

Holds a B. Sc. in Mechanical Engineering and has about 12 years hands-on experience working in design, maintenance and operation.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 16/05/1985  
Gender : Male  
Marital Status : Married  
Residence : Alexandria

## EDUCATION

: B. Sc. in Mechanical Engineering, Alexandria University, 2008  
: Study currently to obtain the Master degree from Alexandria University

## LANGUAGES

Arabic : Native Language  
English : Fluent

## COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Power Point), Internet  
: IBM SPSS  
: AutoCAD (2D & 3D)  
: Solid Works  
: C/ C++, JAVA, SQL & PYTHON Programming Language  
: CFTURBO (Design of Turbo-machinery)  
: Microsoft Visio (draw PFD's and P&ID's)  
: MATLAB (Programming, Simulink)  
: AUTOMATION STUDIO, Fluid-SIM (Hydraulic and Pneumatic Circuits Simulation)

## TRAINING COURSES AND CERTIFICATIONS

: Data Analysis (by IBM SPSS), YOUTUBE (2021).  
: Data Analysis (by SQL), UDACIYU (2021).  
: Data Analysis Professional, UDACIYU (2020).  
: Machinery Lubricant Analyst CAT I, NORIA & ICML (ATLASCO-Prime Gear) (2020).

- : Asset Efficiency Optimization Basics, SKF (2020).
- : Reliability Centered Maintenance, Shell (Jun. 2020).
- : Maintenance, Reliability and Asset Management All in One Brief Course, RES Global (May 2020).
- : Maintenance and Reliability Best Practices (self study) (2019 - 2020).
- : Vibration Analyst CAT II, ATLASCO-Prime Gear (Mobius Institute) (2019).
- : Rules of Thumb for Maintenance and Reliability Engineers (self study) (2019).
- : Embedded Systems (self study - YouTube & Rewaq) (2019).
- : Digital Electronics (self study - YouTube) (2019).
- : Practical Electronics (self study - YouTube) (2019).
- : PLC , MEHN ARABIA (2014).
- : CLASSIC CONTROL, Don Bosco (2014).
- : JAVA Programming, CODE MASRY (2013).
- : HYDRAULIC AND ELECTRO-HYDRAULIC CIRCUITS, Don Bosco (2012-2013).
- : PNEUMATIC AND ELECTRO-PNEUMATIC CIRCUITS, Don Bosco (2012).
- : ENGLISH COURSES, Egyptian American Center (2012).
- : PUMPS & COMPRESSORS Course, OIL & GAS SKILLS (OGS) (2012).
- : PROGRAMMING OF MICRO-CONTROLLER, TECHNOPRO (2010).
- : Solid Works Certified (Modeling, Assembly, Animation, Simulation, Sheet Metal, Pipe and Tube Routes and Drawings).
- : Trainings at:
  - ALEXANDRIA FOR PETROLEUM Co. (Jul. 2007).
  - ALEXANDRIA PETROLEUM MAINTENANCE Co. (PETROMAINT) (Jul. 2006).
  - SIDI KRIR Thermal Power Station (Jul. 2005).

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From 2019 till now
- Project** : EGYPTIAN LNG
- Job title** : Senior Machinery Engineer
- Job Description** :
- Perform advanced maintenance management, troubleshooting, field activities, and maintenance activities for all rotating equipment's like pumps (SUNDYNE, GOULD, AND GABBIONETA), Instrumentation air (ATLAS COPCO) and process compressors (N.P. & SUNDYNE), and gas turbines including all auxiliary systems, particularly MS5002D GE gas turbines, Siemens SGT-500 (GT35C2).
  - Assisted the Engineering teams during the DLN technical study for reducing NOx level from turbo compressors MS5002 to comply with the newly legislated laws by the ministry of environment.
  - Conducted many sessions' and online YOUTUBE videos about DLE, and DLN systems in Siemens and GE gas turbines.
  - Handle the tasks of reviewing, verifying reports on equipment maintenance and repairing.
  - Follow-up the plant trips, failure data and a "Bad actors" report on monthly basis.

- Identify the failures that should be subject to "Root Cause Failure analysis" procedure, and develop trends for critical equipment failure modes.
- Excellent knowledge of ORACLE program with fully access.
- Plan and prepare all the spares and special tools require for the planned maintenance activity.
- Participate in condition monitoring checks and analysis on Rotating equipment's, gas turbines and process compressors (System 1), notify any abnormality or malfunction.
- Monitor the operational performance of the Rotating equipment's, gas turbines, and compressors, running parameters and auxiliaries' operations.
- Carried out LTPI for MS5002D.
- Carried out Minor Inspections for compressors (2MCL-1006, MCL-806, 3MCL-1405, and 3BCL-608) "Nuovo Pignone".
- Carried out Level C inspection for SGT-500 (GT35C2) (SIEMENS).
- Perform assigned duties in accordance to the HSE system.
- Perform tool box and task risk assessment meeting to establish scope of work, safety requirement, and permit to work, special tools and material.
- Review maintenance procedures, job plans, standing instruction, operating manuals, and to update manuals for safe maintenance and operation.

**Dates** : From 2019 till now (part time)  
**Employer** : YOUTUBE & OGS  
**Job title** : Mechanical Engineering Trainer & Instructor  
**Job Description** : Instructor for practical courses as rotating equipment and gas turbine.

**Dates** : From 2013 till 2019  
**Employer** : RASHPETCO (SHELL-JV)  
**Job title** : Senior Turbomachinery Engineer  
**Job Description** :

- Maintenance, Operation, troubleshooting for GE PGT25+, SIEMENS SGT-100, SGT-300 & SGT-400 turbines.
- Perform advanced maintenance management, troubleshooting, field activities, and maintenance activities for all gas turbines including all auxiliary systems, particularly PGT25+ GE gas turbines, Siemens SGT-100, SGT-300 and SGT-400.
- Fully conversant with DLE systems in LM2500+, SGT 300, and SGT 400.
- Ability to improve environmental emissions from gas turbines such as NOX and CO emissions by participate during conducting mapping and tuning the fuel to air ratio using Horriba Analyzer in LM2500+.
- Execute all maintenance routines in time.
- Develop reports on the plant reliability figures & trends with relevant history and lesson learned on monthly basis.
- Improve Turbo-machinery equipment reliability and availability through the implementation of Reliability engineering principles, techniques and tools, such as Root Cause Failure Analysis (RCFA).
- Participate in condition monitoring checks on gas turbines and gas compressors, notify any abnormality or malfunction.

- Monitor the operational performance of the gas turbines and gas compressors, running parameters and auxiliaries' operations.
- Prepare maintenance work instruction "MWI" for preventative maintenance to turbo-machinery equipment.
- Compile and prepare reports on normal, breakdown and major maintenance work.
- Use CMMS to control manpower, material resources, equipment history and carry out the main duties.
- Review maintenance procedures, job plans, standing instruction, operating manuals, and to update manuals for safe maintenance and operation.
- Evaluation and technical advice for the commercial received offers for material and spare parts.
- Prepare the spares, material requisitions and proposals.
- Carried out Minor Inspection for the centrifugal gas compressors-SIEMENS.
- Carried out Minor & Major Inspection for the centrifugal gas compressor (2BCL-606) "Nuovo Pignone".
- Carried out the hot gas path inspection "re-blading" (B-Inspection) for the SGT300 turbine.
- Replaced the bearing No. 1 (combined journal and thrust bearing) for the SGT300 turbine.
- Dismantled and swapped the core engine (GG) for the (LM2500+ engine) and SGT-400.
- Carried out replacement for the 1<sup>st</sup> stage nozzles and blades for the HSPT (PG-25).
- Perform assigned duties in accordance to the HSE system.
- Perform tool box and task risk assessment meeting to establish scope of work, safety requirement, and permit to work, special tools and material.

**Dates** : From 2014 till now (part time)  
**Employer** : ELHODA COMPANY FOR TURNING ENGINEERING AND WELDING OF METALS, ALEXANDRIA  
**Job title** : Mechanical Design Engineer  
**Job Description** :

- Carried out many modifications in a lot of machines and equipment's.
- Design and drawing of 2D and 3D for mechanical parts.
- Making Assembly for different machines.
- Make simulation for mechanical moving parts.
- Making Assembly, Sheet metal, Steel structure, Welding, Simulation, Animation by Solid Works.

**Dates** : From 2011 till 2013  
**Project** : Sidi Krir Thermal Power Plant units 3 & 4 (BOOT) (2x340MW – Natural gas & Mazout oil fire)  
**Job title** : Mechanical Engineer  
**Job Description** :

- Carry out periodical tests for all standby and emergency equipment's.
- Preparing work orders following the Lock Out Tag Out isolation procedures (JD Edward program).
- Follow the maintenance and operation procedures and helping in modifying and updating these procedures to comply with IMS system

(integrated management system).

- Responsible for the shift to shift safe operations of all equipment associated with the power generation facility, excluding the Water Treatment area.
- Responsible for power generation facility system inspections and system alignments during start up and shutdowns to ensure safe and correct operations of system equipment, both during normal and emergency situations.
- Document equipment performance by maintaining complete and accurate log sheets.
- Maintain system and equipment operations within vendor's specifications and guidelines.
- Co-ordinate safety with regards to maintenance shift work activities; isolation of equipment and placing equipment back in service in accordance with facility Lockout and Tag out Procedures.
- Co-ordinate Assistant Plant Operators and Training Operators activities with activities of the facility to ensure time optimization and utilization.
- Training of staff on Plant Operator position.
- Assist WTO in correcting and maintaining condensate, boiler feed water, and boiler chemistry.
- Participate in many modifications in the power plant by Solid Works.

**Dates** : From 2010 till 2011

**Employer** : PETROMAINT

**Job title** : Site Engineer

**Job Description** :

- Renewal and re-installation of solar Pipeline for Gempetco at El Zaffrana Jetty.
- Installation of High Pressure Piston Pump for Gempetco at the Water Station.
- Executed main Fire Fighting System for Gempetco at its Camp.
- Executed expansion on Gempetco Platform to installation the Sewage Tank.
- Executed Intelligent Pigging for PPC main lines.
- Executed Painting Projects for WEPCO.