

Hamad Alsuhaibani

Master of IoT |
Networking | ICT
Developer | M2M |
WSN | Cyber-
Physical systems



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📍 Boston, Massachusetts

Skills

Project Management,
Problem Solving,
Creative Thinking,
Communication Skills,
Analytical Thinking

Operating Systems

Linux | Cisco iOS
MacOS | Windows

Programming Languages

C/C++
Python
Java
ARM Assembly
Bash
SQL
NoSQL

Profile

I am a graduate student at Northeastern University pursuing MS in Internet of Things. I have a growing interest in Cloud Computing, Edge Computing, Networking, Security, Embedded Systems and Software Development. I have gained experience with the latest cutting edge development tools and procedures.

Professional Experience

ICT Applications Developer

STC

Sep 2018 – Jun 2019 | Riyadh, Saudi Arabia

- Build and develop an inventory for hardware Assets Management
- Build a universal assets classification to map all the existing data ranges across the sectors.
- Perform meetings with each department for assets data acquisition and ensuing compliance with assets governance.
- Create and maintain a framework for assets governance to document and manage the lifecycle of each hardware asset from deployment to retirement.
- Analyze assets data to identify operational issues & implement changes.
- Establishes, monitors and enforces procedures and policies for handling assets destruction and disposal.

Design Project Manager

STCS

May 2018 – Sep 2018 | Riyadh, Saudi Arabia

- Plan design deliverables & maintain their schedules.
- Lead the Scopes Verification to ensure approved scopes are doable technically and financially.
- Providing assistance and support for IGW project in order to optimize STC Core Network

Fixed Access Network Technologies Engineer (COOP)

STC

Jul 2017 – Feb 2018 | Riyadh, Saudi Arabia

- Test verification of FTTHGPON, MSAN, VDSL2+, G.Fast, Super Vector, and TWDM New Platform
- Prepare and update Technical Design documents and solution proposal.
- Providing Technical assistance for Pre-Sales Solution of STC Fixed Access (Broadband and GPON Network).
- Conduct type approval and proof of concept certificate of different access network technologies and associated firmware.
- Organizing technical meetings with vendors offering for new Technologies.
- Reviewing of novel technologies to enhance STC Network.

Education

Master of Internet of Things | Cyber-Physical systems

Northeastern University

Jan 2021 – Dec 2022 | Boston, United States

Network Protocols

OSPF | BGP | MPLS | DHCP |
DNS | VLAN | STP | IPSec |
TCP/IP

IoT Protocols

CoAP | MQTT | XMPP | ZigBee
| LoRa | IEEE 802.15.4 |
6LoWPAN | REST | B-MAC | T-
MAC | CC-MAC | TRAMA | Z-
MAC | Tunneling MAC

Tools

- Eclipse
- PyCharm
- DBeaver
- MongoDB
- Vmware
- Docker
- eve-ng
- Git/Github
- OMNet++
- Packet Tracer
- WireShark
- MATLAB
- Raspberry Pi

Courses

Key Courses

- Fundamentals of Internet of Things
- Connected Devices
- Data Networking
- Internet Protocols & Architecture
- Wireless sensor networks
- IoT Embedded Systems Design
- Object Oriented Programming
- Database Management & Design

Intensive Academic English

University of California

Jul 2019 – Jun 2020 | San Diego, United States

Bachelor of Electrical Engineering

King Saud University

Sep 2012 – Sep 2017 | Riyadh, Saudi Arabia

GPA: 4.70 out of 5

Projects

Design, build and test an end-to-end IoT system using C

Oct 2022 – Dec 2022

- Use an industrial grade IoT communication protocols.
- Application issues actuation commands (based on readouts using an ML model) that result on the device performing actuation

Programming an end-to-end IoT solution using python for the constrain device and java for the gateway and the cloud

Jan 2022 – May 2022

- Apply Object-Oriented design principles to easily allow new sensing and actuation capabilities within CDA
- Build data management, transformation and local storage capabilities into GDA and CDA.
- Build a robust publish/subscribe and request/response data communications capability into CDA and GDA using MQTT and CoAP
- Build cloud-integration functionality into GDA using MQTT

Encrypted Client-Server Communication using Socket Programming in Python

Jan 2022 – Feb 2022

Evaluate the performance of the Dual Beacon Discovery (2BD) protocol for Wireless Sensor Network with Mobile Sink (WSN-MSs) using OMNeT++

Oct 2021 – Oct 2021

Ad-hoc Network using Linux

Mar 2021 – Apr 2021

- Configured a DHCP server for dynamic allocation of IPv4, and IPv6 addresses in the network
- Created a DNS server using BIND9 to resolve the domain name and IP queries with A, AAAA, CNAME, PTR, MX type records
- Implemented the man in the middle attack using Python script with ARP spoofing

Multi-geographical Corporate Inter-Network

Feb 2021 – Mar 2021

- Designed a hierarchical network infrastructure for a corporate using cisco packet tracer and applied OSPF protocol
- Incorporated VLANs and access lists for network optimization and security, PVST and HSRP to increase network redundancy