

Holds a B. Sc. in Communication & Electronics Engineering and has about 8 years hands-on experience, including 1 year working as Automation Engineer and 7 years as Teaching Assistant.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 05/08/1987
Gender : Male
Residence : Maadi, Cairo

EDUCATION

: B. Sc. in Communication & Electronics Engineering, Thebes Academy for Engineering, 2009
: Currently working on M. Sc. in "PID Controller Adaptation Using Fuzzy Model Reference Algorithm and its Application to Non-Linear Systems", Ain Shams University
: Maadi Secondary School, 2004

LANGUAGES

Arabic : Native Language
English : Fluent

COMPUTER SKILLS

: Windows, MS Office (Word, Excel), Internet
: MiKro.C for AVR
: MiKro.C for PIC
: Arduino IDE
: MATLAB, Simulink
: Wincc Explorer
: Simatic Manager
: Quartus
: ModelSim
: Visual Basic

TRAINING COURSES AND CERTIFICATIONS

: Microcontroller - Micro.C for PIC (Cairo University).
: Microcontroller - Micro.C for AVR (Cairo University).
: Arduino.

- : MATLAB, Simulink (Cairo University)
- : VHDL (Cairo University).
- : PLC (Jeilecom Company).
- : Analog and Digital Control Systems (Cairo University).
- : Verilog (Cairo University).
- : GSM (Jeilecom Company).
- : GPRS (Jeilecom Company).
- : UMTS (Jeilecom Company).
- : CDMA (Jeilecom Company).
- : VOIP (Cairo University).
- : OFDM (Cairo University).

CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Apr. 2012 till now
- Employer** : Thebes Academy for Engineering
- Job Description** : Teaching Assistant in:
- PLC.
 - Automatic Control.
 - Logic Circuit Design.
 - Electronics.
 - Electronic Measurements.
 - Coding Theory.
 - Satellite Comm.
 - Optical Fiber.
 - Field Theory.

- Dates** : From May 2011 till Apr. 2012
- Employer** : Asec Automation
- Job title** : Automation Engineer
- Job Description** :
- South Valley Cement Plant – Egypt / Beni Suef (from May till Oct. 2011): Programming of a number of the planet sectors + Making the whole As Built documents of the Plant.
 - TITAN Cement Plant – Egypt / Beni Suef (from Oct. 2011 till Jan. 2012): Handling of FAT, Programming of a few numbers of the Planet sectors + Studying the existing and As Built drawings and Re-Document them as well.
 - BMIC Cement Plant – Egypt / Assiut (from Jan. till Apr. 2012): Site Survey and studying existing P&ID and As Built drawings, Plant commissioning, start-up activities & troubleshooting.

- Dates** : From Oct. 2009 till May 2011
- Employer** : Thebes Academy for Engineering
- Job Description** : Teaching Assistant in:
- PLC.
 - Automatic Control.
 - Logic Circuit Design.

- Electronics.
- Electronic Measurements.
- Coding Theory.
- Satellite Comm.
- Optical Fiber.
- Field Theory.

Projects:

- Design and implementation of Quadcopter using Arduino Due and a group of sensors:
 - BMP085 to measure altitude through pressure measurement.
 - MPU9150 which contain Accelerometer, Gyro and Compass sensors and these sensors used to control the balancing of the quadcopter through a closed loop controller which based of Adaptive PID controller which has K_p , K_d and K_i values will be adapted according to the sensors values.
 - Ultrasonic sensor to make the quadcopter able to avoid any obstacle in front of it.
 - XBee module works as a communication method between the quadcopter (Flying station) and the laptop as a ground station.
- Home Automation design and implementation using Arduino Mega:
In this project, I controlled the lighting of the home rooms and the garage door through Arduino and group of sensors:
 - Ultrasonic sensor working as proximity sensor.
 - Infrared Sensor.
 - PIR sensor to detect motion.
 - Keypad and servomotor to open the garage door when the combination entered through the keypad is correct.