***Shady*** ***MSc, MBA, PMP, CCNP, AWS***

**MSc. Computer Engineering**

 **BSc. Communications and Electronics Engineering**

 **MSc. Business Administration**

**Westlake, OH**

 ***Summary:*** .

**- A Senior Engineer** with **15+ years** of Professional Experience widely spread across different fields of **IT & Cloud, Digital Transformation and Telecommunications**

- Diversified **Multinational / Multicultural** experience through aRemarkable Exposure to a Multitude of Customer Network Configurations in **EMEA (Europe, Middle East & Africa**)

- Proven Record of Regional/Global, Onsite/Remote **Problems Resolutions** in different **Technical and Senior Management Tiers**

- Proven Record in Leading **Engagement Practices** activities (**RF**x) to **Create** and Maximize **Business Opportunities**

- Broad experience spanning Telecom (Ericsson, Nokia and Siemens), Cloud (**AWS** and Ericson), Cisco **Networking,** VMware **Virtualization and Automation,** IoT and **Machine Learning**

**- Customer Oriented** and **Innovative Mindset** with excellent Communication and Presentation skills via Customer Enablement Sessions, Stakeholders and **Executives Consultations**, Presentations and Demo’s to **influence Strategic Decision Making**

***Education:*** .

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| -  **MSc.** of **Computer Engineering** |  Cleveland State University ***GPA: 4.0***  |
| -  **MBA** Master of Business Administration  |  Arab Academy for Science & Technology ***GPA: 4.0***  |

***Certifications:*** *.*

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| -  **CCNP** ENCOR: **C**isco **C**ertified **N**etwork **P**rofessional / Enterprise Core  |  Cisco Certification  |
| -  **CCNP** ENAUTO: **C**isco **C**ertified **N**etwork **P**rofessional / Enterprise Automation  |  Cisco Certification  |
| *-***AWS**Solution Architect | Amazon Web Services Certification |
| *-***AWS**Advanced Networking – Specialty (in progress) | Amazon Web Services Certification |
| -  Ericsson **Cloud Architect**  |  Ericsson Cloud Certification  |
| -  Ericsson **Transmission Network Management**  |  Ericsson NMS Certification  |
| -  **PMP (P**roject **M**anagement **P**rofessional**)** |  PMI Certification  |

***Professional Experience:*** .

***Fireland Firelands Regional Medical Center (FRMC****)*  (June 2022– Present)

***Network Architect:***

Assumed the following responsibilities as part of **FMRC** as anIntegration and Escalation Architect / Engineer

* **Managing and Developing** Main Campus and remote offices infrastructurethat include LAN, WAN, WLAN, etc.
* **Design and Maintain VLAN’s** and allocate resourcesaccording to the business need.
* **Defend the Network** by troubleshooting network problems and scheduling upgrades
* **Evaluate Network Resources** and proactively address looming capacity and performances issues
* Makes modifications to **Optimize Network** utilization and Maximize performance
* **Secure the Medical / Cloud Systems** by establishing and enforcing **Firewall policies** and maintaining access privileges
* **Renovate** the existing Infrastructure and **Retire** less performant technologies
* **Technical Solution Delivery**, Management Escalation and Emergency Handling

***Project Implementations and Architecture:***

* Meditech Migration to the IMO Cloud (Medical Cloud) based on **AWS services** (Ongoing)
* Test Bed Building and Integration with **Cisco Network**, VMware **Virtualization** and **AWS Cloud** Scenarios (Ongoing)
* Re-Engineering of Data Communication Closets in Main Campus (Ongoing)
* Renovation of the whole Main Campus Wireless Network of 400+ Access Points (2022)

***CLEVELAND STATE UNIVERSITY*** (***Electrical Engineering & Computer Science Department)*** (Jan 2020 -June 2022)

***Project Research Assistant:***

* Development**,** Implementation and **Architecture** of **IoT, Cloud,** **Big Data**, **AI**, **N**atural **L**anguage **P**rocessing Projects
* Assumed the following responsibilities towards **Object Oriented SW Engineering** and **Digital Logic Design** Classes**:**
* **Assurance** of a **High-Level** Practical and Theoretical Knowledge of students via **Material and Lab** Preparation, in class **Presentation** and Professional **Advising**
* **Project** assignments **Evaluation and Grading** according to **Standards** and **Best Practices**

***Project Implementations / Achievements:***

* **Cloud Based IoT Environment Monitoring** including **AWS Dynamo dB, S3, EC2, SQS** integration with **FPGA** and **Sensor Board** (2022)
* **Embedded Linux Image Creation** using BitBake on Intel **FPGA** to come up with an **automated** web application **service** to handle **API** requests of **Big Data** collected by sensor boards, transferred via **MQTT,** stored to **AWS Dynamo dB** and displayed through a **Web Interface** and **LCD**’s (2022)
* Biweekly **Machine Learning** and **Big Data** Projects verification with **AWS Sage Maker** and other AWS tools (2022)
* Medical **Question Answering Systems** using **Big Data** – NLP (**N**atural **L**anguage **P**rocessing**)** Techniques (2021)
* **Image Processing** - **Unsupervised Learning** image Clustering - **Supervised Learning** for **Image Classification** -**Neural Networks** i.e., **ANN** (single and multi-layer) for **Image Recognition** and CNN for COVID detection - **NLP** for **Text Classification / Clustering** (2021)
* **Web Scrapping / Information Extraction** from Semi Structured HTML, XML and JSON Data of Web Pages and Yelp Data Set to store to **MySQL dB** and from Twitter Real Time Data Stream to store to **Mongo dB**  (2020)
* **Information Retrieval, Indexing,** and **Text analysis** of Unstructured Data - **Classification** with ML - Designing and Building a **Prediction Model** with a ML Classifier. (2020)

***ERICSSON*** (November 2014 – November 2017)

***Senior Fulfillment Solution Architect (OSS and Cloud) (Presales and Solution Delivery):***

***Supported Region: MEA (Middle East & Africa)***

Assumed the following responsibilities towards **OSS / NMS** i.e., **Network Operation, Business Management Support and Automation** for **IT & Cloud, and Digital Transformation** technologies**:**

* **SPOC** (**S**ingle **P**oint **O**f **C**ontact) **Country Wide** towards Network Management and Automation
* **Lead Customer Workshops** and **RFx** to Maximize **B2B** Sales Volume and to **Create** new **Business Opportunities.**
* **HLD/LLD (H**igh/**L**ow **L**evel **Design), SOC(St**atement **O**f **C**ompliance**)** and **SOW (St**atement **O**f **W**ork**)** materialization
* **Complex** Requirements Analysis, Adaptation and Fault Clearance **analysis** with **R&D** for Multi-Layer Management Systems
* **Services Cost and Risk** Calculation and **Price Rationalization / Negotiation**
* **Knowledge Base Leverage** via Customer / Team **Enablement Sessions** / **Mentorship** and **Knowledge Object Creation**
* **Technical Project Management** of processes and cross team projects’ resources though out the whole life cycle, i.e.:
* **Resource Selection** and **Interviewing** to ensure the highest quality of Execution and Delivery.
* **Services Cost** and **Risk** Calculation, and **Price Rationalization / Negotiation** with different stake holders
* Technical and Resource **Conflict Resolution,** and **Risk Calculation** and **Mitigation** planning,
* Technical and administrative activity **Planning** and **Coordination** between different stake holders
* **BOQ** / **BOM** (**B**ill **O**f **Q**uantities / **M**aterial)Preparationand 3rd party **Procurement**

***Awards and Achievements:***

* 1+ Million USD - New Business Opportunity for Products and Services with WE Telecom - Ericsson **Cloud OSS** (2017)
* 1+ Million USD - New Product & Services Architecture for EETC - Ericsson **Cloud OSS** Project (2017)
* 2+ Million USD - Add On Sales of Product & Services for Etisalat -Ericsson **Cloud OSS Project** (2016)
* 1+ Million USD - Add On Sales of Product & Services for Vodafone - Ericsson **OSS Project** (2016)
* 1+ Million USD - New Business Opportunity for Product and Services with WE Telecom - Ericsson **OSS Project** (2015)

 ***NOKIA SIEMENS NETWORKS***  (June 2001 - October 2013)

***Senior Escalation Engineer / Analyst / Project Coordinator (for Access Solutions & OSS):***

***Supported Regions: EMEA (Europe, Middle East & Africa)***

***Project Locations: Portugal - Germany - Sweden - Belgium - Egypt - Syria - Lebanon - Qatar - Iran - India - South Korea***

Assumed the following responsibilities as part of **Global Support** in **SIEMENS/** **Lisbon** then **NOKIA / Warsaw**:

* **Global TIER 2 / TIER 3 End to End** Technical Solution Delivery, **Management Escalation** and **Emergency** Handling
* **Consultations** for **Network Performance Improvement** and **Optimization**
* **Engineering** of OSS and Access Solutions **Test Bed infrastructure**
* **On Site Project Implementation,** Upgrade and **Acceptance**
* **On Job** training **/ Mentorship** and **In Class** and **Instructor**upon the request of the **Academy** in **Belgium**
* DCN **(D**ata **C**ommunication **N**etwork**) Design** and Materialization

***Awards and Achievements:***

* 2800+ Trouble Resolution from WSE and MEA Regions as a Tier 2 and Tier 3 support (2007-2013)
* Global OSS Upgrades i.e., MCCI Iran, MTC Touch Lebanon, Syria Tel, Qtel Qatar, etc. (2010 -2013)
* 10% **Cost reduction** in Egyptian Ministry of Education V-SAT, internet and, Remote Learning Project (2012)
* 300% **Time Efficiency improvement** and 50+ % **Service Cost reduction** in NOC project for WE Telecom (2011)
* Whole Commissioner of NGN Access for WE Telecom (2004-2007)

 ***Domains of Competence:*** ***.***

* ***Technical Project Management, Planning, Procurement:***
* **Tools:** Microsoft Project, Visio, Office, and other Cost, Risk and Resources Management and Planning tools
* ***Cloud, Computing, Networking, Security and Storage:***
* **IP LAN/WAN Security & Management Tools:** Cisco Prime, Wireless Controller, Meraki, DNA Spaces, FortiGate, UPS’s, etc.
* **Operating Systems:** Linux and Windows Active Directory
* **ITSM (IT Service Management):** Orion SolarWinds, Web Help Desk, BMC Remedy
* **Storage and Centralized Backup** **Solutions**: EMC VNX, Veritas NetBackup
* **HW:** IntelFPGA for IoT Edge, HP and Dell Enterprise Servers and Printing Solutions
* **IoT Edge Devices Design:** MQTT, Qt design, Make / BitBake
* **Big Data Analytics:** MySQL, Mongo dB, XML, HTML, JSON
* **Artificial Intelligence, ML and DL:** Visual Data Analysis, NLP, ANN, deep CNN, Computational Intelligence
* **Cloud and Virtualization:** Kubernetes, VMware, Amazon AWS Cloud Services such as EKS, VPC, CNI, TGW, etc
* **Other Cloud and Networking:** Cloud Vision, LANZ, DANZ, Software Defined Networking (High Level Training)
* **Coding, DevOps, CI / CD Tools:** Python, Git, Ansible
* **Technology Frameworks:** ITIL, TOGAF

 ***Telecom OSS / Core / Access / Inventory Management:***

* **Radio** Network Management for GSM, CDMA/UMTS, LTE nodes
* **Fixed**/**Mobile** Core Networks Management
* **Microwave, Optical Transmission and Access** Networks Management
* Network Adaptive **Inventory** **Management**
* **Traffic Monitoring & Optimization** / **Customer Experience**
* **Next Generation Network Access and Transport:** IP Carrier Switches, MSAN (**M**ulti-**S**ervice **A**ccess **N**odes), G-PON, GE-PON, ATM and IP DSLAMS,FTTx, (**F**iber **T**o **T**he **H**ome/**C**urb /**B**uilding) and Flexible Multiplexers.
* **Messaging System:** EMe (ERICSSON Messaging System)

***Languages:*** .

**English:** Fluent  **Arabic:** Fluent  **German:**  Fair

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| ***Appendix -A******Selected Project Types and Research Papers Summery***  |

***Cleveland State University:***

***Location: USA***

* **Artificial Intelligence and Big Data**: project:

Evidence Based Medical **Question Answering Systems** (Big Data - Natural Language Processing - Machine Learning)

* **IOT (Internet of Thing) Design of Edge Devices:** project:

Creating an **embedded Linux image** on Intel FPGA with web application and **automated services** to handle API and **sensor board** collected weather condition data, get them displayed on **a web interface and LCD** as well as to transfer them via **MQTT** to **AWS Dynamo dB**

* **Big Data:** projects:

**Web Scrapping / Information Extraction** from Semi Structured HTML, XML and JSON Data of Web Pages and Yelp Data Set to **MySQL dB** and from Twitter Real Time Data Stream to **Mongo dB** - **Information Retrieval, Indexing, NLP** (Natural Language Processing) and **Text analysis** of Unstructured Data - **Classification** with Machine Learning Designing and Building a **Prediction Model** with a Machine Learning (ML) Classifier - **MapReduce** on **Hadoop** Distributed File system

* **AI / ML and DL (Artificial Intelligence Machine Learning and Deep Learning):** projects:

**Image Processing** - KNN **Unsupervised Learning** image Clustering - SVM **Supervised Learning** for **Image Classification** - ANN **(single and multi-layer)** for **Image Recognition** - **CNN** for Covid- 19 detection - **NLP** for **Text Classification** - KNN for **Text Clustering**

* **Renewable Energy:** Paper

A Holistic Approach to Maximize Renewable Energy Usage using **Cloud/ Fog** Computing for Energy Management Systems

* **Cyber Security:** Paper:

**Cloud Security**, Vulnerabilities, Attacks, and Countermeasures - a Layered Model Approach

***ERICSSON:***

***Region : EMEA***

* **Optical and Microwave Management Systems:** projects:

SOEM Implementations and Upgrades: Solution Design/ Architecture Presales, Delivery, Technical Project management

* **Core and Radio Management Systems:**

ENM, OSS - RC Installations and Upgrades: Solution Design/ Architecture, Presales and Delivery

* **Customer Experience:** projects:

Solution Design/ Architecture, Presales and Delivery

* **Messaging System:** project:

EMe (ERICSSON Messaging System): Solution Design/ Architecture, Presales and Delivery

* **Cloud Based Core and Radio Management System** project:

VNF (Virtual Network Function) - Life Cycle Management: Solution Design/ Architecture and Presales

***NOKIA / SIEMENS / NOKIA SIEMENS NETWORKS***

***Locations: Portugal - Germany – Sweden - Belgium - Egypt - Syria - Lebanon - Qatar - Iran - India - South Korea***

* **OSS (Operating Systems Support)**: projects:

NOC (Network Operation Centers – for Core and Radio Nodes) Design - Green Field Implementation and Upgrades

* **Broadband Access** **and Optical Networks**: projects:

ONU / OLT (Optical Network Units/ Optical Line Termination – for land lines) - Green Field Projects Implementation

* **Broadband Access**: projects:

Flexible Multiplexers for Remote Learning and V-SAT, Gas Pipelines Control - Infrastructure Implementation

* **Training Academy:** projects:

Testbed of Broadband Access, Optical Networks and OSS technologies - Design and Configuration

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| ***Appendix - B*** ***Training & Technical Developments*** |
| ***IT, Cloud, & Security*** |  |
| **-   Amazon Web Services Certified Developer (AWS)** | Amazon - WBT’s  |
| **-   Certified Information Systems Security Professional (CISSP)** | Cleveland State University  |
| -   Technology Trainings: xDSL – ATM- Frame Relay- IP Multi Services | SIEMENS Training Institute - Cairo, Egypt |
| **-   CCNP Routing and Switching - Academic Track** | IT Gate - Cisco Academy - Cairo, Egypt  |
| **-   HP Enterprise Server and Windows Networking Certification**  | HP - Vienna - Austria  |
| **-   HP Peripherals Certification**  | HP - Vienna - Austria  |
| ***OSS/ NMS / Inventory***  |  |
| -  Ericsson **Cloud Architect**  | ERICSSON - WBT’s  |
| **- ERICSSON Transport NMS Certification**  | ERICSSON - WBT’s  |
| -   Optical and Radio Management System: SO-EM / IPTNMS  | ERICSSON - OJT's - Boras, Sweden |
| -   Optical Network Management System: TNMS Core Installation | SIEMENS - Cairo, Egypt |
| -   Mobile Radio and Core Management Systems: ENM / OSS-RC / ENIQ / OMBS  | ERICSSON - WBT’s  |
| -   Mobile Core Management System: Switch Commander OSS | NOKIA- OJT's - Lisbon, Portugal |
| -   Mobile Core Management System: Switch Commander Advanced Topics  | NOKIA R&D Workshop - Bangalore, India |
| -   Mobile Radio and Core Management System: Net Act Admin 1 and 2 | NOKIA Academy - Cairo, Egypt |
| -   Mobile Radio and Core Management System: Net Act Advanced Topics | NOKIA - Remote Workshop - Warsaw, Poland |
| -   Mobile Radio and Core Performance Management: Net Act Traffica  | NOKIA - Remote Workshop - Warsaw, Poland |
| -   Fixed Core Management System: Net Manager OSS Advanced Topics | SIEMENS Training Institute - Cairo, Egypt |
| ***NGN Access/ Transport / Core*** |  |
| -   MSAN and Carrier Switches: Advanced Topics  | NOKIA - OJT - TIER3 - Lisbon, Portugal |
| -   Carrier Switches OAM | SIEMENS Training Institute - Munich, Germany |
| -   IP DSLAM: OAM  | SIEMENS Training Institute - Munich, Germany |
| -   G PON: OAM | SIEMENS - Workshop - Greifswald, Germany |
| -   GE PON: Advanced Topics | DASAN Networks - TIER3 - Seoul, South Korea |
| -   IP DSLAM: Advanced Topics | DASAN Networks - TIER3 - Seoul, South Korea |
| -   Carrier Switches: Advanced Topics | DASAN Networks - TIER3 - Seoul, South Korea |
| -   Flexible Multiplexers: FMX2 OAM | SIEMENS Training Institute - Munich, Germany |
| -   Optical Network Equipment: OAM / Advanced Topics | SIEMENS Training Institute - Cairo, Egypt |
| -   Fixed Core Exchange: EWSD Intro (Voice/ Data i.e. Circuit/Packet Switching) | SIEMENS Training Institute - Cairo, Egypt |
| ***Leadership / Sales / Quality*** |  |
| -   **Leadership** Skills and Effective Communication | Quali Train - Cairo, Egypt |
| -   Achieving Superior Service / How to Wow your customer  | NOKIA - TIER3 - Cairo, Egypt |
| -   KT Resolve for Analytical Problem Solving  | NOKIA - TIER3 - Lisbon, Portugal |
| -   **SPIN Selling** | ERICSSON - WBT’s |
| -   **Lean 6 Sigma**  | NOKIA - Remote Workshop |
| -   **ITIL** 4 Exam Preparation | Learn Quest – Coursera |
| -  Enterprise Architecture / **TOGAF** | Petersburg Polytechnic University |