

**102390-TLC-7CDM-E-2008**  
**Senior Infrastructure Engineer (Telecom, Cloud)**

Holds a B. Sc. in Electronics & Communication Engineering and has over 15 years experience working in telecommunication field.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 12/11/1985  
Gender : Male  
Residence : El-Mahalla El-Kobra

## EDUCATION

: B. Sc. in Electronics & Communication Engineering, Mansoura University, 2008  
: Pre-Master's degree from Mansoura University

## LANGUAGES

Arabic : Native Language  
English : Good

## COMPUTER SKILLS

: Windows, MS Office, Internet

## TRAINING COURSES AND CERTIFICATIONS

: Juniper Network, National Telecommunication Institute, Cairo (Egypt) (Jan. – May 2009):

- (JNCIA.ER), Juniper Network Certified Internet Associate Enterprise Routing (J-series & M-series), (NTI Smart village).
- (JNCIS.ER), Juniper Network Certified Internet Specialist Enterprise Routing, (NTI Smart village).

: TOEFL international degree 65.

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From Nov. 2020 till now  
**Employer** : National Telecommunication Regulatory Authority (NTRA), Ministry of Communications & Information Technology (MCIT), Cairo (Egypt)  
**Job title** : Senior Infrastructure Engineer (Telecom, Cloud)

- Job Description** : • **Summary:**
- Senior Cloud, Broadband, Data analytics Engineer with 15 years of experience in designing, implementing, and optimizing broadband networks.
  - Proficient in a wide range of broadband technologies, including fiber optics, DSL, cable, and wireless. Skilled in network planning, deployment, troubleshooting, and performance optimization.
  - Strong leadership abilities, project management skills, and a proven track record of delivering high-quality broadband solutions.
- **Skills:**
- Broadband Network Design and Architecture.
  - Fiber Optics, DSL, Cable, and Wireless Technologies.
  - Network Planning and Capacity Management.
  - Deployment and Configuration of Broadband Equipment.
  - Troubleshooting and Fault Resolution.
  - Performance Optimization and Network Tuning.
  - Network Security and Access Controls.
  - Quality of Service (QoS) Implementation.
  - Project Management and Team Leadership.
  - Documentation and Reporting.
  - Industry Standards and Best Practices (e.g., DOCSIS, DSLAM, GPON).
- **Experience:**
- Participate in the broadband plan committee for Egypt vision 2030.
  - Examining all complaints coming from the Parliament and the Shura Council, as well as complaints from ministries and governors regarding broadband internet and ways to solve them.
  - Laying down mechanisms, foundations, and solutions for broadband internet in remote rural areas.
  - Led the design and implementation of broadband networks, collaborating with cross-functional teams to meet customer requirements and deliver high-speed connectivity solutions.
  - Conducted site surveys, analyzed network requirements, and developed network designs, considering factors such as coverage, capacity, and scalability.
  - Worked closely with vendors and suppliers to evaluate and select broadband equipment, ensuring compatibility, performance, and cost-effectiveness.
  - Deployed and configured broadband equipment, including routers, switches, DSLAMs, fiber termination units (FTUs), and cable modems, ensuring proper integration and functionality within the network infrastructure.
  - Conducted network testing and performance measurements, identifying and resolving issues related to signal quality, throughput, latency, and jitter.
  - Developed and implemented network optimization strategies, including capacity planning, load balancing, and QoS configurations, to ensure optimal performance and user experience.
  - Led troubleshooting efforts to diagnose and resolve network issues, collaborating with internal teams, vendors, and service providers to minimize downtime and restore service quickly.
  - Implemented network security measures, including access controls,

- firewall configurations, and intrusion detection systems, to protect broadband networks from unauthorized access and threats.
- Managed projects from initiation to completion, including defining project scope, creating timelines, allocating resources, and ensuring successful project delivery within budget and schedule.
- Developed comprehensive documentation, including network diagrams, technical specifications, configuration files, and troubleshooting guides, to facilitate network maintenance and support activities.
- Google Cloud: Associate Cloud Engineer (2023-2026):
  - Deploy and manage applications and services on Google Cloud Platform.
  - Collaborate with software developers, system operators, and other IT staff members to manage cloud-based solutions.
  - Monitor and optimize cloud infrastructure to ensure high availability and performance.
  - Implement security and compliance best practices for cloud environments.
  - Provide technical support to clients, addressing their issues and ensuring the smooth operation of cloud-based applications and services.
  - Create and maintain detailed technical documentation related to configurations, processes, and procedures.
  - Stay up-to-date with the latest Google Cloud technologies and certifications.
  - Strong understanding of Google Cloud Platform services and products.
  - Proficiency in programming languages such as Python, and familiarity with scripting languages for automation tasks.
  - Knowledge of networking concepts including VPNs, firewalls, and load balancers in the context of cloud environments.
  - Understanding of cloud security concepts including identity and access management, encryption, and security policies.
  - Excellent problem-solving skills and the ability to troubleshoot complex issues.
  - Excellent communication skills, both written and verbal.
  - Ability to work collaboratively in a team-oriented environment.
- SAS Certified Specialist: Visual Business Analytics Using SAS Viya (2023-2028):
  - Summary: Create and deliver data visualizations, reports, and dashboards that provide insights into business data. This role involves working closely with business stakeholders to understand their data analysis needs, designing and developing interactive visualizations, and helping to make data-driven decisions.
  - Skills:
    - ❖ Design and develop interactive data visualizations, reports, and dashboards using SAS Visual Analytics.
    - ❖ Create and customize charts, graphs, heatmaps, and other visual elements to effectively convey data insights.
    - ❖ Ensure data accuracy and integrity in all visualizations.
    - ❖ Analyze and interpret data to identify trends, patterns, and outliers.

- ❖ Collaborate with business users to define analytical requirements and translate them into actionable insights.
- ❖ Utilize SAS Viya tools and capabilities to access, transform, and prepare data for visualization.
- ❖ Stay up-to-date with the latest features and enhancements in SAS Viya to optimize visualizations and reporting.
- ❖ Integrate data from various sources, such as databases, spreadsheets, and external data, into SAS Viya for analysis and visualization.
- ❖ Work closely with cross-functional teams, including data engineers, data scientists, and business analysts, to ensure alignment on data visualization objectives.
- ❖ Provide training and support to end-users to help them navigate and interpret the visualizations and reports effectively.
- AWS Certified Data Analytics – Specialty (06-2022) - AWS Certified Cloud Practitioner (08-2022);
  - Summary: Experienced AWS Data Analytics Specialist with [2] years of expertise in designing and implementing data analytics solutions on the AWS platform. Proficient in leveraging a wide range of AWS services to collect, process, analyze, and visualize data. Skilled in data warehousing, ETL (Extract, Transform, Load) processes, data lakes, and business intelligence tools. Strong problem-solving abilities and effective communication skills to collaborate with stakeholders and deliver impactful data-driven insights.
  - Skills:
    - ❖ AWS Data Analytics Services: Amazon Redshift, Amazon Athena, AWS Glue, Amazon EMR, etc.
    - ❖ Big Data Technologies: Hadoop, Spark, Hive, Presto.
    - ❖ Data Warehousing and Data Modeling.
    - ❖ ETL (Extract, Transform, Load) Processes and Data Integration.
    - ❖ Data Lake Architecture and Design.
    - ❖ Business Intelligence and Data Visualization Tools (e.g., Tableau, Power BI, Amazon Quick Sight).
    - ❖ SQL and NoSQL Databases.
    - ❖ Programming Languages: Python, SQL.
    - ❖ Data Security and Compliance.
    - ❖ Data Governance and Quality Assurance.
    - ❖ Agile and Scrum methodologies.
    - ❖ AWS Cloud Concepts and Fundamentals.
    - ❖ AWS Management Console Navigation.
    - ❖ Core AWS Services: EC2, S3, VPC, IAM, RDS, Lambda, CloudWatch, etc.
    - ❖ Cloud Deployment and Management.
    - ❖ Security and Compliance in AWS.
    - ❖ Cost Optimization and Billing.
    - ❖ Troubleshooting and Debugging.
    - ❖ Basic Networking Concepts (IP addressing, subnets, routing).
    - ❖ Data Storage and Database Services.
    - ❖ Understanding of Cloud Computing Architectures.
  - Experience:
    - ❖ Designed and implemented end-to-end data analytics solutions

on AWS, enabling organizations to gain valuable insights from their data and make data-driven decisions.

- ❖ Collaborated with business stakeholders to understand their data requirements and translate them into scalable and efficient AWS architectures.
- ❖ Implemented data warehousing solutions using Amazon Redshift, optimizing schema design and query performance to enhance data analysis capabilities.
- ❖ Developed ETL processes using AWS Glue or custom scripting to extract, transform, and load data from various sources into the data warehouse or data lake.
- ❖ Built and maintained data lakes on AWS using services such as Amazon S3, AWS Glue, and Amazon Athena, enabling organizations to store and analyze large volumes of structured and unstructured data.
- ❖ Designed and implemented data pipelines using Amazon EMR and Apache Spark to process and transform big data for advanced analytics and machine learning.
- ❖ Utilized business intelligence and data visualization tools like Tableau or Amazon Quick Sight to create intuitive dashboards and reports for stakeholders, enabling them to gain actionable insights from the data.
- ❖ Implemented data security measures, including encryption, access controls, and compliance with relevant regulations (e.g., GDPR, HIPAA), to ensure data privacy and integrity.
- ❖ Conducted data quality assessments, developed data governance frameworks, and implemented data cleansing processes to maintain high-quality data for accurate analysis.
- ❖ Collaborated with cross-functional teams, including data engineers, data scientists, and business analysts, to develop cohesive data solutions and drive successful project outcomes.
- ❖ Utilized AWS Management Console to provision and manage EC2 instances, S3 buckets, and IAM users, applying best practices for security and cost optimization.
- ❖ Worked with cross-functional teams to deploy and configure virtual private clouds (VPCs), subnets, and security groups, ensuring secure network connectivity within AWS environments.
- ❖ Created and managed Amazon RDS instances for relational database needs, implementing backup and monitoring strategies to ensure data availability and performance.
- ❖ Developed and deployed serverless applications using AWS Lambda, leveraging event-driven architectures to build scalable and cost-efficient solutions.
- ❖ Utilized AWS CloudWatch to monitor and troubleshoot system performance and application health, implementing alarms and automated actions to ensure system reliability.
- ❖ Demonstrated understanding of AWS shared responsibility model and best practices for securing AWS resources, including IAM user and role management, encryption, and access controls.
- ❖ Assisted in cost optimization efforts by analyzing AWS billing reports, identifying cost-saving opportunities, and implementing

- resource rightsizing and utilization monitoring strategies.
- ❖ Collaborated with team members to troubleshoot and resolve issues related to AWS services, networking, and system configuration, ensuring smooth operation of cloud-based environments.
- ❖ Stayed updated on AWS service updates, announcements, and industry trends to continually enhance knowledge and stay aligned with best practices.

**Dates** : From Oct. 2010 till Nov. 2020

**Employer** : National Telecommunication Institute (NTI), Ministry of Communications & Information Technology (MCIT), Cairo (Egypt)

**Job title** : Senior Telecom Engineer

**Job Description** :

- Huawei access network instructor, HCIA\_ACCESS certified H35\_210 (Valid to 10/2023):
  - Configuring of TCP/IP, routing and VLAN forwarding process, can apply TCPIP working principles to data forwarding.
  - Configuring GPON typical application scenarios, key GPON components, upstream and downstream technology.
  - Configuring the key performance parameters on distance, bandwidth, optical launched power, received sensitive power, attenuation, etc.
  - Configuring and structure of cabinet, frames, boards, and cables.
  - Perform GPON FTTH/B/C HSI and VoIP service configuration, maintenance, and verification.
  - Master the PPP/PPPoE, DHCP, SIP protocols.
- Huawei LTE (4G) instructor, HCIA\_LTE certified H31\_411 (Valid to 10/2022):
  - LTE Field Maintenance.
  - LTE eRAN Commissioning.
  - Configuring eNodeB Routing Operation and Maintenance.
  - LTE eRAN Initial Configuration.
  - LTE eRAN eNodeB Site Solution.
- Fiber Optic Training Center (FOTC) NTI:
  - Provide Training for technicians (about 3000 technicians around Egypt in the field of fiber optic.
  - Troubleshooting the cabling network of port said Tunnels (structure cabling including fiber optics cables using Fluke OTDR & OLTS).
  - Installation, Testing and Commissioning of Structured Cabling System products plus joining cable end termination using Splicing Machine, Glue and Polish for any type of Fiber Optic Connector such as: ST, SC, LC, FCPC, for both Multimode & Single Mode including testing by O.T.D.R. or Power Meter using 850, 1300, 1310, 1550 wavelength.
  - Develop mitigation and restoration procedures for emergency conditions such as fiber damage, power failures and/or other issues.
  - Advise customers (internal or external) about products and their use in various applications.
  - Three months Corning course at Egypt.
  - LANSCAPE installer certificates from Corning Company.
  - Installation, Testing and Commissioning of FTTH, Lan & Data center using latest tools from Corning.

- UNicham termination for connectors.
- Optical Fiber testing insertion loss, OSNR, ORL using latest testing tools from FLUKE & EXFO devices.
- PON testing IL, ORL and designing the all network.
- Analysis of OTDR traces using fast reporter.
- Optical fiber termination, cable handling, splicing for all types of cabling.
- LABVIEW System:
  - Building automation & wireless communication systems using LABVIEW software design suite & Data Acquisition modules DAQ & instrumentation control drivers.
  - Build from Scratch a Cognitive Radio System Using USRP & LABVIEW Contain (Dispatcher, Spectrum analyzer, Primary user, Secondary user & Jammer).
- HCIA-5G V1.0 Huawei Engineer Training (Not Certified Yet - In progress):
  - 5G Network Architecture and Key Technologies.
  - 5G Use Case.
  - 5G industry applications and solutions.
  - SDH, DWDM, OTN transmission technology instructor.

**Dates** : From Jan. 2009 till Oct. 2010  
**Employer** : EGY-TRONIX for elevators control, Cairo (Egypt)  
**Job title** : System Design Engineer  
**Job Description** :
 

- Shift Team Leader Project Electronic Engineer (control of the elevator using microprocessor, testing & troubleshooting control & boards).
- Building control panels for the elevator from scratch.

**Dates** : From Aug. 2008 till Jan. 2009  
**Employer** : Eastern Electronic Company, Port Said (Egypt)  
**Job title** : Telecom Engineer  
**Job Description** :
 

- Telecommunication & Electronics Engineer (communication & navigation systems).
- Familiar in Raytheon and ray marine products.
- Experience in two-way radio communication systems in the bands (VHF & UHF & HF) and system integration and installation.
- Experience in (TETRA) Terrestrial Trunked Radio system architecture and System component (BTS, core switch, Handheld).
- Installing onboard marine electronics instruments including autopilots, radars, and GPS, nav aids, fish finders, safety and communications systems.