

# **CURRICULUM VITAE**

# Eng.: Awad Khalafalla Hamadnalla Hassan

Office Address : Bayan College for Science & Technology

Khartoum, Sudan, P.O.Box 210

Postal code: 11111

Telephone: 475309-ext: 113

Marital Status : Married

**Telephone (mobile)** : (00249) 12953406

E-mail : awad kh@hotmail.com

**Date of Birth** : 12<sup>th</sup> December 1974

Nationality : Sudanese

#### **EDUCATION AND QUALIFICATIONS**

2002-2004 : Msc. In Computer Engineering\_

**Sudan University** 

of Science and Technology

#### Msc. Project

A theoretical and practical project in system on chip (SoC) using CPLD. The project includes analysis of a digital systems as a case and then an AHDL code was written for each integrated in the system using **MaxPlusII** text editor to create default symbols . Then by using **MaxPlusII** graphical editor the symbols were going to be connected together create equivalent SoC. Finally by using **DNL3** software the design was loaded into the CPLD IC through the serial port of the PC. Then the design was be tested on a testing and gave good results.

\* The project presentation is under progress

Msc. Subjects

Semester One

- Computer Interface Design .
- Assembly Language .
- AI and Expert Systems .
- Microprocessor -based Systems Design .
- Probability and Stochastic Process.

#### Semester Two

- Advanced Computer Architecture
- VLSI Circuits.
- Computer Networks.
- Information Storage Systems
- Information Theory.

1999-2002 Sudan University of Science and Technology

# B. Eng. (Hon.) Computer Engineering\_ (Second Class Division One)

#### **Year-5 (Final Year Project)**

A theoretical study and analysis project in the internetworking technologies entitled 'MPLS over IP'. The MultiProtocol Label Switching (MPLS) is defined by the Internet Engineering Task Force (IETF) as standard-based approach to combine the benefits of switching technologies with the benefits of IP routing technologies .

The project is focused on the applicability of MPLS in the network layer and studying the MPLS through its architecture components , signaling protocols , label distribution procedures , traffic engineering ( TE ) and quality of service ( QoS ) .

## **Honours Subjects**

#### Semester One

- Computer Architecture I .
- Computer Networks .
- Introduction to AI and Expert Systems.
- Software Engineering .
- Data Base
- Engineering Projects Management .

#### Semester Two

- Computer Architecture II.
- VLSI Circuits.

- Networks Operating Systems .
- Object-Oriented Programming.
- Information and Encoding Theory.

## **Year-4 Subjects**

#### Semester One

- Sequential Circuits Design.
- Assembly Language Programming.
- C Language & Systems Programming.
- Electromagnetic Waves Propagation.
- English Language VI.
- Numerical Analysis.

## Semester Two

- Modern Communication Systems.
- Data Communication Systems.
- -Digital & Microprocessors Systems Design.
- Operating Systems.
- Computer Applications II (Visual Basic) .
- Engineering Economics.

# **Year-3 Subjects**

#### Semester One

- Digital Electronic Circuits.
- Analog Electronic Circuits.
- Electronic Measurement.
- Computer Applications I (Pascal).
- Mathematics V.
- English Language V.

#### Semester Two

- Microprocessors Systems.
- Communication Engineering.
- Measurements Systems.
- Automatic Control Theory & Systems.
- Probability & Statistics.

1995-1998 Sudan University of Science and Technology Electronics Engineering Diploma (Second Class Division Two)

# **Diploma Project**

A hardware interface project entitled 'Interfacing Audio to PC '. The main objective of this project is to design and implement a customized card to interface Audio signals to the PC, in order to take advantage of using the software available in the PC for storing, Processing, and regeneration of the audio signals. An assembly language program is written to control ADC and DAC to convert the audio signal to digital form, store it into the computer memory and regenerate it back(by converting it to analog form again using DAC).

## **Diploma Subjects**

### **Year-3 Subjects**

- Microelectronics.
- Communication Engineering.
- Electric Measurement II.
- Radio & Television II.
- Electronics II.
- Power Electronics.
- Computer Applications (Basic).
- English Language.
- Arabic Language.

## **Year-2 Subjects**

- Radio & Television I.
- Electronics I.
- Electric Measurement I
- Electric Engineering Principles II.
- Electric Machines.
- Electric Technology.
- Mathematics.
- English Language.
- Arabic Language.

## **Year-1 Subjects**

- Electric Engineering Principles I.
- Electric Systems.
- Mech. Engineering Principles.
- Engineering Technology.
- Engineering Drawing Systems.
- Workshop Practice.
- Mathematics.
- English Language.
- Arabic Language

### SHORT COURSES

A short course in computer eng. Microcomputers, Microcontrollers, PLCs, PLDs and SoC in K&H training center in Taiwan.

#### **SKILLS AND INTERESTS**

**Computing** : A good Knowledge of Basic, Pascal, C, and

80X86 Assembly and a medium Knowledge of Visual Basic and Java programming languages. Also I have a good Knowledge of ORCAD And ELECTRONIC WORKBENCH and

a medium Knowledge of PSPICE and MATLAB

Simulation software.

Beside a good Knowledge of using Microsoft Operating systems such as DOS and WINDOWS (Win9x, WinNT, Win2000, WinXP and WinME).

**Languages** : Fluent English and Arabic written and spoken .

**Sports**: I enjoy playing football regularly.

#### PRACTICAL EXPERIENCE

Academic Years: 1998, 1999 : Joined Karrary Academic of Technology as

a part-timer technician in the department of

Electric

Engineering at the faculty of Engineering. I was

involved in electronics circuits practical.

Academic Years: 1999,2000 :Joined Al Bayan College for Science & Technology

as a full-timer technician in the department of Electronic Systems Engineering. My work involved in managing the Electronics Laboratory and teaching a number of practical and simulation subjects

( dc electric circuits, digital and analog

electronic

2001, 2002

circuits).

**Academic Year : 2001** : Joined the International University of Africa

as a part-timer teaching assistant in the

of Computer Science at the faculty of Computer

Studies. I was involved in digital circuits

simulation.

department

Academic Year : 2002 : Joined the International University of Africa as a part-timer teaching assistant in the

department

of Mathematics and Computer at the faculty Pure and Applied Sciences . I was involved in assembly

language programming practical.

Academic Year: 2001-2002 :Joined Sudan University of Science and Technology

as a part-timer teaching assistant in the

department

of Electronics Engineering at the College of

Engineering . I was involved in sequential

circuits

practical and simulation.

Academic Year: 2002 and till now :Joined Sudan University of Science and Technology

as a full-timer teaching assistant in the

department

of Electronics Engineering at the College of

Engineering . I was involved in sequential

circuits

practical and simulation, and microprocessors

**Systems** 

and assembly language practical.

Academic Year:2002-2004 : Promoted at Al Bayan College for Science &

Technology to a full-timer teaching assistant

in the Electronic Systems Engineering

department.

I was involved in microprocessors Systems and

assembly language practical.

: Promoted at Al Bayan College for Science & Academic Year:2004 and till now

Technology to a full-timer Lecturer in the

department Electronic Systems Engineering. I was involved in teaching computer engineering

courses (Microprocessors Systems, Assembly Language, and computer Interfacing methods).

I was involved also in teaching the practical of these

courses.

**Personal Design**: :During my stay in Al-Bayan, I have supervised

and Supervision students for designing, implementing and testing

a number of electronic projects:

- Two digits BCD counter.

- Digital Watch Simulation .

- Interfacing Traffic Lights to PC.

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Other Jobs:

: Also During my stay in Al-Bayan College
I have create a suitable computer engineering
laboratory, that covers the practical of the advanced
computer engineering subjects. Beside that I helped in
developing the syllabus of the Electronic Systems
Engineering department. Nowadays I'm a member
in the committee of developing the syllabus of the
biomedical engineering department in our college
(new department).

People to Refer to :

# - Dr. Osama Abd Alwahab Rais:

Sudan University of Science and Technology College of Engineering

**Head of Electronics Engineering department** 

### - Dr. Abd Alrasul Jabar :

Sudan University of Science and Technology College of Engineering

**Electronics Engineering department** 

#### - Dr. Amar Hassan Khames :

Al Bayan College for Science & Technology Academic Trustship

## - Lec. Ibrahem Saeed:

Sudan University of Science and Technology College of Engineering

**Electronics Engineering department** 

## - Lec. Mokhtar Albanna:

Sudan University of Science and Technology College of Engineering

**Electronics Engineering department** 

## - Lec. Luai Farog :

Al Bayan College for Science & Technology Head of Electronic Systems Engineering Department