



# Huda Dakhilallah Abdulrahim Althumali

Assistant Professor

## Personal Data

Nationality | Saudi

Date of Birth | 16/1/1988

Department | Computer Science

Official UoD Email | hdalthemaly@iau.edu.sa

Office Phone No. | 013338559

## Language Proficiency

Language	Read	Write	Speak
Arabic	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent
Others	-	-	-

## Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2022	Doctor of Philosophy in Computer Networks	University of Putra Malaysia (UPM)	Selangor, Malaysia
2017	Master's in computer science	University of Putra Malaysia (UPM)	Selangor, Malaysia
2009	Bachelor's in computer science	Taif University	Taif, Saudi Arabia

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

PhD	Random Access Control Schemes for Massive Machine Type Communications in IoT Cellular Networks.
Master	Cost Efficient Scheduling Through Auction Mechanism in Cloud Computing.
Fellowship	-



### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Assistant Professor	Imam Abdulrahman bin Faisal University - Jubail	2023 - now
Lecturer	Imam Abdulrahman bin Faisal University - Jubail	2017 - 2023
Teaching Assistant	Imam Abdulrahman bin Faisal University - Jubail	2011-2017

### Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Deputy of Computer Department	Computer Department	2023 - now
Director of Student Activities Unit	Student Affairs Deanship	2022 -2023

### 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	Huda Althumali, Mohamed Othman, Nor Kamariah Noordin, and Zurina Mohd Hanapi	Priority-based Load-adaptive Preamble Separation Random Access for QoS-differentiated Services in 5G Networks.	Journal of Network and Computer Applications, Elsevier, 2022.
2	Huda Althumali, Mohamed Othman, Nor Kamariah Noordin, and Zurina Mohd Hanapi	Dynamic Tree-Splitting Algorithm for Massive Random Access of M2M Communications in IoT Networks.	IEEE Systems Journal, IEEE, 2021.
3	Huda Althumali, Mohamed Othman, Nor Kamariah Noordin, and Zurina Mohd Hanapi	Opportunities of Hybrid Random Access Protocols for M2M Communications in LTE/LTE-A Networks.	Journal of High Speed Networks, 2021.
4	Huda Althumali, Mohamed Othman, Nor Kamariah Noordin, and Zurina Mohd Hanapi	Dynamic Backoff Collision Resolution for Massive M2M Random Access in Cellular IoT Networks.	IEEE Access, IEEE, 2020
5	Huda Althumali and Mohamed Othman	A Survey of Random Access Control Techniques for Machine-to-Machine Communications in LTE/LTE-A Networks.	IEEE Access, IEEE, 2018
6	Huda Althumali, Masnida Hussin and Zurina Mohd Hanapi	Cost Efficient Scheduling Through Auction Mechanism in Cloud Computing.	Journal of Telecommunication, Electronic and Computer Engineering, 2017



### Refereed Scientific Research Papers Accepted for Publication

#	Name of Investigator(s)	Research Title	Journal	Acceptance Date
1	Shaikha Alhajri, Noura Aljulaidan, Zainab Alramdan, Relam Alkhaldi, Zomord Alshihab, Khaznah Alhajri, Huda Althumali, and Taghreed Balharith	An IoT Based Smart City Model Using Packet Tracer Simulator	11th International Conference of Networks and Communication	2023

### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
-	-	-	-

### Completed Research Projects

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Abeer Alsafraa, Rinad Alghamdi, Ameerah Hazzazi, Wala Al-Sinan, Huda Althumali, Nourah Alqahtani.	Developing Arabic Sign Language Model Using Deep Learning Technique	2023

### Current Researches

#	Research Title	Name of Investigator(s)
1	Players Collision Prediction Model using AI Algorithms.	Huda Althumali, Reem Almualem, May Alotibi, Ghala Alkhaldi, Fida Alelo, Warood Alzaier.

### Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	Saudi High Performance Computing Conference	27 – 29 September 2022 Dammam, Saudi Arabia	Attendance



## Membership of Scientific and Professional Societies and Organizations

- IEEE member (2019 - now)

## Teaching Activities

### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Computer Skills	COMP111	Teaching theoretical and lab lectures.
2	Fundamentals of Programming	CS 221	Teaching lab lectures.
3	Communications & Network Fundamentals	CIS315	Teaching theoretical lectures.
4	Object Oriented Programming	CS 311	Teaching lab lectures.
5	Project Proposal	CS 511	Supervisor.
6	Artificial Intelligence	ARTI 401	Teaching lab lectures.
7	Project Implementation	CS 521	Supervisor.
8	Computer Graphics and Application	ARTI 558	Teaching lab lectures.
9	Mobile Computing	CS513	Teaching theoretical lectures.
10	Advanced Programming Language	CS516	Teaching theoretical and lab lectures.

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

1	<b>Computer Skills (COMP111):</b> Introduction to Computer skills is designed to familiarize students with computers and their applications.
2	<b>Fundamentals of Programming (CS 221):</b> The course is designed to teach students some advanced topics in programming.
3	<b>Communications &amp; Network Fundamentals (CIS 315):</b> The course introduces the principles and theory of all the network layers in OSI and TCP/IP models.
4	<b>Object Oriented Programming (CS 311):</b> The course provides students with fundamental knowledge of object oriented programming (OOP).
5	<b>Project Proposal (CS 511):</b> In this course, students choose a project subject and define the objectives of the project under the supervision of a faculty member and prepare the project proposal.
6	<b>Artificial Intelligence (ARTI 401):</b> This course provides a general introduction to AI, fundamental concepts and techniques underlying the construction of intelligent agents.
7	<b>Project Implementation (CS 521):</b> Project implementation course offers students an opportunity to assemble their knowledge acquired throughout their BS curriculum to realize a final project.
8	<b>Computer Graphics and Application (ARTI 558):</b> This is course introduces students to the technical concepts behind creating synthetic computer-generated images.
9	<b>Mobile Computing (CS513):</b> This course presents the development of the mobile computing technology from fixed networks to wireless network.



10 **Advanced Programming Language (CS516):** This course presents the concept and design of different programming languages such as Python, Prolog and Lisp.

### Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)

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

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### Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Post grad.	From	To
1	Communication and Network Fundamentals	✓		✓		1 Sept. 2022 & 28 Aug 2023	30 Nov. 2022 & 31 Dec 2023
2	Mobile Computing	✓		✓		1 Dec 2022	28 Feb 2023
3	Advanced Programming Language	✓		✓		12 March 2023	16 June 2023

### Guest/Invited Lectures for Undergraduate Students

#	Activity/Course Title and Code	Subject	College and University or Program	Date



### Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Seventh	30	2013	2014
2	Seventh	35	2012	2013
3	Fourth	17	2022	now

### Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
-	-	-	-	-

### Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
1	Bachelor	Players Collision Prediction Model using AI Algorithms.	Imam Abdulrahman bin Faisal University- College of Science and Humanities	2023

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

#### Administrative Responsibilities

#	From	To	Position	Organization
1	2013	2014	Community Service Coordinator for Computer Science Department	College of Science and Humanities - Imam Abdulrahman bin Faisal University



2	2013	2014	Technical Club Leader	College of Science and Humanities - Imam Abdulrahman bin Faisal University
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### Committee Membership

#	From	To	Position	Organization
1	2023	Now	Member in Facalties load Committee of Computer Science Department	College of Science and Humanities - Imam Abdulrahman bin Faisal University
2	2023	Now	Member in Projects Committee of Computer Science Department	College of Science and Humanities - Imam Abdulrahman bin Faisal University
3	2023	Now	Member in the Scientific Committee of Computer Science Department	College of Science and Humanities - Imam Abdulrahman bin Faisal University
4	2022	Now	Member in Courses Committee of Computer Science Department	College of Science and Humanities - Imam Abdulrahman bin Faisal University
5	2022	Now	Member in Postgraduate Studies Committee of Computer Science Department	College of Science and Humanities - Imam Abdulrahman bin Faisal University
6	2012	2014	Member in Schedules Committee of Computer Science Department	College of Science and Humanities - Imam Abdulrahman bin Faisal University

### Scientific Consultations

#	From	To	Institute	Full-time or Part-time
-	-	-	-	-



### Volunteer Work

#	From	To	Type of Volunteer	Organization
1	22 March 2023	23 March 2023	Organizing “My blood for my homeland” campaign.	College of Science and Humanities - Imam Abdulrahman bin Faisal University
2	10 April 2023	11 April 2023	Organizing “Do not throw your computer” initiative.	College of Science and Humanities - Imam Abdulrahman bin Faisal University
3	15 May 2023	30 May 2023	Organizing the Computer Department Projects Exhibition.	College of Science and Humanities - Imam Abdulrahman bin Faisal University

### Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Time Management Skill.
2	Team Management Skill.
3	Computer Skills (Matlab – Latex – Python – Microsoft Office – E-learning Applications – Visual Basic – C++, Java)
4	Writing, publishing and revising the scientific researches.

Last Update

29/10/2023