# Curriculum Vitae

Objective

Seeking a Biomedical engineer position, to utilize my skills and education in a fast paced and challenged environment.

Education

* **Master of Science, Biomedical Engineering Oct 2011 - Jan 2014**

Biomedical Engineering Department, Cairo University, Egypt

Thesis Title: “Computer Aided Diagnosis System for Digital Mammography”

Overall Grade Point Average (GPA): 3.5/4

* **Bachelor of Science, Biomedical Engineering Oct 2004 - Oct 2009**

Sudan University of Science and Technology, Sudan

Graduation Project Title: “Nurse Calling System”

Overall Grade Point Average (GPA): 3.08/4, First Class

***Relevant Courses:***

Digital Design I,II Electrical Measurements

Analogue Electronics I,II Medical Instrumentation Technology I,II

Medical Instrumentation I,II Medical Imaging Equipment

Radiation Protection Quality Assurance and Reliability

Work Experience

* **Biomedical Engineer Dec 2015 - Jan 2016**

*Center Khartoum (RICK), Sudan*

Gained a good knowledge in the following equipment:

* Cobalt 60 Machine
* Gamma Camera
* Linear Accelerator Machine
* X-ray Simulator
* Fluoroscopy
* Mammography
* Conventional X-ray
* **Biomedical Engineer Nov 2009 - Nov 2010**

*Ribat University Hospital, Sudan*

**Responsibilities:**

* Adjust, maintain, repair, or provide technical support for biomedical equipment (ICU, Operating Room, Sterilization, Hemodialysis equipment and other medical equipment in the hospital).
* Evaluate the safety, efficiency, and effectiveness of biomedical equipment.
* Keep documentation of service histories on all biomedical equipment.
* Train clinicians and other personnel on the proper use of equipment.

Training & Certificates

* **Jan 2016** **Effective Healthcare Technology Management & Planning workshop**, Healthcare Skills Training Institute, GE Healthcare, Dubai.
* **June 2011 The Academic Test of English as a Foreign Language**, The Center for Foreign Languages and Professional Translation, Cairo (583 Marks).
* **March 2010** **Medical Equipment Diagrams Tracing and Analysis**, Sudanese Training Centre For Medical Devices Technology, Khartoum.
* **May 2006** **First AID In The Community**, Sudanese Red Crescent Society, Khartoum.

Skills

* **Personal Skills**
* Advanced problem-solving skills and excellent communication skills.
* Good attention to details.
* Able to work under pressure.
* Willingness to knowledge and skills improvement on an ongoing basis.
* Able to work effectively with team from various disciplines and educational backgrounds.
* **Computer Skills**
* Microsoft office (Word, Excel and PowerPoint).
* Proteus and Multisim for electronic circuit simulation.
* Matlab Programming.
* SPSS for statistical analysis.
* **Languages**
* Arabic - Native fluency.
* English - Advanced fluency.

Projects

* **Computer Aided Diagnosis System For Digital Mammography**

Developed CAD system for screening mammography to classify suspicious regions in the breast to mass or normal region with accuracy equal to 96%.

* **Thickness Correction of Peripheral Breast Tissue in Mammograms**

Implemented two image enhancement algorithms to enhance the peripheral area of the breast region in mammograms and compared between them using a mammogram database.

* **Automatic Pectoral Muscle Segmentation in Mammograms**

Implemented and compared between two of the popular image segmentation techniques used for pectoral muscle segmentation.

* **Nurse Calling System**

Designed a nurse calling system to help the nurse identifying the patient and location of the call using electronic circuit composed of infrared transmitter and receiver.

Textbooks

* **Mohamed Elmanna** and Yasser Kadah, ”*Computer Aided Diagnosis System for Digital Mammography”*, Scholars' Press, Germany, 2015. (ISBN: 978-3-639-76388-1)

Conference Publications

* **Mohamed Elmanna** and Yasser Kadah, “Implementation of Practical Computer Aided Diagnosis System for Classification of Masses in Digital Mammograms”, International Conference on Computing, Control, Networking, Electronics and Embedded Systems Engineering (ICCNEEE 2015), Khartoum, Sudan, pp. 336 – 341, 2015.

Achievements & Other Activities

* Top of class in the undergraduate.
* Achieved GPA above 3.00 for eight semesters in the undergraduate.
* Reviewed the development of computerized maintenance management system (CMMS) to satisfy the biomedical engineering department needs in Ribat University Hospital.

Personal Profile

**Date of Birth :** 18th Nov, 1987

**Nationality :** Sudanese

**Religion :**  Muslim

**Marital Status :**  Single

**First Name of Application CV No:** **1654848**

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