# Ahmed E. Mohamed, MSc.



#### WORK EXPERIENCE

FROM FEB 2018, NOW (FT)

#### ProSyLab

### Senior Systems Architecture Engineer

Provide advice on project costs, design concepts, or design changes. Recommend changes to improve computer or information systems. Document design specifications, installation instructions, and other systemrelated information. Verify stability, interoperability, portability, security, or scalability of system architecture. Test computer system operations to ensure proper functioning.

FROM OCT 2017, JAN 2018 (FT)

#### **VDIS**

### Senior Embedded systems Engineer

Maintain, upgrade and modify embedded systems as needed. Work with Manager in developing technical specifications based on customer requirements. Analyze system technical issues and develop appropriate resolutions. Coordinate with design, development, testing and implementation teams to plan and complete assigned projects within deadlines. Participate in system design reviews and recommend improvements. Identify technical risks and challenges and propose action plans. Support in integrating modules to existing systems and perform integrating testing. Assist in preparing system design and architecture documents. Provide support in system testing and bug fixing activities. Assist Manager in determining project budget and timelines.

FEB 2017 - APR 2017 (PT)

## PAC Development Trainer

Responsible for training undergrad students to use the state of the art industrial NI PAC controllers in advanced motion planning and sensor array deployments in hazardous areas

MAR 2015 - JUNE 2016 (PT)

#### EgyCet Instructor

Responsible for teaching "HIT" students a complete electronics professional diploma including digital, analog, and mixed electronics.

JUNE 2015 - MAR 2016 (PT)

### ALPHA ELECTRONICS Embedded Systems Architect

leading a technical team to design, analyse, implement, test, and support the company products. This team activities includes schematic, wiring, simulation, PCB layout, testing, and delivery of projects.

SEPT 2011 - SEPT 2013 (PT)

## ATOMIC ENERGY AUTHORITY

Co-developed "RADMON" project to monitor, record gamma radiation levels and provide various alarming levels.



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http://github.com/mridsgn

#### **EDUCATION**

Master of Science 2017 - PRESENT

Computer Engineering Cairo University

Master of Engineering 2017

Computer Engineering Cairo University

**Bachelor Computers Control Engineering** 2008 - 2013

FIRST CLASS HONOURS

Computers Control Engineering Department

**OHIE** 

#### COMPUTER SKILLS

PRODUCTIVITY System design, UML, LATEX

Algorithm design, Web, GIS, DB, OS SOFTWARE

Automation, ICT, PCB HARDWARE

#### COMMUNICATION SKILLS

CONFERENCES Oral presentation at ICCES 2017

LANGUAGES Arabic, English

#### SKILLS

#### Goal Oriented

I believe in action over long-winded discussions. I listen to everyone's viewpoints and use my judgement to immediately act based on consensus to achieve goals quickly and efficiently.

#### Passionate

I have been interested in theoretical physics such as quantum mechanics and relativity from an early age. My education and research have cemented this interest into a passion. I greatly enjoy carrying out fundamental physics research with potential practical applications.

#### Hobbies

I'm interested in practicing running, rowing, reading, and classical guitar

#### HPC

BigDL, Spark, Hadoop, Cloud systems design, GPGPU

ATM, USART, I2C, SPI, CAN, LIN, Profibus, ProfiNet, MODBUS RTU, OPC, USB, TCP, IP, PCI

#### Programming Techniques

Big-Data techniques, Enterprise techniques, Industrial techniques, Functional, RTOS and micro-services

JUNE 2010 - SEPTEMBER 2010 (FT)

## DELTA SUGAR COMPANY

#### Intern

Trained to handle both modern industrial automation system, data acquisition systems and drivers.

JUNE 2003 – MAY 2005 (FT)

# THE EGYPTIAN COMPANY FOR ELECTRICAL POWER TRANSMISSION

#### Intern

Trained to operate and maintain power transmission substations and different kinds of faults.

#### **REFERENCES**

Rami Ibrahim

POSITION Head of R&D Department

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Mona A. Farouk

POSITION Professor

EMPLOYER Cairo Universty

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#### **PROJECTS**

GOPP SPAAD

ENF-COMM Web portal & mobile application

MOJ ICT infra-structure assessment

ESA Automating Agricultural Records Systems

HAIER Refrigerator automation system

ALEX PETROLEUM Oil treatment' waste refinement system

KEMPINSKI HOTEL 200 Locations adaptive brightness control

ELISION ELEVATOR EMERGENCY BACKUP SYSTEM

EAEA Nuclear plant remote logging, and alarming system

OHIE Remote realtime image transfer

Programming Languages

C98, C99, ANSI C, CII, CUDA C, C++II, C++I7, GoLang, Python, C#, JAVA SE, LabVIEW, LADDER, Structured text, Swift

Circuit design and printing

Altium designer, Mentor graphics expedition PCB, Circuits thermal simulation, EMC analysis

Meta-heuristics

Genetic Algorithms, Ant Colony, Bee colony, Bee hive, Gray wolf

Machine learning

Clustering, Classification, Regression

Technology

KER AS, Open CV, SKLearn, Theano, Torch, Tensor flow

#### **PUBLICATIONS**

**Ahmed Ezzat (2018)**.GDD: Geometrical Driven Diagnoses Based on Biomedical data. *Journal of advanced research, Elsevier*.

**Ahmed Ezzat (2017).** Search space pruning by evolving probabilistic strategies. *Computer Engineering and Systems (ICCES), 2017 12th International Conference on. IEEE, 2017* 

**Ahmed Ezzat (2017).** A Comparative Study of Software Test Case Generation Tools for JAVA. *SME* 

**Ahmed Ezzat (2017).**Fitness Aware Adaptive Mutation For Genetic Algorithms. *RG* 

Ahmed Ezzat (2017). SpiNNaker Survey. RG