



## Zainab Ali Khalaf

**Date of birth:** 18/05/1974 | **Nationality:** Iraqi | **Phone number:** (+964) 7721161869 (Mobile) |

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**Address:** University of Basrah, College of Education for Pure Sciences, Basrah, Iraq (Work)

### ABOUT ME

Zainab A. Khalaf received her B.Sc. and M.Sc. degrees in Computer Science from the University of Basrah, Iraq. Moreover, she received her Ph.D. degree in artificial intelligence from the University of Universiti Sains Malaysia (USM) in 2015. She was awarded a TWAS fellowship to complete her Ph.D. Currently, she is working as a professor at the University of Basrah where she has taught different topics in computer science fields. She participated and presented in many training workshops, conferences, and symposiums. Her research interests include computer vision applications, natural language processing, and data mining. She has published many manuscripts in prestigious journals and conferences internationally and locally. She is certified by Agence Universitaire de la Francophonie (AUF) in e-learning courses and she is also certified by the Ministry of Higher Education & Scientific Research in modern teaching methodology.

### WORK EXPERIENCE

01/04/2022 – CURRENT Basrah

**PROFESSOR, COMPUTER SCIENCE DEPARTMENT, COLLEGE OF EDUCATION FOR PURE SCIENCES, UNIVERSITY OF BASRAH, IRAQ.**

01/11/2018 – 01/11/2022 Basrah, Iraq

**HEAD OF CONSULTATION OFFICE FOR COMPUTER AND INFORMATION SYSTEMS, UNIVERSITY OF BASRAH, IRAQ.**

01/10/2021 – 01/10/2022 Basrah, Iraq

**VICE DEAN FOR SCIENTIFIC AFFAIRS AND POSTGRADUATE STUDIES, COLLEGE OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY, UNIVERSITY OF BASRAH, IRAQ.**

02/11/2015 – 01/10/2018 Basrah, Iraq

**HEAD OF COMPUTER SCIENCE DEPARTMENT, COLLEGE OF SCIENCE, UNIVERSITY OF BASRAH, IRAQ.**

### EDUCATION AND TRAINING

01/08/2011 – 01/08/2015 Penang, , Malaysia

**PH.D. IN COMPUTER SCIENCE** School of Computer Sciences, Universiti Sains Malayisa (USM), Penang, Malaysia, 2015.

**Website** <https://cs.usm.my/>

Basrah, , Iraq

**M.SC. IN COMPUTER SCIENCE**, Computer Science Dept., University of Basrah

**Website** <https://en.eng.uobasrah.edu.iq/>

Basrah, Iraq

**B.SC. IN COMPUTER SCIENCE** Computer Science Dept., University of Basrah



**LANGUAGE SKILLS**

Mother tongue(s): **ARABIC**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

**DIGITAL SKILLS**

Microsoft Office | Video Conferencing (Zoom, Teams, Skype, Webex) - Advanced | Python (PyROOT, RDataFrame; ML: Keras, TensorFlow) | LaTeX (very good) | Data Science | Data Collection, Data Processing, Data Analysis, Data Visualisation | Html, Java, CSS | Machine Learning, NLP | Deep Learning (Tensorflow, Pytorch(basic), Jax/Flax(basic) ) | • Application programming and Artificial Intelligence (Machine Learning/Neural Network)

**PUBLICATIONS**

2025

**[A Survey Of Fingerprint Identification System Using Deep Learning](#)**

Hussein G. Muhammad and Zainab A. Khalaf, International Journal of Computing and Digital Systems, 17(1), 2025International Journal of Computing and Digital Systems

2024

**[Control system design for azimuth position of earth station antennas](#)**

Auday Al-Mayyahi, Ammar Aldair, Zainab A Khalaf, William Wang,Journal of Engineering and Applied Science

2024

**[Airplane Detection Using Deep Learning Based on VGG and SVM](#)**

Zainab A Khalaf, Auday Al-Mayyahi, Ammar Aldair, Phil Birch ,Tikrit Journal of Engineering Sciences, 2024

2024

**[Volve Oil Field S-Wave Log Data Prediction Using GBR and MLPR](#)**

AG Fadhil, HM Ali, ZA Khalaf, M Ahmed, SH Ahmed Iraqi Journal of Science, 2264-2274

2024

**[Fingerprint Identification System based on VGG, CNN, and ResNet Techniques](#)**

Hussein G Muhammad, Zainab A Khalaf, Basrah Researches Sciences, 2024

2024

**[A survey study in Object Detection: A Comprehensive Analysis of Traditional and State-of-the-Art Approaches](#)**

Marwa A Hameed, Zainab A Khalaf, Journal of Basrah Researches (Sciences), 2024

2023

**[Optimizing Neural Network Efficiency by Neuron Pruning](#)**

AG Fadhil, HM Ali, ZA Khalaf Basrah Journal of Sciences 41 (3), 419-435

2023

**[Using Genetic Algorithm for DNA Profile Matching](#)**

NS Jabir, ZA Kahlaf J. Basrah Res.(Sci.) 49 (1), 13-22



2023

**Design and Implementation of a 3RRR Parallel Planar Robot**

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A Aldair, A Al-Mayyahi, ZA Khalaf, C Chatwin

2022

**Coronavirus disease 2019 detection using deep features learning.**

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ZA Khalaf, SS Hammadi, AK Mousa, International Journal of Electrical & Computer Engineering

2021

**Diagnosis, Treatment and Classification of COVID-19 Disease by Complete Blood Test**

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ZAK Qutaiba Mohammed Al Dulaimi, Biochemical and Cellular Archives 21 (1), 1211-1216

2020

**Geological model Construction for Yamama Formation at Faihaa Oil Field-South of Iraq.**

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ZJ Younis Al-Aani, FM Al-Najm, ZA Khalaf Basrah Journal of Science

2020

**Measuring the Impact of Using Different Tools on Classification System Results**

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ZA Khalaf, ZM Jawad Journal of Physics: Conference Series 1591 (1), 012025

2020

**Review of different combinations of facial expression recognition system**

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FA Abd\_Almuhsen, ZA Khalaf Journal of Physics: Conference Series 1591 (1), 012020

2020

**THE COMBINATION OF TEXT CLASSIFICATION SYSTEM**

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ZM Jawad, ZA Khalaf Journal of Basrah Researches (Sciences) 46 (1)

2018

**FILTERING APPROACH AND SYSTEM COMBINATION FOR ARABIC NEWS CLASSIFICATION.**

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ZA Khalaf, KA Hassan Journal of Theoretical & Applied Information Technology 96 (14)

2014

**BASRAH: an automatic system to identify the meter of Arabic poetry**

---

M Alabbas, ZA Khalaf, KM Khashan Natural Language Engineering 20 (1), 131-149

● **CONFERENCES AND SEMINARS**

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01/09/2009 IEEE, 1<sup>st</sup> Conference on Computer Technologies and Applications, Babylon, Iraq, pp. 41-44, 2009.

**A comparison of the prosody studies and methods**

---

01/10/2011 IEEE, International Conference on Asian Language Processing (IALP), Penang, Malaysia, 2011.

**BASRAH: Arabic Verses Meters Identification System**

---

01/06/2013 Dubai, UAE

**The BASRAH System: A Method for Spoken Broadcast News Story Clustering**

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2012 4th International Conference on Electronics Computer Technology (ICECT 2012), pp. 116-120, 2012.

**MAHER: A Clustering System for Analyzing Spoken Broadcast News**

---

2013 Poland, pp. 577 - 584, 2013.

**Automatic Identification of Broadcast News Story Boundaries using the Unification Method for Popular Nouns**

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2015 Malacca, Malaysia, 2015

**A System Combination for Malay Broadcast News Transcription**

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2015 (ChinaSIP 2015), China, pp. 353- 357.

**A Grapheme and Phone Rescoring Combination System for Malay Broadcast News Recognition**

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● **HONOURS AND AWARDS**

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2013

**LDC award as best proposal to get a copy of 1996 English Broadcast News Transcripts (HUB4) (LDC97T22) – University of Pennsylvania.**

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2010

**TWAS-USM fellowship to complete Ph.D. in Malaysia. – TWAS, Italy**

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● **RESEARCH INTERESTS**

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○ **Artificial intelligence**

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**Computer vision and machine learning**

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**Deep Learning**

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**Data Mining and Text mining**

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**Multimedia application**

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**Image Processing**

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**Natural language processing**

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**Biometrics recognition**

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**Object detection**

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**Signal processing**

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