

# Ahmed Hussein Abdelaziz Hamed

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Military Status: Exempted



## Career Objective

A position utilizing my leadership skills, presentation skills and self-learning experience, my proven project management capabilities, my practical implementation skills, my technical background and experience in instrumentation engineering field and my record of participating in many projects.

## Education

### **MSc, Electronics and Communications Engineering** **2017**

Master's Degree, Electrical Communications Engineering, Engineering Faculty - Mansoura University

### **BSc, Electronics and Communications Engineering** **2012**

Mansoura University - Engineering Faculty - Final Grade 86 %

Excellent with honors in the 6th place on electronics and communication department

## Relevant Experience

### **Instrumentation and Control Engineer at the Egyptian Natural Gas Company (GASCO) 2013 to Present**

- Planning sequence of testing and calibration program for instruments and equipment according to blueprints, schematics, technical manuals and other specifications.
- Performed preventative and corrective maintenance of test apparatus and peripheral equipment at the reduction and metering stations.
- Conferred with supervisors and other technical workers to assist with equipment installation, maintenance and repair techniques.
- Analyzed and converted test data, using mathematical formulas, reported results and proposed modifications.
- Set up test equipment and conducted tests on performance and reliability of equipment.
- Selected sensing, telemetering, and recording instrumentation and circuitry.
- Disassembled and reassembled instruments and equipment using hand tools, and inspected instruments and equipment for defects.
- Natural Gas flow metering Instruments calibration at metering stations in GASCO and Natural Gas fields.
- Coordination of functional testing of commissioned systems and engaging the Operations Team when and where needed. Provide Operations with technical support throughout start-up, stabilization and performance testing. Coordinate activities with other departments and staff.

### **PLP (Presidential Leadership Program) 2018 - 2019**

The PLP program has been developed around targeting young future leaders and enables them to acquire the skills they need to learn about governance, administrative and political fields and most importantly to develop their ability to attain critical and analytical thinking, throughout the 8-months program there have been four main modules.

- *Economics and Political Science* studied in NTA (National Training Academy)
- *Management* studied in Military College of Science and Management
- *Strategy and National Security* studied in Nasser Military Academy
- *HR and Marketing* studied in NTA (National Training Academy)

### **Delta University for Science and Technology, Gamsa, Dakahlia** **2012 - 2013** **Demonstrator**

Gained a lot of experience at Delta University for Science and Technology especially in the fields of teaching, scientific research and communication skills. In this period conducted many courses such as (Electrical Circuits - Computer Aided Design - Math's 5 - Measurement and Instrumentation - Applied Industrial Electronics - Wireless Communication - ...)

**Egyptuino Electronics Stores, Mansoura, Dakahlia**  
**Research and Development Department Manager**

**2012 - 2015**

Working in this company enhanced my practical experience through my responsibilities such as:-

- Making technical decisions about the company products
- Searching grant opportunities
- Participating in ideas generation and proposal development session
- Assisting with budget preparation and proposal submission
- Maintaining records and provide reports of proposal and award activity

**Arduino Microcontroller Instructor**

**2012 to Present**

I'm working as Arduino Microcontroller Freelancer Instructor, I have worked in many training companies and organizations such as Mansoura University, IEEE Mansoura Student Branch, EGYCET and Je telecom.

### Projects

**- Graduation Project**

Arduino based UAV (Quad Copter) Controlled by Dedicated RF Remote Control

Degree: Excellent (Full Mark)

**- Cathodic Protection Software**

This software is based on MATLAB which creates all the excel sheets needed for cathodic protection systems monthly reports, also plots the pipeline voltage profile and calculates current density.

**- GASCO Metering Software Package**

This software based on MATLAB which runs on personal computer to validate gas flow computer calculations by performing complex arithmetic functions.

**- Natural Gas Pipelines Grid Allocation on Google Earth**

This project aims to make a complete database for the Natural Gas Pipelines Grid components (Pipelines - Gas Stations - Cathodic Protection test points and rectifiers - ..... Etc.) On Google earth software, similar to GIS systems

**- Wireless Remote Monitoring for Cathodic Protection**

Cathodic Protection system is an efficient system used for protecting the underground metal objects from corrosion. The aim of developing a Cathodic Protection system is to provide control over oil pipelines and to reduce the incidence of corrosion. I'm going to summarize the wasted resources on cathodic protection monitoring in the following points:-

- The wasted man power and money periodically to collect the data from the test points.
- Monitoring can be time consuming and a drain on personnel resources
- Installations may be in remote or difficult to access areas
- Working environments are often hazardous

### Languages

**Arabic:** Native or bilingual proficiency

**English:** -

- Professional working proficiency (CEFR Level **C1**)
- IELTS Overall Band Score: **7.5**

### Skills

Performance Test Simulation/Verification, Electronic Equipment Inspection

High ability to work in teams, Project management, Excellent Presentation and Research skills

## Activities and Honors

**-YIA certificates of excellence in undergraduate research**, Nahdet El Mahrousa's Young Innovators' Awards, I have taken this award for my graduation project in a national competition

**-Award for participating, Egyptian Engineering Day**, the Egyptian Engineering Day is an annual summit that facilitates the opportunity for the best of the engineering graduation projects from all over Egypt to be implemented, as a consequence of a judging exhibition.

**-Shaghal Prototype Competition, Nahdet El Mahrousa's Young Innovators' Awards**, sponsored by Mobinil, BG Egypt, SADCO and Yomken.com Objective: The prototype competition is a national competition which provides grant awards to young Egyptian innovators who develop innovative prototypes and products in the fields of science and technology. The prototypes should help solve challenges faced in the Egyptian industry and help introduce new innovation in the market.

## Software

**Microsoft Office**: Very good especially Word and PowerPoint.

**Simulation programs**: Worked on many simulation programs (MATLAB, Multisim and Protous ...)

**Programming Languages**: MATLAB - C/C++

## Affiliations

-Co-Founder and Main coordinator of Zewail city friends in Dakahlia, **Zewail City Friends** **2011**

-Organizer, **Made In Egypt Organization** **2013**

"Made in Egypt" or MIE is a University-Industry linkage program founded and organized by IEEE Egypt GOLD affinity group, that aims at bridging the gap between the academic community - including both research and educational sectors - and the industrial community. Our contribution lies mainly in creating suitable models of cooperation between both communities that enrich the national industry and production and lift up the academic standards to create a better impact on the industrial and economic development in Egypt.

## Training

-PLC, **SIEMENS** **2020**

-Online Analyzer Training Course, **ENPPI** **2019**

-Certificate of completion of Cathodic Protection Course, **ENPPI** **2014**

-Process Control Engineering, Trained at Misr Fertilizer Production Company (**MOPCO**), Damietta **2011**

-Instrumentation Engineering, **SEGAS LNG Plant**, Damietta **2010**

-MICRO Controller, **Jelecom** Training Center **2010**

-PCB, **Jelecom** Training Center **2010**

-GSM & GPRS - CDMA & UMTS, **Jelecom** Training Center **2010**

## Conferences and Scientific Publications

### Conferences

-Speaker at **ADIPEC** (Abu Dhabi International Petroleum Exhibition and Conference)  
Pipelines Monitoring Using Energy-Optimized Linear Wireless Sensor Networks **2021**

- Speaker at **EGYPS** (Egypt Petroleum Show) Technical Conference

Case Study on Abo Madi Talkha Gas Pipeline Cathodic Protection Remote Monitoring System **2019**

- Speaker at **ADIPEC** (Abu Dhabi International Petroleum Exhibition and Conference)

Case Study on Abo Madi Talkha Gas Pipeline Cathodic Protection Remote Monitoring System **2018**

### List of Publications

- A. Hussein, A. El-Nakib, S. Kishk. Linear wireless sensor networks energy minimization using optimal placement strategies of nodes. Wireless Personal Communications, pp 1–14 **2020**

- A. Hussein, A. El-Nakib, S. Kishk. "Energy-efficient Linear Wireless Sensor Networks Applications in Pipelines Monitoring and Control". International Journal of Wireless Communications and Network Technologies **2017**

## Activities and Interests

### Sports

Table Tennis and Billiards.

### Hobbies

Listening to Music, Watching American Movies and Play Station.