technology (FIT 2009), Abbottabad, Pakistan, December 2009.
- Panelist on "Information technology and the Society", *International Conference on Information Sciences, Technologies and Applications (ISTA 09)*, Kuwait, March 2009.
- Co-chaired a session on Modeling and analysis for information security at the Intern. Conf. on Information Security and Privacy, ISP'06, Venice Italy, November 2006.
- Chaired a session on Database Technology at the ACS/IEEE International Conference on Computer Systems and Applications, UAE, March 2006.
- Chaired a session on Software Engineering at *The 2004 International Research Conference on Innovations in Information Technology (IIT 2004)*, Dubai, UAE, October 5-7, 2004.
- Chaired a session on Software Engineering at the ACS/IEEE International Conference on Computer Systems and Applications, Beirut, Lebanon, June 2001.
- Chaired a session in the 2<sup>nd</sup> Intern. Conference on E-Commerce in the Gas and Oil Industry, Abou-Dhabi, June 2001.
- Participated in the roundtable discussion organized by Internet City and the American University in Dubai on "Information Technology Research and Development in the Emirates and the Gulf Region", during the Proceedings of the *Information Science Innovation* (ISI'2001) Conference, March 2001.
- Panelist on "Outstanding issues in testing for electronic commerce", *IFIP 13<sup>th</sup> Intern. Conf. On testing of Communicating Systems (TestCom 2000)*, Ottawa, Ontario, August 2000.
- Chaired a session on "Software Engineering and Object-Oriented Programming", 18th Intern. Conf. on Applied Informatics (AI'2000), Innsbruck, Austria, February 2000.
- Participated in the Workshop on *High-yield: A Measure and Motivator for Better Testing*, organized at *CASCON'98*, "High-yield capture of requirements and design constraints for electronic commerce", Toronto, December 1998
- Chaired a session on "Communications", 16th Intern. Conf. on Applied Informatics (AI'98), Garmisch, Germany, February 1998.
- Chaired a session on "Software Engineering", 2nd Intern. Conf. on Electronics, Circuits and Systems (ICECS'95), Amman, Jordan, December 1995.
- Chaired a session on "Compilers, Software and Real-time Systems", *Intern. Conf. on Parallel and Distributed Computing and Systems*, Washington, October 1994.
- Chaired two sessions at the *Open Systems Symposium*, Dhahran, November 94.

  Moderated a panel discussion on "Data and Computer Security in Open Environment", *Open Systems Symposium*, Dhahran, November 94.

# **PROFESSIONAL MEMBERSHIPS**

- Senior Member of IEEE and IEEE Computer Society (21478966).
- Professional Member of the Association for Computing Machinery (ACM) (UK41478).
- Founding Advisor of the ACM Student Chapter at the American University of Sharjah (February 2001).
- Founding member of the Arab Computer Society (ACS) and Secretary General (2000-2004)
- Member of the Information Resources Management Association (2002-2005).

# <u>REFEREE</u>

- Computer Communications, J. Systems and Software, J. Networking and Distributed Computing, International Journal of Information Sciences, J. Kuwait University (Science), IEEE Transactions on Software Engineering, Computer Journal, Informatica, J. of Information and Software Technology, Distributed Computing, Journal of Communications, J. of Software
- Various International Conferences
- Various Research Projects Proposals
- Evaluator for many promotion cases in Kuwait, Jordan, and UAE.

Book Reviewer

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#### **EXAMINATION AND SUPERVISION**

Master Thesis Supervisor – Kuwait University

- H. Alazemi, Expert System for Multi-Factor University Major Selection, May 2021.
- A. Almutairi, Building a Comprehensive Risk Register for Risk Management Information System, September 2020.
- B. Patkovic, Building a Comprehensive Stakeholder Register for Stakeholder Information Management Systems, March 2018.
- N. Bahrani, Factors Behind Social Networking Sites Usage, May 2017.
- B. Bahrani, Enabling Patient Centered Health Care System, December 2016.

## Master Project Supervisor – Kuwait University

- N. Alsanee, SwAPP A smartphone application created based on Kuwaiti user preferences, 2022.
- N. Alfialy, Interfacing with Kuwait CubeSat, 2022.
- Y. Alrasheed, Assessing cyber resilience readiness in small and medium enterprises in Kuwait, 2021.

# Master Project and Thesis Supervisor – Engineering Systems Management, AUS

- A. Al-Khaili, A Services-oriented Security Framework for Developing and Maintaining Trustworthy Systems (June 2006)
- A. Al-Kaabi, Planning Knowledge Management Integration in the UAE Army (June 2006)
- F. Al-Kaabi, A Roadmap for the Deployment of Trustworthy Data Centers (Graduated June 2006)
- G. El-Shahry, A Systematic Approach to the Management of System Security Reengineering Process, (Graduated in June 2005)

#### External Thesis Examiner

- Z. Tao (October 1996, Ph. D. Thesis, Université de Montreal, Canada)
- K. Yung (January 1997, M. Phil., City University of Hong Kong, Hong Kong)
- N. Lew (1999, M.Sc., University of Ottawa)

# Internal Thesis Examiner (Concordia and Kuwait University):

Amal Nagi (M.Sc., May 2000)

Amro Khattab (M.Sc., May 1997)

Kshirasagar Naik (Ph.D., May 1992)

Priyadarshi Tripathy (Ph.D., May 1992)

Parimala Thulasiraman (M. Sc., December 1991)

Ramesh Ahooja (Ph.D., May 1991)

#### Doctoral Thesis Supervision:

Anjali Agarwal (Sept. 91- Aug. 92, Graduated in 1996, Concordia University)

## Graduate Project and Thesis Supervision (Kuwait University):

Sarah Al-Mulla (2009-10): Secure SysML: Extension to SysML for the modeling of system security requirements

Jehad Al-Dallal (1996-97): Synthesis of concurrent protocols from concurrent services.

Ammar Al-Dallal (1996-97): Synthesis of protocols using timed petri net specifications.

Ilham Al-Roweih (1997): Object-Oriented testing of Java programs.

Osama Mostafaoui (1997): Distributed software development using Estelle and Java.

Noura Al-Ghurair (1998): Internet Push Technology using Java and Castanet.

Hassib Khanafer (1998): Integration of Java and CORBA in a Telecom Application

Nidal Nasser (1998): TCP/IP Programming in Java

Nizar Hajjaj (1998): Java-Based Graphical System for Protocol Development

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# VI COMPUTER AND OPERATING SYSTEMS AND LANGUAGES

- Knowledge of IBM environment S/360,370, Sun Workstations, PCs, MacIntosh and Tandem Computers.
- Knowledge and experience in computer languages such as C/C++, Java, R, Python, JavaScript, Perl, HTML, Ada, Pascal, Prolog, LISP, Transactions Applications Language (TAL), Fortran, PL/I, SQL, Cobol, and C#.
- Knowledge and experience in application packages such as MicroSoft Office, MS Project, FrontPage, Visio, Primavera....
- Knowledge and experience in CASE tools such as Oracle CASE, Rational Rose, TurboCASE, System Architect.

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