

Academic Curriculum Vitae



Personal Information:

Full Name: **Diary R. SULAIMN**

Academic Title: **Professor**

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Education:

- PhD, Electrical Engineering Department, Engineering College, , Salahaddin University-Hawler, Erbil, Kurdistan Region, IRAQ, 2015.
Dissertation: A Combined Threshold Hopping and Voltage Scaling for Power Reduction in Microprocessors
- M.Sc., Electrical Engineering Department, Engineering College, , Salahaddin University-Hawler, Erbil, Kurdistan Region, IRAQ, 2005.
Thesis: Dynamic Voltage Frequency Scaling For CPU Power Reduction.
- B.Sc., Electrical Engineering Department, Engineering College, Salahaddin University-Hawler, Erbil, Kurdistan Region, IRAQ, 1990.

Employment:

- 1992-1995 Lab Engineer, Basic EE Lab, Dept. of EE at SUH.
- 1995-1997 Lab Engineer, Electronics EE Lab, Dept. of EE at SUH.
- 1997-1999 Teaching Assistant, Basic EE Lab, Dept. of EE at SUH.
- 1999-2001 Lab supervisor and Teaching Assistant, Electronics EE Lab, Dept. of EE at SUH.
- 2001-2003 Research Assistant, the Project's Lab, Dept. of EE at SUH.
- 2003-2005 M.Sc. Student, Dept. of EE at SUH.
- 2005-2008 Assistant Lecture, Dept. of EE at SUH.
- 2008-2012 Lecturer, Dept. of EE at SUH.
- 2012- 2018 Assistant Professor, Dept of EE at SU.
- 2012- up to date Professor, Dept of EE at SU.

Qualifications

- IELTS 6.
- Pearson Test of English -PTE: 48
- CCNA1, CISCO Network Academy, Kurdistan Regional Academy, IRAQ
- Lab supervisor and Teaching Assistant, Electronics EE Lab, Dept. of EE at SU.
- Assistant Lecture, Dept. of EE at SUH.
- Lecturer, Dept. of EE at SUH.
- Assistant Professor, Dept of EE at SU.
- Professor, Dept of EE at SU.

Teaching experience:

- Courses, trainings, lab supervision, etc.,
- Embedded Systems, PhD course, Dept. of EE at SUH.
- Advanced Digital ICs, PhD course, Dept. of EE at SUH.
- Advanced Optimization Techniques, PhD Course, Dept. of EE at SUH.
- Modern Optimization Techniques, MSc Course, Dept. of EE at SUH.
- Computer Architecture & Organization, MSc Course, Dept. of EE at SUH.
- Advanced Mathematics, MSc Course, Dept. of EE at SUH.
- Numerical Analysis, MSc Course, Dept. of EE at SUH.
- Numerical Analysis, MSc Course, Dept. of EE at SUH.
- Fundamentals of Electrical Engineering and Circuits, Dept. of EE at SUH.
- Engineering Mathematics II, Dept. of EE at SUH.
- Digital Electronics & Design II, Dept. of EE at SUH.
- Computer Architecture & Organization, Dept. of EE at SUH.
- Computer Networks, Dept. of Computer, College of Science, Soran University, IRAQ
- Computer Networks & Communications, Dept. of Computer, College of Education, Soran University, IRAQ
- Advance Digital Design, Dept. of Computer, College of Science, Soran University, IRAQ
- Computer Architecture, Dept. of Computer, College of Science, Soran University, IRAQ
- Digital Systems, Dept. of Refrigeration & Air Cooling, Technical College, Erbil, Technical University, Erbil, IRAQ
- Digital Devices and Systems, Dept. of Computer, College of Engineering, Koya, Erbil, IRAQ.
- CCNA1, CISCO Network Academy, Kurdistan Regional Academy, IRAQ
- CCNA2, CISCO Network Academy, Kurdistan CISCO Regional Academy, IRAQ

Research and publications

- Diary R. sulaiman, Ibrahim I. Hamarash, Muhammed A. Ibrahim, Dynamic Voltage Frequency Scaling (DVFS) for Microprocessors Power and Energy Reduction., 4th international conference on electrical and electronics engineering ELECO'05, Bursa, Turkey, 7-11 December 2005.
- Diary R. sulaiman, Design and analysis of phase locked loops, Journal of pure and applied science, Salahaddin university-Hawler, Vol. 18, No. 2, Iraq, 2006.
- Diary R. Sulaiman, A Combined hardware-Software Approach for CPU Energy Reduction Using Dynamic Voltage Scaling Technique, 2nd Jordanian International Conference on Computer Science and Engineering (JICCSE2006), 5-7 December, 2006, AL-Balqa' Applied University, Al-Salt, Jordan.
- Diary R. sulaiman, Using A Combined hardware-Software Approach for CPU Energy Reduction Using Dynamic Voltage Scaling Technique, International conference on Conference on Digital Communications and Computer Applications DCCA'07, Amman, Jordan, 19-22 March 2007.
- Diary R. sulaiman, A 2.2 GHz - 2.9 V charge pump phase locked loop design and analysis, 5th international conference on electrical and electronics engineering ELECO' 07, Bursa, Turkey, 5-9 December 2007.
- Diary R. sulaiman, The solar energy conversion system: design and analysis, International Conference on Sustainable Energy, Technologies, Materials, and Environmental Issues, Cairo, Egypt, October 29- November 1, 2007.
- Diary R. sulaiman, Using clock gating technique for energy reduction in portable computers, International conference on computer and communication engineering ICCCE' 08, Kuala Lumpur, Malaysia, 13-15 may 2008.
- Diary R. Sulaiman, Microprocessors Leakage Power Reduction Using Dual Supply Voltage Scaling, 5th International Advanced Technologies Symposium (IATS'09), May 13-15, 2009, Karabuk, Turkey, 2009.
- Diary R. Sulaiman, Hilmi F. Amin, Ismail K. Said, Design of High Efficiency DC-DC Converter for Photovoltaic Solar Home Applications, The International Conference on Renewable Energies ICRE'2010, April 5 – 8, 2010 Damascus, Syria.
- Diary R. Sulaiman, Hardware Based: Dynamic Branch Prediction for Microprocessors Energy Reduction in Portable Systems, International Journal of Engineering Studies, ISSN: 0975- 6469, Vol.2, No.2, Pp 223-235, June 2010.
- Diary R. Sulaiman, Microprocessors Thermal Challenges for Portable and Embedded Systems Using Thermal Throttling Technique, The International Conference on Information Technology WCIT'2010, October 6-10, 2010 Istanbul, Turkey.
- Diary R. Sulaiman, Aree A. Muhammad, Design High Efficiency PWM Boost Converter for Wind Power Generation, Journal of Electrical and Electronics Engineering, Vol.3, No.2, October 2010.

- Hilmi F. Amin, Ismail K. Said, Diary R. Sulaiman, Total harmonic reduction of Wound Rotor Induction Motor (WRIM) Chopper Resistance Control Using Three Phase Boost Rectifier in Rotor, Zanco journal of Pure and Applied Sciences,, Salahaddin University-Hawler, Vol 2, No 3, 2010.
- Diary R. Sulaiman, Hilmi F. Amin, Ismail K. Said, Design of High Efficiency DC-DC Converter for Photovoltaic Solar Home Applications, Journal of Energy and power engineering, Vol 4, No 11, November 2010.
- Diary R. Sulaiman, The 3rd Order Phase Locked Loops (PLLs) Analysis, Design, and Simulation, The 1st Scientific Research Conference on Technical Education, December 1-2, 2010, Duhok, Kurdistan region, Iraq.
- Diary R. Sulaiman, Microprocessors Thermal Challenges for Portable and Embedded Systems Using Thermal Throttling Technique, ELSEIVER Procedia Computer Science Journal, Vol 3, 2011.
- Diary R. Sulaiman, ANN Based DBP for Microprocessors Power Reduction, Journal of Computer Science and Control Systems, ISSN: 1844- 6043, Vol.4, No.1, Pp 173-178, May 2011.
- Diary R. Sulaiman, A 902-928 MHz PLL Design and Simulation for Biomedical Applications, The 5th International Conference on Information Technology, ICIT'2011, May 11-13, 2011, Amman, Jordan.
- Diary R. Sulaiman, Using PTL Configuration For Power Aware Portable Design, The 4th International Scientific Conference of Salahaddin University-Erbil (SU-ERBIL2011), October 18-20, 2011, Erbil, Kurdistan, IRAQ.
- Diary R. Sulaiman, Thermal Reduction in Portable Systems Using DVS Technique, Advance Electromagnetic Symposium, AES'2012, 16 – 19 April 2012, Paris – France.
- Diary R. Sulaiman, Microprocessor's Power and Temperature Management Using Voltage and Frequency Control Technique, Zanco Journal of pure and applied science, Salahaddin university-Hawler, Vol. 24, No. 2, Iraq, 2012.
- Diary R. Sulaiman & Bestoon S. Ahmed, Using the combinatorial optimization approach for DVS in high performance processors, International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (TAECE), Konya, Turkey, 2013.
- Jalil Aziz Hamadamin, Diary R. Sulaiman, Arazoo M. Aziz, The Antenna Electrical Downtilt Improvement for KOREK_TELECOM GSM Mobile Station in Erbil City (IRAQ), International Journal of Communications Antenna and Propagation "IRECAP", Vol 4, No.1, Praise Worthy Prize, 2014.
- Diary R. SULAIMAN, Mustafa M. MUSTAFA, and Muhammed A. IBRAHIM, Temperature Aware Design for High Performance Processors, International Conference on Information Technology (ICIT2015), Amman, Jordan, 2015.
- Diary R. SULAIMAN, Ibrahim I. Hamarash, and Muhammed A. IBRAHIM, Microprocessors optimal power dissipation using combined threshold hopping and voltage scaling, IEICE Electronics Express, IF:0586, Volume 14 Issue 24, 2017.

- Diary R. SULAIMAN, Ibrahim I. Hamarash, and Muhammed A. IBRAHIM, Adaptive supply and body voltage control for ultra-low power microprocessors, IEICE Electronics Express, IF:0586, Volume 14 Issue 12, 2017.
- Diary R. SULAIMAN, Ibrahim I. Hamarash, and Muhammed A. IBRAHIM, Using DTVS Technique for Microprocessor's Power and Thermal Management, Journal of Electrical and Electronics Engineering (JEEE), Vol.11, No.1, may 2018.
- Goran W. Hamaali, Power and thermal management in SRAM and DRAM using adaptive body biasing technique, IEICE Electronics Express, IF:0586, Volume 16 Issue 19, 2019.
- Diary R. Sulaiman, The Complete Switching Circuit Design for CPU Joint Body Biasing and Supply Voltage Scaling, ZANCO Journal of Pure and Applied Sciences 31 (s3), 2019.
- Diary R. SULAIMAN 22 nm SRAM Design for Ultra-Low Power (ULP) Applications, Journal of Electrical and Electronics Engineering (JEEE), Vol.14, No.1, may 2021.
- Khalid Abduljabbar, GORAN W. HAMAALI & Diary R. Sulaiman, OPTIMIZATION OF REAL TIME IMAGE SEGMENTATION USING EFFICIENT THRESHOLDING TECHNIQUE, ZANCO Journal of Pure and Applied Sciences, Vol. 34 No. 5 (2022).
- Jwan M. Ali & Diary R. Sulaiman, Performance Analysis of Multicore Processors Using Multi-Scaling Techniques, International, Journal of Electrical and Computer Engineering (IJECE), Accepted for publication. 2022.
- Roshna A. Muhammed & Diary R. Sulaiman, Particle Swarm Optimization (PSO) Based MPPT controller Modeling and Design of PV Modules, Majlesi Journal of Electrical Engineering, Accepted for publication. 2022.
- Miaad A. Salih & Diary R. Sulaiman, Throughput and energy Efficiency Evaluation for WSN using efficient routing Protocols, University of Thi-Qar Journal for Engineering Sciences, VOL 13, No.1, 2023.
- CCNA1, CISCO Network Academy, Kurdistan CISCO Regional Academy, IRAQ.
- CCNA2, CISCO Network Academy, Kurdistan CISCO Regional Academy, IRAQ.

Conferences and courses attended

- 4th international conference on electrical and electronics engineering ELECO'05, Bursa, Turkey, 7-11 December 2005.
- 2nd Jordanian International Conference on Computer Science and Engineering (JICCSE2006), 5-7 December, 2006, AL-Balqa' Applied University, Al-Salt, Jordan.
- International conference on Conference on Digital Communications and Computer Applications DCCA'07, Amman, Jordan, 19-22 March 2007.
- 5th international conference on electrical and electronics engineering ELECO' 07, Bursa, Turkey, 5-9 December 2007.
- International Conference on Sustainable Energy, Technologies, Materials, and Environmental Issues, Cairo, Egypt, October 29- November 1, 2007.
- International conference on computer and communication engineering ICCCE' 08, Kuala Lumpur, Malaysia, 13-15 may 2008.

- 5th International Advanced Technologies Symposium (IATS'09), May 13-15, 2009, Karabuk, Turkey, 2009.
- The International Conference on Renewable Energies ICRE'2010, April 5 – 8, 2010 Damascus, Syria.
- International Journal of Engineering Studies, ISSN: 0975- 6469, Vol.2, No.2, Pp 223-235, June 2010.
- The International Conference on Information Technology WCIT'2010, October 6-10, 2010 Istanbul, Turkey.
- 5th International Conference on Information Technology, ICIT'2011, May 11-13, 2011, Amman, Jordan.
- The 4th International Scientific Conference of Salahaddin University-Erbil (SU-ERBIL2011), October 18-20, 2011, Erbil, Kurdistan, IRAQ.
- Advance Electromagnetic Symposium, AES'2012, 16 – 19 April 2012, Paris – France.
- International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (TAEECE), Konya, Turkey, 2013.
- International Journal of Communications Antenna and Propagation "IRECAP", Vol 4, No.1, Praise Worthy Prize, 2014.
- International Conference on Information Technology (ICIT2015), Amman, Jordan, 2015.

Professional memberships

- [Institution of Engineering and Technology \(IET\)](#)
- [The Institute of Electronics, Information, and Communication Engineers \(IEICE\)](#)
- [International Association of Computer Science and Information Technology](#)
- [Engineering and Technology Publishing \(ETPub\)](#)
- [International Association of Engineers - IAENG](#)
- [Iraqi Engineers Union](#)
- [Kurdistan Engineering Syndicate \(KES\)](#)
- [Kurdistan Teachers Union](#)
- [Universal Association of Computers & Electronics Engineers \(UACEE\)](#)

Professional Social Network Accounts:

- Academic Website: <https://academics.su.edu.krd/diary.sulaiman>
- ORCID: <https://orcid.org/0000-0002-4966-4970>
- Web of Science: <https://www.webofscience.com/wos/author/record/1989438>
- Scopus: <https://www.scopus.com/authid/detail.uri?authorId=14027787300>
- Google Scholar: https://scholar.google.com/citations?user=6eWuZ_kAAAAJ&hl=en
- LinkedIn: <https://www.linkedin.com/in/diariy-sulaiman/>