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SUMMARY	<p><i>A Team Leader working in Research and Development including Software / Electronics / Communications Engineering, and finally as a team leader.</i></p> <p><i>I love solving hard problems, learning new domains, and creating big systems that are manageable and amenable to change. In order to help my whole team succeed, I find and remove obstacles, answer a lot of smart questions, and try to ask even more dumb questions.</i></p> <p><i>Dealt with Software and Hardware specialized companies as a senior engineer in additions to Universities' Communications and Informatics departments as Assistant Professor and Project Manager.</i></p> <p><i>Have a Communications and Electronics Engineering background with exceptional software programming and development skills.</i></p> <p><i>Comprehensive knowledge of telecommunication standards and protocols, Networking protocols, M2M, Smart Metering, Internet of Things, and Embedded Systems. Skilled at learning new concepts quickly, working well under pressure, and communicating ideas clearly and effectively.</i></p> <p><i>Recently I made several integration solutions with IoT cloud platforms like: SAP IoT Cloud, OceanConnect, and Cumulocity IoT platform.</i></p> <p><i>Extensive computer training, including knowledge of several programming languages and new software technologies.</i></p>
EXPERIENCE AND HISTORY	<p>Software Development Team Leader, UGARIT 15-12-2018 / Now</p> <p>Lead a team of Software Engineers within one of the Technology departments, delivering business critical project whilst maintaining high morale, managing the day to day activities in an efficient and professional manner and ensuring all team targets are met as advised by management.</p> <p>My team including me, is working with FormEra project which uses up-to-date technologies and works with the latest ASP.NET Core & EF Core but also supports ASP.NET MVC 5.x & EF 6.x as well.</p> <p>Main tasks:</p> <ul style="list-style-type: none">• Oversee the technologies, tools and techniques used within the team• Work closely with the business and Engineers on issues related to design and requirements• Ensure that development standards, policies and procedures are adhered to.• Drive change to implement efficient and effective strategies as advised by management• Develop and implement IT standards and procedures to aid in the development of high-quality software. Ensure that all Engineers within the team understand and follow existing IT standards.• Work closely with peers in the business to fully understand the business process and requirements.• Gain enough business knowledge to be able to actively participate in specifying software solutions for business needs.• Ensure that all software developed within your team satisfies the business requirements as specified.• Ensure that projects are accurately estimated and delivered to schedule• Show flexibility to respond to the changing needs of the business.• Actively contribute to the process of continual improvement, with regard to self, team and systems• Perform 3rd line support as required.

R&D Software-Communications Senior Engineer, Eclipse Information Technologies

01-10-2014 / Now

Main tasks:

- Research for new creative projects' ideas which are up-to-date with new technologies, and prepare projects proposal in addition to writing complete plan study.
- Implement integration solutions with IoT cloud platforms like: SAP IoT Cloud, OceanConnect, and Cumulocity IoT platform.
- Implement new protocols (IIoT, IoT over 6LoWPAN, MBus/wMBus, COSEM/DLMS, OPC, IEC 60870-5, Modbus...).
- Prepare IoT/modem/Router devices with firmware like OpenWrt, Debian. This includes Linux Kernel compilation, installing drivers, and preparing required file system.
- Build (Web using ASP.Net-C# and windows) applications to Control/Monitor M2M Modems and Gateways.
- Build application to work as a mid-level exchange application between e-Sale Energy Management system, and PMUM EPAIS system.
- Build Tester applications which implements testing Gateways/Routers (Debian, OpenWrt) with the maximum performance.
- Project Supervisor for postgraduate and graduate students who need to do Communications / Control system/ Electronics projects (TEKNOPARK - Boğaziçi Üniversitesi).

Main projects:

- **Packet/Message Sniffer and Broker**
This services solution works as a Broker between Energy companies operating in Turkey and TEDAŞ. It sniffs to packets traffic from APN of IoT devices/modems which have different protocols, accumulates packets to form messages and verifies them with each company's central system. Finally, it sends messages to TEDAŞ using Kafka (Distributed Streaming Platform).
- **Developing Docker micro-services with Cumulocity IoT platform**
We are working on an integration for Eclipse IoT/NB-IoT devices with Cumulocity IoT platform. This includes developing microservices and adding new UIs.
- **Preparing Embedded Linux software for MBus-Data Concentrator**
Preparing software issues for a new Data Concentrator device with several interfaces like wireless/wired MBus modules, RF modules, Serial ports, Ethernet ports, and also 4G/3G modules.
- **NB-IoT Integration with Huawei OceanConnect cloud system**
We are working on the integration of our Eclipse NB-IoT device with Clouding OceanConnect of Huawei, and this includes understanding Huawei solution and work on development of Plug-ins in both the system and Eclipse devices.
- **IEC-60870-5-104/101 Implementation – OMS**
We are working on creating sub-system which works with Outage Management System (OMS) and implements IEC-60870-5-104 and IEC-60870-5-101 protocols to collect events based on monitoring outages. This sub-system will be based on Eclipse modems which include M2M application to monitor the outages and report any event to a server application. The server application will submit the collected events from Eclipse modems to OMS in real time, and record them in database (Oracle/SQL server). The communications will be based on IEC-60870-5-104 and IEC-60870-5-101 protocols.
- **Lightening Control System - M2M Application / Remote Management Web application**
I'm responsible of implementing a Web Application (ASP.Net, Java script with SQL Server) which provides a secure real-time monitoring of lightening system on Bing map. This Lightening system is TMX based project, so it was also my responsibility to work with TMX aiming to reach optimum performance of exchanging data with SQL Server.

	<ul style="list-style-type: none"> • Implementation of an OPC Server application - Industrial Internet of Things (IIOT) Work on an implementation of OPC Server application which is able to serve as OPC Server and communicate with Cellular Modems in order to achieve controlling and monitoring. • Internet of Things: Working with IEEE802.15.4-based wireless network technology and the Internet Protocol (IP) to achieve integration between the two domains (6LoWPAN/IP), providing a solution for the wireless 'Internet of Things'. In addition to Management application .Net C# (Win Form) which implements JenNet-IP protocol. • Modbus Implementation to communicate with Network Analyzer - M2M Application I'm responsible of writing a M2M application (J2ME language) which let's "Eclipse 3G Java modem" read Network Analyzers using Modbus. I'm working on implementation of different calculations and logging for 3-phase Voltage/ Current and Active and reactive power. In addition to that, this application will upload measurements to TMX system to be managed by it. • Modbus Implementation to communicate with Smart Relay- M2M Application I'm responsible of writing a M2M application (J2ME language) which let's "Eclipse 3G Java modem" read and control Smart Relays using RS-485 Modbus RTU. • Embedded systems M2M which implement DLMS/COSEM protocol with JAVA ME, and remote control/configuration application with .Net C# (Win Form). • Mid-level integration application with Energy Data Management system Integration of several systems based on Web Services (Rest/ SWAGGER/SOAP), Energy Data Management system is being developed/installed and we integrated this new system to PMUM/DGPYS and also some existing in-house systems of the customer. Our application Implements mid-level one (.Net C# application as Windows Service & Desktop one dealing with different data type: JSON, XML, CSV and Excel). • Tester applications, .Net C# application (on PC side) with Python scripts (Embedded Linux systems' side) which achieve the communication with Debian/OpenWrt Linux system within the Gateway devices and test the functionalities in the maximum performance for all modules/ports/hardware interfaces on Gateway board. • 4G Router Implementation: Implement 4G/3G Router, OpenWrt Linux system based router with full functionalities. Has been developed for IoT (Internet of Things), Smart Metering and Smart Grid applications supporting data communication and application scenarios making use of Ethernet, 2G/3G/4G modules, RF networks. <p>Software Developer & Programmer, All T&M (LLC) 01-06-2011 / 01-10-2014 Work as Software Developer & Programmer in VS.NET including: C#, C, C++ and SQL Server with Crystal report.</p> <p>Main tasks:</p> <ul style="list-style-type: none"> • Playing a lead role in developing/ reengineering information systems by working closely with business and IT users. • Collecting, understanding, meeting and communicating the business requirements for each project, and translating these into functional specifications, technical specifications and detailed test plans. • Defining systems design requirements (SDRs). • Evaluate problems and opportunities within the business. • Creating/Developing prototype system (user's dialogue and prepared feasibility studies). • Information systems design (Class diagram, activity diagram and sequence diagram). • Writing/producing relevant documentation and system implementation. • Provide technical support to end users. • Involved in all phases of the Software development life cycle (SDLC) that includes Development, Testing, Implementation and Maintenance Support.
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	<ul style="list-style-type: none"> • Involved in the development that include understanding of the current Application and implementation of the new changes / enhancements. • Involved in deployment of windows applications, and the security issues related to risks of copying the program illegally. <p>Main projects:</p> <ul style="list-style-type: none"> • POS Orders & Delivery / Done in VS.Net using C# with SQL server, windows application working on Local Network. This software receives the customers' calls automatically using phone modem and register customer profile and orders. It gives the restaurant manager all the required statistics about the orders, bills and the delivery procedures. It makes it easier for the manager to organize the delivery and do the profit and loss account verifications. Designed to work on both Touch screen and normal one, and it's multi language application (Polish – English – French – Arabic). The application supports all the terminals to identify the products like: Barcode, RFID reader, Dallas Card. • POS Internal Order / Has all the options included in the POS Orders & Delivery but this application was designed for the restaurants and fast-food points, the application help the manager to arrange the orders according to the tables and join the orders with waiters, help to register the waiter work time and calculate the exact salaries. • Both applications were protected with a strong security and period licensing. <hr/> <p>Software Developer & Programmer, SecureTech.Co 01-04-2010 / 01-06-2011 Work as Software Developer & Programmer in VS.NET including: C#, C, C++ and SQL Server with Crystal report.</p> <p>Main tasks:</p> <ul style="list-style-type: none"> • Playing a lead role in developing/ reengineering information systems by working closely with business and IT users. • Collecting, understanding, meeting and communicating the business requirements for each project, and translating these into functional specifications, technical specifications and detailed test plans. • Creating/Developing prototype system (user's dialogue and prepared feasibility studies). • Provide technical support to end users. • Involved in all phases of the Software development life cycle (SDLC) that includes Development, Testing, Implementation and Maintenance Support. • Involved in the development that include understanding of the current Application and implementation of the new changes / enhancements. • Involved in deployment of windows applications, and the security issues related to risks of copying the program illegally. <p>Projects:</p> <ul style="list-style-type: none"> • Medical Data System: Done in VS.Net using C#, C++ with SQL server. Using smart card technology, this system helps the doctor to register all the important details and information about patients, register the diagnoses and medicines in a local/Network database, and export patient's reports and prescription (Crystal report). The smart card is an identification of a patient to the software. I improved this application to work on local network between the doctor and his secretary. <hr/> <p>Communications/Software Engineering Instructor, Yarmouk Private University 01-02-2012 / 01-06-2013 Teaching in the Faculty of Informatics and Communication Engineering the following:</p> <ul style="list-style-type: none"> • Data Communication • Networking • Analog/Digital Communications Labs • Electric Circuits Labs • Electronics circuits Labs (Beginner – Medium – Advance)
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	<ul style="list-style-type: none"> • Logic circuits. <p>Supervise many projects (Senior/Junior):</p> <ul style="list-style-type: none"> • BPSK Simulation on MATLAB • FSK Circuit Implementation • FDM Circuit Implementation • Circuit Implementation TDM • Synchronous transfer of analog signal (Temperature value) • GPS-GSM (C# with C)
	<p>Projects Supervisor, Damascus University - faculty of Communications Engineering</p> <p>Supervise many projects (Senior/Junior):</p> <ul style="list-style-type: none"> • Automatic Modulation recognition (Master's project) • Graphical Raised-Cosine Audio Equalizer (Graduation's project) • Spread Spectrum (Graduation's project) • ISI-Raised Cosine (Graduation's project) • BPSK With An Application On DSP (Graduation's project) • Image fft Application on DSP (Graduation's project) • Virtual and Augmented Reality simple application (Graduation's project)
	<p>Network Engineer, Ministry of Culture/ Informatics department 01-02-2010 / 01-05-2013</p> <p>Work as Network Engineer (Part Time) and responsible for:</p> <ul style="list-style-type: none"> • Network troubleshooting, installing, maintaining. • Configuration of: Routers, Switches, and Access Points. • Documentation for Network information • Study and rate the presented Software. • Develop several applications: HR App/ Infrastructure App/ Minister's exchanges management
	<p>Software Developer & Programmer, Freelancer 2014</p> <p>Projects:</p> <p>E.R.P for Humanitarian organizations</p> <p>It attempts to integrate all departments and functions across a company onto a single computer system that can serve all those different departments' particular needs.</p> <p>That is a tall order, building a single software program that serves the needs of people in finance as well as it does the people in human resources and in the warehouse. Each of those departments typically has its own computer system optimized for the particular ways that the department does its work. But ERP combines them all together into a single, integrated software program that runs off a single database so that the various departments can more easily share information and communicate with each other.</p> <p>This E.R.P work as distributed system without using online database! By importing branch database in the main center database in one click.</p>
	<p>MATLAB & DSP Instructor, MyLAB 2010</p> <p>Teaching MATLAB courses:</p> <ul style="list-style-type: none"> • Introduction to MATLAB • Image Processing • Digital Communications. • Control systems • Signal processing (Digital / Analog / Random).

	<p>Supervise several projects in Image processing, GSM, Spread Spectrum, Virtual & Augmented Reality using MATALB.</p> <p>Training DSP courses:</p> <ul style="list-style-type: none"> • Introduction to DSP • Modulation on DSP • Coding on DSP • Image Processing on DSP <p>Research Communications Engineer, HIAST 2009</p> <p>Graduate Project:</p> <p>Turbo BCH Code: study, design and implement Turbo BCH Code, I made the programming structure to study the performance of this code using C language. I applied Turbo BCH code using TMS320C6713 DSP controlled by MATLAB through user interface and RTDX Link, I achieve 129 Kbps data processing speed. In addition, I created user interface using MATLAB that uses the C functions (mex files) to encode an image, add noise to it then decode using best decoding algorithm and finally show the result image.</p> <p>Image Processing course:</p> <p>Face Detection Based on Skin Color Using morphological tools, programming in C++ and C# under Visual Studio 2005 -.Net-.</p>
SKILLS	<p>Programming Languages:</p> <p>Professional in:</p> <ul style="list-style-type: none"> • C# • C++ • J2ME <p>Good and familiar with:</p> <ul style="list-style-type: none"> • Python • C • ASP.Net, MVC • Java • Visual Basic • Java Script • Lua • PhP • VHDL • Assembly <p>Data Structure XML - JSON</p> <p>Database</p> <ul style="list-style-type: none"> • Very Good in SQL server, and familiar with Oracle. • Good in NoSQL databases like MongoDB. • Very Good in Entity Framework 6, Core and ADO.Net- LINQ. • Good in Access. <p>Data Communication and Networking (finish CCNA course):</p> <ul style="list-style-type: none"> • LAN Switching • IP Routing • Routing Protocols Configuration and Troubleshooting • Wide-Area Networks • Network Services, Data & Network Security. <p>Mobile Networks: GSM – 3G – 4G – 4.5G GPS communications - RF communications</p>

	<p>Microprocessor Programming: very good in programming in both C & Assembly</p> <ul style="list-style-type: none"> • Gemalto modems: BGS5, EHS5, and ELS61. • ACME systems: Aria G25, RoadRunner. • NXP: i.MX 6, i.MX 7 Series Applications Processors. • Digital Signal Processors (DSP) familiar with: TMS320C6713/TMS320C5505/ TMS320C5515. • Microcontroller familiar with: ATMAEGA 16/32 - AT89C52.
TRAINING	<ul style="list-style-type: none"> • Xamarin.Forms Essential Training - Lynda • SQL Server 2014: Developing Databases - Lynda • Kafka Essential Training - Lynda • Entity Framework Core Essential Training - Lynda • Building Web APIs with ASP.NET Web API 2.2 - Lynda • ASP.NET MVC 5 Essential Training - Lynda • Android Studio Essential Training - Lynda • Android Development Essential Training - Lynda • Developing Databases Microsoft SQL Server - Lynda • Installing and Administering Microsoft SQL Server - Lynda • Developing Microsoft SQL Server Databases – Microsoft Certified • Getting Started with the Internet of Things (IoT) – Microsoft Certified • Cloud Application Development – Microsoft Certified • MS (Microsoft) Project 2013 Essential Training, Lynda • Premiere Pro CS6 Essential Training, Lynda • C# Total Training, AppDev • ASP.NET Using Visual C Sharp 2010, AppDev • Total Training for Microsoft WPF Essentials, Total Training • VTC Microsoft SQL Server 2008 Development, VTC • VTC.Microsoft.SQL.Server.2008.Administration, VTC • Crystal Reports XI R2 Multilang, Business Objects • XML with Martin Schaeferle, AppDev
EDUCATION	<ul style="list-style-type: none"> • Master degree in Web Technology (MWT) in Syrian Virtual University • Diploma degree in Electronics & Communications Engineering from: HIAST 2004-2009 with a Very Good grade (71%), ranking 02/173.
LANGUAGE	<ul style="list-style-type: none"> • Arabic: Native Language • English: TOEFL(PBT) 530 / IELTS 5.5 • Turkish: C1, Certified from İstanbul Üniversitesi Dil Merkezi • French: good read/write. • German: B1
OTHERS	<ul style="list-style-type: none"> • <u>Presentation</u>: Developed ability to produce reports and presentations to a professional standard. • <u>Microsoft Office</u>: Very good experience in Word, PowerPoint, Access, Excel, and Outlook (2003 →2019). • <u>Computer maintenance</u>: Good level of knowledge in computer hardware, main parts and their functionalities, added to computer software maintenance. • <u>Operating systems</u>: Windows XP, VISAT, 7/8/10. Windows server 2003, 2008, 2012, 2016, 2019. A Good experience in Linux (Debian, Ubuntu, OpenWRT). • <u>Driving license</u>: Fully clean driving license, since 20/10/2007.

	<ul style="list-style-type: none">• <u>Personality</u> Optimistic, straightforward, helpful, hard-working, and trustworthy. When I have a duty, I make a lot of effort to do it the best way to be done to the fullest extent.• <u>Activities and Interests</u>: I enjoy playing different kinds of sport like table tennis, basketball, badminton, and football, I also like swimming. I enjoy being up to date with new technologies, news.
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