

## Curriculum Vitae



### Prof. Adel Gaafar Abd Elrahim Mohamed Salih

#### PERSONAL DETAILS

<b>Surname</b>	Adel Gaafar Abd Elrahim Mohamed Salih				
<b>Title</b>	Professor				
<b>Gender</b>	Male				
<b>Address</b>	241 Hay Elmittar., Port Sudan, Sudan				
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<b>Mobile</b>	+249912287541			<b>Email</b>	adelgaafar2010@gmail.com
<b>Date of birth</b>	Day 7	Mo 9	Yr 1973	<b>Place of birth</b>	Port Sudan, Sudan

#### EDUCATION

<b>School/College/University/Other</b>	<b>Degree obtained</b>	<b>Dates (from-to)</b>
Electrical Engineering Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt.	Ph.D. in Electrical Engineering	2007-2011
Electrical Engineering Department, Faculty of Engineering, Khartoum University, Khartoum, Sudan.	M.Sc. in Electrical Engineering	2002-2005
Electrical Engineering Department, Faculty of Engineering, Khartoum University, Khartoum, Sudan.	B.Sc. in Electrical Engineering	1993-1998

## **EMPLOYMENT HISTORY**

<b>Employer</b>	<b>Position</b>	<b>Dates (from-to)</b>
Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Faculty Dean	Feb 2014- Oct 2019
Director of the General Administration of Information Technology	Red Sea University	Nov 2023 - present
Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Vice Dean	2012-2014
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Head of the Electrical Engineering Department	2005-2007
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Professor	2022-Present
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Associative Professor	2014-2022
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Assistant Professor	2011-2014
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Academic Advisor	2011 - Present
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Head of the Electrical and Electronics Engineering Department	2005-2007
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Lecturer, Academic Advisor	2005-2007
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Research Assistant	2007-2011
Electrical and Electronics Engineering Department, Faculty of Engineering, Red Sea University, Port Sudan. Sudan.	Research Assistant	1999-2005

### **University Activities and Experience:**

<b>Activity</b>	<b>Dates (from-to)</b>
Chair of First International Conference on Engineering and Applied Sciences (ICEAS 2017).	7-9 March2017
Head of Editorial Board of Engineering and Information Technology Journal (JEIT) – Red Sea University.	Jan 2019- present
Member of the Committee for the Research Chairs at Ministry of Higher Education and Scientific Research.	2016-2020.
Member of the Committee for the Technology Incubator at Ministry of Higher Education and Scientific Research.	2017-2020
Member of the Red Sea University Senate.	2012-2019
Member of the Board of Deans at the University of the Red Sea.	Feb 2014- Oct 2019
Member of the Board of Research at the University of the Red Sea	Feb 2014- Oct 2019
Member of the Council of Technical and Development Studies, Red Sea University.	Feb 2014 - Oct 2019
Member of the University Examinations Committee.	Feb 2014- Oct 2019
Member of the Committee to review the University Regulations for Academic staff Promotion.	2016
Member of the Committee to review the University Postgraduate Regulations.	2016
Member of the Committee of Curriculums, Red Sea University.	2014- Oct 2019
Head of the Council in Faculty of Engineering, Red Sea University.	Feb 2014 - Oct 2019
Head of the Research Council in Faculty of Engineering, Red Sea University.	Feb 2014 - Oct 2019
Head of the Committee for the development of Faculty of Engineering Curriculums.	2013-2015
Head of the Faculty Examinations Committee.	2006-2007
Head of the Committee for the establishment of Nano Center Research.	2016
Head of the Committee for the Preparation of the program of Master of Communication and Networks Engineering in Electrical and Electronics Dept. Faculty of Engineering.	2015 -2016
Member of the consultant council for Water Desalination Plant Incubator of Red Sea University (Funded by Ministry of Higher Education and Scientific Research).	2018- Oct 2019
Electronics and Communication Labs Supervisor.	2011-2016

## **MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS**

<b>Professional body</b>	<b>Level of membership</b>	<b>Year of Award</b>
IEEE		2011-Now
Sudan Engineering Council.		2000-Now
Sudan Engineering Society.		2000-Now

## **FIELDS OF INTEREST**

- Telecommunication Networks.
- Mobile systems.
- AdHoc networks
- Sensor Networks.
- Digital Image Processing.
- Cognitive Radio Networks.
- Network Security.
- Switching and teletraffic engineering
- Design of Digital Electronics Circuits.

## **TEACHING COURSES (Graduate Level and Undergraduate level):**

- Data Communication.
- Telecommunication Networks.
- Fiber Optics
- Communication Systems.
- Digital Signal Processing.
- Analog Communication.
- Digital communication.
- Cognitive Radio Networks.
- Advanced Modern Communications.
- Advanced Computer Networks.
- Wireless and Mobile Networks.

- Wireless Sensor Networks.
- Microprocessors Systems.
- Computer Architecture.
- Antenna and Radio propagation
- Information Theory.
- Mobile Communication.
- Digital Design.
- Signals and Systems.
- Assembly Language.
- Computer Application (MatLaB).

### **Graduation Project Supervision:**

- Supervision of more than 35 Graduation Projects for B.Sc. level and Diploma level.
- Supervision of two Ph. D. Thesis.
- Supervision of three Fulfillment M. Sc. Thesis.
- Supervision of eight Partial Fulfillment M. Sc. Thesis

### **Computer Experiences and Skills**

- Operating System: Linux, and windows
- Programming Languages: MatlaB, NS-2, PASCAL, C, C++, Visual BASIC, PHP
- Prewritten software: Word-processing, spread sheets, etc.
- Web Site Management and Design.
- Many Open Source Software Applications.

### **Languages**

- Arabic, Mother Language.
- English.

## **PUBLICATIONS :**

1. Adel Gaafar, Hussein A. Elsayed, Salwa H. Elramly, and Magdy M. Ibrahim, “An Energy Aware Routing Protocol for Mixed Static and Mobile Nodes in Wireless Sensor Networks”, SpringSim'11, 14th Communications and Networking Symposium (CNS'11), April 4 - 9, 2011, Boston, MA, USA.
2. Adel Gaafar A.Elrahim, Hussein A. Elsayed, Salwa H. Elramly, and Magdy M.Ibrahim, “An Energy Efficient Routing Protocol Approach for Wireless Sensor Networks”, In IEEE Proceedings of the 8th International Conference on Computer as a Tool (EuroCon and ConfTele), April. 2011, Lisbon, Portugal.
3. Adel Gaafar A.Elrahim, “Energy Aware Routing Protocol for Low Energy Sensor Networks”, In IEEE Proceedings International Conference on Computing, Electrical and Electronic Engineering (ICCEEE 2013).
4. Adel Gaafar, Hussein A. Elsayed, Salwa H. Elramly, and Magdy M.Ibrahim, “Performance Evaluation of Energy Efficient Routing Protocols for Wireless Sensor Networks” International Conference on Signals, Systems and Automation ICSSA-2011, January 24-25, 2011 Vallabh Vidyanagar, India.
5. Adel Gaafar, Hussein A. Elsayed, Salwa H. Elramly, and Magdy M.Ibrahim, “Energy Efficient Congestion Control Operation in WSNs” In IEEE Proceedings of 2011 International Conference on Computer Engineering & Systems ICCES'2011, pp 41-46, Nov.30 - Dec.1, 2011, Cairo, Egypt.
6. Adel Gaafar, Hussein A. Elsayed, Salwa H. Elramly, and Magdy M. Ibrahim, “An Energy Aware WSN Geographic Routing Protocol”, Universal Journal of Computer Science and Engineering Technology, pp 105-111, Nov. 2010.
7. Adel Gaafar A.Elrahim, Hussein A. Elsayed, Salwa H. Elramly, and Magdy M.Ibrahim, “A new Routing Protocol for Mobility in Wireless Sensor Networks”, Cyber Journals: Multidisciplinary Journals in Science and Technology, Journal of Selected Areas in Telecommunications (JSAT), February Edition, 2011.

8. Adel Gaafar A.Elrahim, "A survey of Gognitive Radio Networks", INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND TELECOMMUNICATIONS (IJCST), November Edition, 2014.
9. Adel Gaafar A.Elrahim, "Performance Comparison of Two On-demand Routing Protocols for WSNs", Red sea University Journal, 2013.
10. Adel Gaafar A.Elrahim, Hussein, "EAGRP: Energy Aware Geographic Routing Protocol for Wireless Sensor Networks", International Journal of Computer Science and Telecommunications (IJCST), ISSN 2047-3338, 2014.
11. Adel Gaafar A.Elrahim, "Energy Efficient Congestion Control Operationin WSNs", International Journal of Enhanced Research in Science Technology & Engineering (IJERSTE), ISSN: 2319-7463, 2014.
12. Adel Gaafar A.Elrahim, "A survey for Cognitive Radio Networks", International Journal of Computer Science and Telecommunications (IJCST), ISSN 2047-3338, 2014.
13. Adel Gaafar A.Elrahim, "Geographical and Energy Aware Routing Protocol for Wireless Sensor Networks", International Journal of Enhanced Research in Science Technology & Engineering (IJERSTE), ISSN: 2319-7463, 2014.
14. Adel Gaafar A.Elrahim, "Geographical and Energy Aware Routing Protocol for Wireless Sensor Networks", International Journal of Enhanced Research in Science Technology & Engineering (IJERSTE), ISSN: 2319-7463, 2014.
15. Adel Gaafar A.Elrahim, "Geographical and Energy Aware Routing Protocol for Wireless Sensor Networks", International Journal of Enhanced Research in Science Technology & Engineering (IJERSTE), ISSN: 2319-7463, 2014.
16. Adel Gaafar A.Elrahim, Zeinab kamal "Evaluation of Reactive and Proactive Routing Protocols for MANET", International Journal in IT and Engineering, Impact Factor- 4.747 (IJITE), ISSN: 2321-1776, 2015.
17. Adel Gaafar A.Elrahim, Nada Mohammed, Elmustafa Sayed Ali, "Energy Detector Forms" , Red sea university Journal of Basic and Applied Science), ISSN: ISSN: 1858 -7690, 2016.

18. Adel Gaafar A.Elrahim, Zeinab kamal, "Performance Evaluation Comparison of RIP, IGRP, EIGRP,and OSPF routing protocols in UMTS" , Red sea university Journal of Basic and Applied Science), ISSN: ISSN: 1858 -7690, 2016.
19. Adel Gaafar A.Elrahim, Nada Mohammed, "New Optimization Method for cooperative spectrum sensing based improved double threshold energy detection" , Red sea university Journal of Basic and Applied Science), ISSN: 1858 -7690, 2017.
20. Adel Gaafar A.Elrahim, Zeinab kamal, "Design of heterogeneous networks UMTS/MANET " , Red sea university Journal of Basic and Applied Science, ISSN: 1858 -7690, 2017.
21. Adel Gaafar A.Elrahim, Rasha Eltayeb, "Cognitive Improved AODV Routing Protocol for Cognitive Radio Adhoc Network", International Journal of Innovative Studies in Sciences and Engineering Technology (IJISSET), 2017.
22. Adel Gaafar A.Elrahim, kaather mohamedelhafiz, "Space-Time Block Coding (STBC) in MIMO systems of wireless network", Red sea university Journal of Basic and Applied Science, ISSN: 1858 -7690, accepted for publication March 2020.
23. Adel Gaafar A.Elrahim, saadabi DMM, and Saied HFI, None-Invasive Brain –Computer Interface Technology (BCI) Modalities and Implementation : A Review Article and Assimilation of BCI Models.”, Annals of Advanced Biomedical Sciences, ISSN: 2641-9459.Vol 4 issue 2, July 2021.
24. Adel Gaafar A.Elrahim, Fatima Ali, “Performance Comparison of routing protocols in Vehicular Ad hoc Networks”, Sinar University Journal, 2021.