# Ammar Hamza

## Khartoum, Sudan

## Cell Phone 0961416026 Email ammar.khaliel@gmail.com

## **OBJECTIVE**

With a master degree in mechanical engineering and 6 years of experience, my goal is to find a position in a leading organization where I can contribute my knowledge and skills to the success and growth of the organization and enhance my experience through continuous learning and teamwork

## **EDUCATION**

Bradlev University, IL, USA Master of Science in Mechanical Engineering

University of Khartoum, Khartoum, Sudan

Bachelor of Science in Mechanical Engineering

GPA:3.9/4.0

May 2016

August 2008

## WORKEXPERIENCES

# District Manager. Metropcs Authorized Dealer. IL, USA

Oct 2016 - May 2017 Provided sales consultation to all stores employees and stores managers

- Controlled and managed inventory work
- Completed company sales and promotions training in a timely manner
- Provided training and coaching to new employees

# Teaching Assistant. Bradley University. IL, USA

Sep 2014 - Dec 2015

- Assisted students in conducting experiments of thermal and mechanical systems lab
- Collected experimental data utilizing LabVIEW, analyzed and reduced data in Excel

# Mechanical Engineer. Al-Ahmadain Co Ltd. Khartoum

Dec 2010 - Jan 2014

- Prepared cost and time estimates of drilling operations
- Supervised all procurement actions
- Led maintenance operations of drilling machines, air compressors and heavy equipment
- Developed preventive maintenance system (PMS)

# Engineer Intern. Sudan National Electricity Corporation. Khartoum

Feb 2010 - May 2010

- Studied operation process of thermal power plant
- Learned maintenance activities of steam turbine and boiler

### **Project Engineer.** Abina for Engineering Works. Khartoum

Sep 2008 -Jul 2009

- Ensured project completion in timely manner
- Performed project schematic design evaluation to ensure compliance with MEP work
- Supervised duct and piping installation of HVAC systems

## Academic Research and Projects

#### Design of Fin Folding Machine

- Created 3D parts models and assemblies
- Fabricated, assembled and aligned components on the machine
- Modified LabView program to control the machine operation

## Finite Element Analysis (Abaqus)

- Investigated mechanical phenomena including: static, dynamic, plastic and elastic behavior, coupled thermal-structural stress, transient and quasi heat transfer, modal analysis, Fatique. spring back and residual stresses
- Utilized Abagus to perform linear and nonlinear analysis

## Computation Fluid Dynamics (Fluent & OpenFOAM)

- Investigated laminar flow and heat transfer in concentric curved duct
- Experimentally verified the numerical results of flow field and showed modified friction factor as only function of dean number
- Utilized Ansys, Fluent and OpenFOAM to conduct flow and heat transfer analysis

#### SKILLS

- MS Office, AutoCAD, Creo, Fluent, OpenFOAM, Abaqus, HyperMesh, MatLAB, LabVIEW,
- CFD, FEA, Quality management, Six sigma, FMEA, GD&T, and Machining skills

#### **Publications**

A. Hamza, J.H. Kennedy, A. Fakheri, PROPER SCALING OF FLOW IN CONCENTRIC HELICAL AND SPIRAL COILS, ASTFE TFEC-IWHT2017- 17554, April 2017, Las Vegas, USA