Kholood Khalid Alnowaiser

Lecturer

Personal Data

Department |Computer Information Systems

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Language Proficiency

Language	Read	Write	Speak
Arabic	Mother Tongue		
English	Excellent	Excellent	Excellent

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
January 2015	Masters of Science in Computer Science	United States	
July 2009	Bachelors of Science in Computer Science	Saudi Arabia	

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Teaching on a contract	Computer Science Department, Science College, University of Dammam	March 2010
Lab TA	Computer Information Systems Department, College of Computer Science and Information Technology, University of Dammam	July 2011
Lecturer	Computer Information Systems Department, College of Computer Science and Information Technology, University of Dammam	June 2016

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	*Faisal Alsaby, Kholood Alnowaiser*	*An Efficient DNA Molecule Clustering using GCC Algorithm*	*GSTF Journal on Computing (JoC), January 2015*

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Communication & Network Fund	CIS 315	Lab TA
2	Network Protocols and E-commerce	CIS 325	Lab TA
3	Human Computer Interaction	CIS 422	Lab TA
4	Distributed & Mobile Databases	CIS 524	Lecturer
5	Data Mining and Warehousing	CIS 517	Lecturer
6	Knowledge Mgmt & Info Retrieval	CIS 525	Lecturer
7	Database Management Systems	CIS 411	Lab TA

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

1	**CIS 315 - Communication & Network Fund:** Fundamentals of data communications: Essential Elements Of Data Communications: Simplex, Half-Duplex and Full Duplex Transmission, Analogue And Digital Signals, Periodic and Non Periodic Signals , Signal Parameters, Time and Frequency Domains Concepts, Types of Channels, Transmission Impairment). Transmission Media: Guided Media, Unguided Media, and Types of Propagation. Basic concepts of networking: network concepts, network criteria, and network applications and benefits. Configurations, topologies and categories of networks: line configuration, network topologies (mesh, star, tree, bus, ring, (LAN, WAN, MAN), internetwork or internet, types of network connection (peer- hybrid), scopes of networks to-peer network, server based network, combined network), intranet and extranet. Introduction to OSI and TCP/IP models: The OSI Model The OSI layers, TCP/IP Protocol Suite. Error detection and correction techniques: VRC, LRC, CRC, Checksum, and Hamming code techniques. Circuit and packet switching. Data link layer control: framing, error control, and flow control. Networking and internetworking devices. Student will be trained on the existing components and product 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.	
2	**CIS 325 - Network Protocols and E-commerce:** This course covers two parts. The first part of the course covers the principles underlying the interconnection of large numbers of computers and includes transmission technologies: Ethernet, optical fiber, gigabit networks, cellular transmission and infrared. This course covers also the network technologies: servers clients, access control, intranets, reliable message passing, and interoperability. The second part of the course covers the electronic commerce technology. Topics include: communication and networking, mobile E-Commerce, and architecture of Web systems, data interchange, electronic payments, and all relevant application tied to EC (virtual stores, electronic government, etc...) with appropriate EC suites relying on appropriate tools like php, asp, asp-net, etc. Student will be trained on the existing components and product 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	
3	**CIS 422 - Human Computer Interaction:** This course provides an overview and introduction to the field of HCI. It introduces students to tools, techniques, and sources of information about HCI and provides systematic approach to design. The course increases awareness of good and bad design through observation of existing technologies, and teaches the basic skills of task analysis, and analytic and empirical evaluation methods. The student will be acquainted	

	with the whole design process: HCI in the design process, design rules, implementation support, evaluation techniques, universal support, etc...He also studies some relevant models and theories: cognitive models, communication models, task analysis, dialog notations and design, modeling rich interaction, etc. Final chapters will cover some alternative realities, multimedia, global information systems, and the Web. Students will also participate in a laboratory where they will practice HCI techniques in an independent, self defined project. Students will be trained on some HCI software like: AlphaUIMS, SuperCard, ISA dialog Manager, InterMaphics.	
4	**CIS 524 - Distributed & Mobile Databases:** This course covers the fundamental topics for distributed and mobile database system. It includes: Distributed data processing, promises of distributed data base systems, complicating factors, The course material includes architectural models for distributed database management system and distributed database management system architecture (Client/Server Systems and Peer-to–Peer distributed systems). Distributed data base design including alternative design strategies, distributed design issues, fragmentation, and allocation. Semantic data control including, view management, data security, and semantic integrity control. Distributed concurrency control, distributed database management system reliability, parallel database systems and distributed object database management systems are introduce. Mobile database including : directory management, cashing, broadcast data, query processing and optimization and transaction management are discussed. Students will be trained on some software tools such as: Oracle, Sybase, DB2, and Informix.	
5	**CIS 517 - Data Mining and Warehousing:** Data mining concepts: why data mining?, cycles of data mining, the various cycles in practice, data mining methodology, measurement of the effectiveness of data mining. It will introduce various data mining techniques: the market based analysis, clustering, link analysis, decision trees, artificial neural networks, genetic algorithms,; data mining and the corporate data warehouses, OLAPs, and choosing the right tool for the job, putting data mining to work. The course introduces also data warehouse concepts: Gradual changes in computing, dynamic reports, data Marts, operational Data stores, and data warehouse cost-benefit analysis. Some other concepts are described such as: Warehousing strategy, warehouse management and support processes, data warehouse planning, data warehouse implementation, data warehouse maintenance and evolution, warehouse applications and warehouse software, and recent warehouse trends. Student will be trained on some well-known data mining software like: Matryx98, Cart, Megaputer PolyAnalyst, KnowledgeAccess, Cognos Power Play.	
6	**CIS 525 - Knowledge Mgmt & Info Retrieval:** This course begins with a brief introduction to Knowledge Management (KM) and its significance in the 21st century. The Knowledge Management concepts covered in this course include: Knowledge Management Cycle, Knowledge Management Models, Knowledge Capture and Codification, and Knowledge Application and Knowledge Management Tools. The second part of this course covers latest development of Information Retrieval (IR), Information Retrieval Modeling, Retrieval Evaluation, Query Languages, Query Operations, Text Operations and Indexing and Searching. As part of this course, students will be trained on some latest software.	
7	**CIS 411 - Database Management Systems:** This course emphasizes on the principal concepts of Database Management Systems (DBMS). The DBMS concepts include: Storing data: disks and files which include the memory hierarchy, RAID, disk space management, buffer management, file and indexes, page formats and record formats; file organization and indexes which introduce cost modeling, comparison of three file organizations, overview of indexes and properties of indexes. Three-structured indexing, hash based indexing and database design security; transaction management which introduce to transactions and schedules, concurrent execution of transaction, lock-based concurrency control and crash recovery. Crash recovery includes introduction to ARIES, recovery from a system crash and media recovery. The course also covers advanced topics such as: Parallel and distributed database including architectures for parallel databases, parallel query evaluation and	

optimization, distributed DBMS architectures, storing data in distributed DBMS, distributed catalog management and query processing, updating distributed data, distributed transactions and concurrency and recovery. As part of this course, students will be trained on some latest database management software.

Administrative Responsibilities, Committee and Community Service
(Beginning with the most recent)

Administrative Responsibilities

#	From	To	Position	Organization
1	August 2015	Current	CIS Coordinator	College of Computer Science and Information Technology

Last Update

11/13/2016