

Heriot-Watt University Dubai Campus

Staff profile

DETAILS	TO BE FILLED IN BY STAFF MEMBER
Name	Amin Z Sadik
Designation	Dr
Role (including modules taught)	Teaching Fellow – EPS/ Electrical and Electronic Engineering Modules Taught: <ol style="list-style-type: none"> 1. Digital Design and Programming/ 1st year 2. Digital Design and Programming/ 2nd year 3. Electromechanical Systems/ 2nd year 4. Computer Architecture and Embedded Systems/3rd year 5. Mathematics 1 / 1st year
Telephone number	04 361 6983
Email address	A.Sadik@hw.ac.uk
School Duties	Teaching
Research Interests	Digital Signal Processing and Digital Communications
Academic Biography	Amin Z. Sadik received the B. Sc. (1983) and M. Sc. degrees (1988) in electrical engineering from the University of Baghdad (Iraq) and Baghdad University of Technology (Iraq), respectively. He has finished his PhD (Digital signal Processing) at the School of Electrical and Computer Engineering, RMIT University, Melbourne, Australia. From 1989 to 1995, he was a researcher at the Scientific Research Council, also a part-time lecturer in the School of Electrical Engineering, University of Technology, Baghdad (Iraq). From 1995-2001 he was an academic staff member/Deputy Head of Dept. of Electrical Engineering at the University of Salahaddin, Erbil (Iraq), and from 2001-2004 he was a lecturer at the University of Al-Balqa (Jordan). He worked as a Research Fellow and then as a Senior Research Fellow in RMIT University and Queensland University of Technology (QUT), respectively. He is an IEEE member, a reviewer in Elsevier Journal on Applied Signal Processing, and a Technical Program Committee member (TCP) in International IEEE Conference on Advanced Technologies for Communications 2008 (ATC 2008). He received four awards among which are “Best paper Award” in IEEE TENCON 2005/Australia and DSP Creative Design Contest 2006/Taiwan. He has been selected for Who's Who in Science and Engineering, 10th Anniversary Edition, 2009. Currently, he is a Teaching Fellow in the School of Engineering and Physical Sciences/Heriot-Watt University-Dubai campus. His research interests include digital signal processing (particularly, adaptive systems and image compression) and digital communications.
Key publications	

1. Amin Z. Sadik and Peter J. O'Shea, "Realization of Ternary Sigma-Delta Modulated Arithmetic Processing Modules," *Eurasip Journal on Applied Signal Processing*, vol. 2009, no. 12, doi:10.1155/2009/574627, 2009.
2. Amin Z. Sadik, Z. M. Hussain, and P. O'Shea, "An Adaptive Algorithm for Ternary Filtering," *IEE Electronic Letters*, vol. 42, issue 7, pp. 420-421, March 2006.
3. Amin Z. Sadik, Zahir M. Hussain, Xinghuo Yu, and Peter O'Shea, "An Approach for Stability Analysis of A Single-Bit High-Order Digital Sigma-Delta Modulator," *Elsevier Journal on Digital Signal Processing*, vol. 17, no. 6, pp. 1040-1054, 2007.
4. Amin Z. Sadik, Zahir M. Hussain, and Peter O'Shea, "A Multiplierless DC-Blocker for Single-Bit Sigma-Delta Modulated Signals," *Eurasip Journal on Applied Signal Processing*, vol. 2007, pp. 18361, 2007.
5. Amin Z. Sadik, Zahir M. Hussain, and Peter O'Shea, "DC Cancellation in the Single-Bit Domain Using Ternary Filtering," *International Journal of Electronic*, vol. 95, no. 11, pp 1167-1180, 2008.
6. Khaizuran Abdullah, Noura Al-Hinai, Amin Z. Sadik, and Zahir M. Hussain, "Circular 16-QAM Modulation Scheme for Wavelet and Fourier Based OFDM Systems," *Proceedings of the 5th IEEE Gulf Cooperation Council Conference & Exhibition (IEEE – GCC 2009)*, Kuwait, 17-19 Mar. 2009.
7. Noura Al-Hinai, Amin Z. Sadik, and Zahir M. Hussain, "Transmission of Compressed Image over PLC Channel: A Comparative Study," *Proceedings of the 5th IEEE Gulf Cooperation Council Conference & Exhibition (IEEE – GCC 2009)*, Kuwait, 17-19 Mar. 2009.
8. Khalifa S. Al-Mawali, Amin Z. Sadik, and Zahir M. Hussain, "Time-Domain Techniques for Impulsive Noise Reduction in OFDM-Based Power Line Communications," *International Conference on Communication, Computer and Power (ICCCP'09)*, Muscat, Oman, 15-18 Feb. 2009.
9. Arun K. Gurung, Fawaz S. Al-Qahtani, Amin Z. Sadik, and Zahir M. Hussain, "Power Savings Analysis of Clipping and Filtering Method in OFDM Systems," *IEEE Australian Telecommunication Networks and Applications Conference (ATNAC'08)*, Adelaide, 2008.
10. Darshan Thakkar, Amin Sadik and Zahir Hussain, "An FPGA-Based Digital Class-D Amplifier Using Short Word-length," *IEEE Australian Telecommunication Networks and Applications Conference (ATNAC'07)*, New Zealand, 2007.
11. Amin Z Sadik, Xinghuo Yu, and Zahir M Hussain, "An Approximate Analysis for the Dynamics of Sigma-Delta Systems," *IEEE Australian Telecommunication Networks and Applications Conference (ATNAC'07)*, New Zealand, 2007.
12. Amin Z. Sadik and Zahir M. Hussain, "Short-Word Length LMS Filtering," *IEEE*

	<p>International Symposium on Signal Processing and its Applications 2007 (ISSPA 07), UAE, Sharjah, February 12-15, 2007.</p> <p>13. Amin Z. Sadik and Zahir M. Hussain, "Two-Bit LMS-Like Adaptive Filtering," IEEE Australian Telecommunication Networks and Applications Conference (ATNAC'06), Melbourne, Australia, 2006.</p> <p>14. Amin Z. Sadik and Zahir M. Hussain, "Limit cycle Investigation in a Ternary Structure," IEEE TENCON, Hong Kong, 2006.</p> <p>15. Amin Z. Sadik and Zahir M. Hussain, "New DSP Using Short-Word Length," Proceedings of Digital Signal Processing Creative Design Contest (DSPCDC'2006), Tainan, Taiwan, Nov. 2006.</p> <p>16. M. M. AlKaisi, A. Z. Sadik, "A three dimensional design approach for a-Si:H multi-junction devices," Proceedings of the 21st IEEE Photovoltaic Specialists Conference, Florida, 1990.</p>
<p>Other Interests</p>	

* If required, please attach photo as a separate image file.