



Ruba Alsalah

Lecturer

Personal Data

Nationality | Jordanian
Date of Birth | 07/12/1985
Department | Computer Information Systems
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Language Proficiency

Language	Read	Write	Speak
Arabic	✓	✓	✓
English	✓	✓	✓

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
March, 2011	Master	Jordan	Jordan University of Science & Technology
June, 2007	Bachelor	Jordan	Jordan University of Science & Technology

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

Master	Master “Malicious Nodes Detection in MANETs: Behavioral Analysis Approach”
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Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work			Date
Lecturer	IAU	Dammam	Saudi Arabia	2014
Lecturer	Najran University	Najran	Saudi Arabia	2011-2014



Scientific Achievements

Published Refereed Scientific Researches

(In Chronological Order Beginning with the Most Recent)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	Ruba Alsalah, Asiya Salam, Madhawi Alzamil, Reem Alaskr, Maisa Alyemni, Mada Alahmdi, Buthaina Alqahtani	“Thakirni application: An Assistive Application for Alzheimer Patients”	International Journal of Online and Biomedical Engineering (iJOE) December 2020
2	Ruba Alsalah, Asiya Salam	“Vertically Scrambled Caesar Cipher Method”	International Journal of Computer Applications May 2015
3	Ruba Alsalah, Dr. Yasser Khamyseh	“Malicious node detection in MANET: Behavioral analysis scheme”	Journal of Networks, Vol 7, No 1(2012), 116-125, Jan 2012

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	Sardar Zafar Iqbal, Aroob Alkarni, Jumana Aleleyo, Lubna Alghamdi, Monera Almokainzi, Rayanh Alyami, Hina Gull, Ruba Alsalah, Maryam Temitayo Ahmed	Flourish: Requirements and Design of an Android Application Prototype for Various Symptoms Management in ADHD Patients	2022 2nd Asian Conference on Innovation in Technology (ASIANCON)
2	Fatimah A Alqarni, Raghad A Almulla, Rana A Alqahtani, Eman A Almubarak, Yasser A Bamarouf, Ruba M Alsalah, Samiha Brahimi, Gomathi Krishnasamy, Arwa M Alghamdi	“Dental Pager: Interactive Mobile Application to Enhance Supervision of Dental Colleges Students”	2nd International Conference on Computer Applications & Information Security (ICCAIS)



Completed Research Projects

#	Research Title	Report Date
1	Currently Supervising Project “CCSIT Community”	2022
2	Supervised Project “Training Line”	2021
3	Supervised Project “Thakirmi application: An Assistive Application for Alzheimer Patients”	2019

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Communication & Network Fundamentals	CIS 315	3 lectures weekly (3 hours/lec), 3 labs weekly (3 hours/lab)
2	Web-based Systems	CIS 423	4 lectures weekly (2 hours/lec), 4 labs weekly (2 hours/lab)
3	IT Infrastructure Management	CIS 326	
4	System Analysis & Design 1	CIS 417	2 lectures weekly (2 hours/lec), 2 labs weekly (2 hours/lab)
5	System Analysis & Design 2	CIS 421	2 labs weekly (2 hours/lab)
6	Network Protocols & Ecommerce	CIS 325	4 lectures weekly (2 hours/lec), 4 labs weekly (2 hours/lab)
7	Technical Reports	CIS313	4 lectures weekly (2 hours/lec)
8	Professional Responsibility	CIS 413	4 lectures weekly (2 hours/lec)
9	Information Systems Management	CIS 421	1 lecture weekly (3 hours/lec)

Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

Communication & Network Fundamentals CIS315: This course provides the fundamentals of data communication and networking. The course introduces the principles and theory of all the network layers in OSI and TCP/IP models starting from the physical layer to the presentation layer. The students are taught the software and hardware tools in building a computer network. The course also includes the lab components where students are provided with the hands one experience in building, configuring, and managing the organization networks for related network services.

Web-based Systems CIS423: This course provides the students with an introduction to web-based systems development with an emphasis on current web tools, techniques and



practical application in an enterprise environment. The course includes client side and server-side technologies. The client side covers HTML, CSS, and JavaScript for presentation and client-side interactivity. The server side includes PHP language for the business logic and MySQL as the back-end database. It also covers installation and configuration of a development server through the use of XAMP (Apache, MySQL and PHP) software bundle. In addition to the use of web services and API, the course will expose students to new opportunities that will facilitate achieving an organization goal using web technology and enhancing existing processes to create value. The course also focuses on knowledge and practical skills for the implications of adopting digital business and evaluation of digital business capabilities for business organizations.

IT Infrastructure Management CIS326: This course covers advanced concepts in data communications and computer networks including Media Access Control Mechanisms, wireless and mobile networks, and routing protocols. It then focuses on the services and solutions available through IT infrastructure in an organizational context. Students develop knowledge and skills for communicating effectively with professionals whose special focus is on hardware and systems software technology, and for designing organizational processes and software solutions that require in-depth understanding of the IT infrastructure capabilities and limitations. The course focuses on Internet-based solutions, business continuity, and the role of infrastructure in regulatory compliance. Students are given practical training on the configuration and analysis of WLANs and routing protocols through a more in depth use of Wireshark and Packet Tracer. It also covers the analysis of network performance for a business organization. Case studies of noteworthy examples of success of IT infrastructure deployment in businesses help students build the skills of successfully applying infrastructure solutions in businesses and choosing the correct options.

System Analysis and Design 1–CIS417: This course introduces the analysis and design of information systems within the context of an organization. The course approaches this by identifying the need for IT to enable organizational change and bring business value. Business process management and modeling techniques are used to analyze and model business requirements. This includes data, user and security requirements. The course lays down different approaches to systems analysis and design including SDLC, agile and UML. Finally, the course demonstrates the different options organizations have to develop information systems including: package systems, outsourced and in-house development. The lab component will exhibit these concepts using system analysis and design software tools. Students are expected to demonstrate their understanding of these concepts in a form of a project. Students learn how to write Systems Requirements Specifications to communicate systems requirements at different organizational levels in a business organization.

System Analysis and Design2–CIS421: This course includes: designing simple requirements model, measurability of non-functional requirements, the process of selecting best alternative design strategies, best practices of designing human interfaces, conventional design approaches (Data Flow Diagrams/extended ER Diagrams/Architecture/Subsystems/Flowcharts/Pseudo codes), object oriented analysis and design, designing structure diagrams (Class/Component/Object) and behavior diagrams



(Activity/Sequence/State Machine). The course also includes concepts of design patterns, deliverables and outcomes of the process of coding and testing, applying installation strategies, issues of providing support for end users, and factors that influence the cost of maintaining an information system. Students will be trained on some latest software tools.

Network Protocols & Ecommerce 326: The course covers the principles underlying the interconnection of different types of networks including Ethernet, cellular transmission, wireless, and infrared. The course focuses on several network protocols that support data communications according to TCP/IP stack. In addition, it explores the electronic commerce technology including: E-Commerce communication protocols, mobile E-Commerce, architecture of web systems, data interchange, electronic payments, and relevant applications tied to EC with appropriate EC suites. Student will be trained on the existing components and products related to Cisco such as wireless networking, switches, routers, etc. in addition with the products, components and software of Heathkit educational systems for wireless networking.

Technical Reports–CIS313: This course is designed to help students develop an effective method of planning and completing writing tasks so that student can meet professional writing demands. Since succeeding in the professional world requires not only technical knowledge but also effective writing skills. This course focuses on the writing skills necessary for advanced academic and professional writing, tailored specifically to student academic career work as professional in a technical field. Successful technical communicators know how to organize and present complex information so that the ideas are understandable to many readers, viewers, and listeners. In this course, students will complete several small technical and recommendation reports on a topic related to IT related majors. Indeed, this course requires intensive writing, reading, and peer commentary.

Professional Responsibility CIS413: This course introduces the students to the legal, social, and ethical issues of information technology and use; information rights, property rights, liability, accountability, privacy, security, crime, ethical principles, codes of ethics, "the digital divide", role of PTTs, role of government, role of law enforcement, role of business and industry; professional conduct, social responsibility, and rigorous standards for software testing and reliability, students read, write, discuss, and present reports on these topics, fraud and abuse, electronic communication privacy, mail fraud, credit card abuse, privacy protection, copyright and patent statute, communication decency, law and computer, software engineering code of ethic, name dispute resolution policy.

Information Systems Management CIS421: This course includes: designing simple requirements model, measurability of non-functional requirements, the process of selecting best alternative design strategies, best practices of designing human interfaces, conventional design approaches (Data Flow Diagrams/extended ER Diagrams/Architecture/Subsystems/Flowcharts/Pseudo codes), object oriented analysis and design, designing structure diagrams (Class/Component/Object) and behavior diagrams (Activity/Sequence/State Machine). The course also includes concepts of design patterns, deliverables and outcomes of the process of coding and testing, applying installation



strategies, issues of providing support for end users, and factors that influence the cost of maintaining an information system. Students will be trained on some latest software tools.

Course Coordination

#	Course Title and Code	Coordinati on	Co-coordination	Undergr ad.	Postgrad .	From	To
1	Communications & Network Fund.	Yes	No	Yes	No	2019	2022
2	Web-based Systems	Yes	No	Yes	No	2020	2020

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
	12	38	2022	2023

Committee Membership

#	From	To	Position	Organization
1	2020	Onwards	Member of Scientific Research Unit	Imam Abdulrahman Bin Faisal University
2	2016	Onwards	Member of Quality Assessment & Exams Unit	Imam Abdulrahman Bin Faisal University
3	2017	Onwards	Member of CIS Curriculum Unit	Imam Abdulrahman Bin Faisal University
4	2018	2019	Member of COOP training unit	

Volunteer Work

#	From	To	Type of Volunteer	Organization
1	2019	2019	Community Service “Aman Project”	Dhahran School
2	2018	2018	Community Service “Mawhiba”	IAU

Last Update

20/10/2022