Saad Al-Azawi

Bio

I'm a professor, working at Department of Computer Engineering, College of Engineering, University of Diyala. My BSc degree was from of University of Baghdad, College of Engineering, Department of Electrical Engineering. I got an MSc Degree in Electronic and Communication Engineering from College of Engineering, Al-Mustansiriya University. Also, I got a PhD degree in Electronic Engineering from Newcastle university, UK, 2013. My research interests are: Designing and implementation of Image processing algorithms and architectures, Data Transforms architectures, Parallel architectures. Further, I have great interest and experience in Database system analysis and design using MS-Access, SQL, Java and C-Sharp, and Web development using ASP.net. I, also, have an experience in Macros coding in MS-Excel and Access using VBA.

Personal Information

Academic degree: **Professor Scopus ID:** 36614945900 **Researcher ID:** O-2328-2016

ORCID : 0000-0003-2475-3499

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Nationality: Iraqi

Email: saad.m.alazawi@gmail.com and saad.alazawi@uodiyala.edu.iq

Website: www.uodiyala.edu.iq
License: Iraqi Driving License.

Postal address: Department of Computer Engineering, College of Engineering, Diyala

University, Baquba City, Diyala Province, Iraq.

Professional Strength and Skills

Microsoft Office, Word, Excel, Power Point and Access

- Matlab: Coding and Simulink
- Xilinx ISE Design Suite
- Spice
- Electronics Workbench
- Visual Basic
- Java
- Foxpro
- MySQL Workbench
- Java Netbeans

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- C#
- Asp.net
- Database Analysis and Design

Educational Qualifications

• PhD Degree in Electronic Engineering, Newcastle University, UK (2013).

Thesis Title: Efficient Architectures for multidimensional Data Transforms in Image and Video Applications.

- M.Sc. Degree in Electrical Engineering (Electronic and Communication), Electrical Engineering Department, College of Engineering, Al-Mustansiriya University, Iraq.
- **B.Sc. Degree** in Electrical Engineering, Electrical Engineering Department, College of Engineering, University of Baghdad, Iraq

Memberships and Academic positions

- Head of Computer Engineering Department College of Engineering Diyala University 2020 2021
- Head of Electronic Engineering Department College of Engineering Diyala University 2016 –
 2020
- Department Coordinator Computer Engineering Department College of Engineering Diyala University since 2007 - 2009.
- Member of Iraqi Engineers Union (IEU) since 1993 till now.

Training and Courses

- IEEE Signal Processing Society Summer School on High Performance DSP and FPGA implementation of Signal Processing Systems, School of Electronics, Electrical Engineering and Computer Science, Queen's University of Belfast, Belfast, UK, 20th-24th August 2012.
- The DSP Primer, Xilinx University Program, Rutherford Appleton Laboratory, UK, 10th-11th May 2012.
- Xilinx/EUROPRACTICE Partial Reconfiguration Workshop, Rutherford Appleton Laboratory, UK, 13th-14th September 2011.
- Introduction to FPGA Design using Xilinx, Rutherford Appleton Laboratory, UK, 23th-24th September 2009.
- Several workshops during my PhD study at Electrical and Electronic School, Newcastle University, UK, 2009-2013.

Languages

• English: Excellent

• Arabic: Mother Language.

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Employment History (Academic & Technical)

Currently

• Lecturer (Physics) at the Department of Computer Engineering, College of Engineering, University of Diyala.

2020-2021

Head of Computer Engineering Department, College of Engineering, University of Diyala

2016-2020

- Head of Electronic Engineering Department, College of Engineering, University of Diyala .
- Lecturer (Digital Image Processing) at the Department of Electronic Engineering, College of Engineering, University of Diyala .

2014-2017

- Lecturer (Electronic Engineering) at Computer and Software Engineering Department, College of Engineering, Diyala University.
- Lecturer for PhD students (Computer Fundamentals) at College of Physical Education and Sport Science, Diyala University.
- Member of the Scientific Committee, Computer and Software Engineering Department, College of Engineering, Diyala University.

2013-2014

- Lecturer (Electronic Engineering and Computer Networks) at Computer and Software Engineering Department, College of Engineering, Diyala University.
- Member of the Examination Committee, Computer and Software Engineering Department, College of Engineering, Diyala University
- Member of the Scientific Committee, Computer and Software Engineering Department, College of Engineering, Diyala University

2013

• Laboratory demonstrator (Digital Electronic and Advanced Modulation and Coding) in EEE School, Newcastle University, UK.

2009-2013

• PhD student at Electrical and Electronic School, Newcastle University, UK

2007 - 2009

- Department Coordinator of Computer and Software Engineering Department, College of Engineering, Diyala University.
- Lecturer (Analogue Communication, Computer Networks and Digital Image processing) in Computer and Software Engineering Department and Electronic Engineering Department, College of Engineering, Diyala University.

2000 - 2007

• Lecturer (Electronic Physics and Analogue Communications), Computer and Software Engineering Department, College of Engineering, Al-Mustansiriya University.

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1998-2000

• Lab Demonstrator, Computer and Software Engineering Department, College of Engineering, Al-Mustansiriya University.

2000-2002

• Member in *Eng. Consultancy Bureau-Al-Mustansiriya Univ*. College of Eng. Unit of Computer and Software(Software Eng.). During this period, this unit has implemented several software projects in engineering and database fields.

2000-2005

• Member in computers maintenance unit of College of Engineering, Al-Mustansiriya University.

1997-2000

• MSc Student at Electrical Engineering Department, College of Engineering, Al-Mustansiriya University, Baghdad, Iraq

Reviewer and referee

Reviewer:

- 1. IEEE Transactions of Parallel and Distributed System
- 2. IEEE Transactions on Circuits and System for Video Technology
- 3. IEEE Transactions on Circuits and System II
- 4. IET Image Processing
- 5. Diyala Journal of Engineering Sciences

Membership of journal editorial board

- IEEE Society 2006. No: 85025442
- Member of Iraqi Engineers Union (IEU) since 1993 till now.

Published Research Papers

Journals

No	Title of research	Journal name	Publisher or hosting	ISSN
1.	Ahmed Raad Raheem, Wisam A Mahmood, LaythKamil Almajmaie, Saad Albawi, Saad Alazawi, Oguz Bayat, "Software Architecture Recovery with the ArRTool"	Design Engineering		
2.	Ahmed K. Jameil*, Yasir Amer Abbas and Saad Al-Azawi, "Low Power and High-Speed Sequential Circuits Test Architecture"	Recent Advances in Computer Science and Communications		2666-2558
3.	Ahmed K. Jameil, Yasir Amer Abbas, Saad M. Al-Azawi, Saad Albawi, Test Mode for FIR Filter Design Using FPGA	Journal of Advanced Research in Dynamical and Control Systems		1811-1817

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4.	Salah H. Alkurwy, Saad M. Al- Azawi, Noor A. Al Darraji, FPGA Implementation of FIR Filter Design Based on Novel Vedic Multiplier	International Review on Modelling and Simulations		1974-9821
5.	Saad Al-Azawi, Omar Nibouche, Said Boussakta, Gaye Lightbody, New fast and area-efficient pipeline 3-D DCT architectures	Digital Signal Processing	Elsevier	1051-2004
6.	Saad Q. Fleh, Oguz Bayat, Saad Al- Azawi, Osman N. Ucan, Social Touch Gesture Recognition Using Convolutional Neural Network	Computational Intelligence and Neuroscience	Hindawi	1687-5265
7.	Saad Q. Fleh, Oguz Bayat, Saad Al- Azawi, Osman N. Ucan, A Systematic Mapping Study on Touch Classification	IJCSNS International Journal of Computer Science and Network Security Vol. 18 No. 3 pp. 7-15		1738-7906
8.	S. Al-Azawi, Low-Power, Low-Area Multi-level 2-D Discrete Wavelet Transform Architecture	Circuits Syst Signal Process (2017). doi:10.1007/s00034-017- 0553-2	Springer Science	1531-5878
9.	A. E. Abdelkareem, Saad Mohammed Saleh, and Ammar D. Jasim, "Design and Implementation of an Embedded System for Software Defined Radio"	International Journal of Electrical and Computer Engineering (IJECE), Vol. 7, No. 6, December 2017, pp. 3484 – 3491		2088-8708
10.	S. Al-Azawi, K. A. Humood, and A. H. Saleh, "An Efficient Image Compression Algorithm For Bayer-Pattern Images"	Journal of Engineering and Development vol. 19, Issue 3, pp. 50-61, May, 2015	College of Engineering, Al-Mustansiriya University	
11.	K. A. Humood, S. Al-Azawi, and W. N. Ad. Abed, "Design of 2x4 Alamouti Transceiver Using FPGA,"	International Journal of Engineering Research and Technology, vol. 3, Issue 11, pp. 1726-1735, November, 2014.		
12.	S. Al-Azawi, S. Boussakta, and A. Yakovlev, "Image compression algorithms using intensity based adaptive quantization coding,"	American Journal of Engineering and Applied Sciences, vol. 4, issue 4, pp. 504-512, January, 2012		

Conferences

No	Conference	Paper title	Proceeding or journal name
1	2018 International Conference on Advanced Science and Engineering (ICOASE)	Yasir Amer Abbas, Razali Jidin, Norziana Jamil, Muhammad Reza Z'aba, Saad Al-Azawi, Small Footprint Mix-Column Serial for PHOTON and LED Lightweight Cryptography	
2	2018 1st International Scientific Conference of Engineering Sciences - 3rd Scientific Conference of Engineering Science (ISCES)	Adham Hadi Saleh; Kamal Mohammed Saleh; Saad Al-Azawi, "Design and simulation of CRC encoder and decoder using VHDL"	

3	International Conference on Engineeringand Technology-2017 by IARES (ICET'2017)	Saad Albawi, Tareq Abed Mohammed, Saad Al- Azawi, "Understanding of a Convolutional Neural Network"	
4	The Second Engineering Scientific Conference-College of Engineering, Diyala Univesity, Diyala Journal of Engineering Sciences, vol. 8, Issue 4, pp. 593-500, Dec., 2015	Saad Al-Azawi, Ammar A. Abedelkareem, " Low Complexity Multilevel 2-D DHWT Architecture	
5	9th International Symposium in Communication Systems, Networks and Digital Signal Processing (CSNDSP), 2014, 2014, pp. 804-808	S. Al-Azawi, Y. A. Abbas, and R. Jidin, "Low complexity multidimensional CDF 5/3 DWT architecture"	
6	IET Conference on Image Processing (IPR), 2012, pp. 1-6.	S. Al-Azawi, S. Boussakta, and A. Yakovlev, "High precision and low power DCT architectures for image compression applications,"	
7	in 7th International Workshop on Systems, Signal Processing and their Applications (WOSSPA), 2011, pp. 131-134	S. Al-Azawi, S. Boussakta, and A. Yakovlev, "Low complexity image compression algorithm using AMBTC and bit plane squeezing	
8	in Communication Systems Networks and Digital Signal Processing (CSNDSP), 2010 7th International Symposium on, 2010, pp. 811-815.	S. Al-Azawi, S. Boussakta, and A. Yakovlev, "Performance improvement algorithms for colour image compression using DWT and multilevel block truncation coding	

For more information visit the following links of Social and Scientific media

Research Gate https://www.researchgate.net/profile/Saad_Al-Azawi3

Acadimeca.edu a https://uodiyala.academia.edu/SaadAlazawi

Google Scholar Mttps://scholar.google.co.uk/citations?user=n8JuNxsAAAAJ&hl=en

Linkedin in https://www.linkedin.com/in/saad-al-azawi-80827352/

Publons https://publons.com/author/1198588/saad-al-azawi#profile

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