

Ali Al-Bayaty

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<https://albayaty.me>

SUMMARY

Building and managing servers (on-premises and cloud-based: LAMP, NAS, QuickBooks, G Suite, VoIP, and NVR systems), handling websites and databases security, and dealing with networking hardware/software needs using reusable resources and open-source approaches have always motivated me to seeking for my outlook career, a Senior System Engineer.

EDUCATION

University of New Haven CT, USA

MSEE (Master of Science in Electrical Engineering) May 2014

Thesis title: '*Graphical-based Robotics Programming Language*' GPA: 3.94 / 4.00

U.S. Fulbright Masters Scholarship

University of New Haven CT, USA

Graduate Certificate in Computer Programming July 2012

U.S. Fulbright Masters Scholarship

Al-Nahrain University Baghdad, Iraq

Master of Science in Computer Engineering March 2006

Thesis title: '*Development of 1D Barcode Reader Software Tool*' Grade: 73.455 %

Iraqi Qualified Students Program

Al-Nahrain University Baghdad, Iraq

Bachelor of Science in Computer Engineering September 2002

Project title: '*PC-based Simple Robotic System*' Grade: 74.450 %

Ranked the 3rd out of 16

AWARDS & MEMBERSHIP

- Fulbright International Exchange Alumni Association since 2014.
- IEEE-HKN (Eta Kappa Nu) Honor Society Membership since 2012.
- Fulbright Masters Scholarship Award, 2010.

MOOC (Online Learning)

- Control of Mobile Robots, Georgia Institute of Technology Coursera.org
- Autonomous Mobile Robots, Zürich University edX.org
- Fundamentals of Image and Video Processing, Northwestern University Coursera.org
- Introduction to R, Microsoft and DataCamp edX.org
- Introduction to jQuery, Microsoft edX.org
- Real-Time Communications 101 (SBC, VoLTE, WebRTC & SDN) Sonus Academy
- Machine Learning, Stanford University (currently registered) Coursera.org

PUBLICATIONS

Books:

- A. Al-Bayaty. (Sep. 2017). *Video Game Engine Development Guide (Using Xilinx® SoC Board)*. (1 ed.) Series: Simplified Engineering Approaches. [Online]. vol. 4. ISBN: 978-1976400940. Available: <https://www.amazon.com/dp/1976400945/>
- A. AlZubaidi and A. Al-Bayaty. (Jul. 2017). *Introduction to Prosthetic Hand Engineering (Theory and Applications)*. (1 ed.) Series: Simplified Engineering Approaches. [Online]. vol. 1. ISBN: 978-1974102822. Available: <https://www.amazon.com/dp/1974102823/>

Chapter:

- A. Al-Bayaty, "CT Radiation Therapy Planning (CT RTP)," in *Introduction to CT Techniques (Principles and Applications)*, A. AlZubaidi (ed.), 1 ed., Amman: Dar Safaa, 2018, ch. 3, pp 71-102, to be printed.

Journals:

- A. Al-Bayaty, "Software-Defined Robotics – Idea & Approach," *IEEE Robotics and Automation Letters (RAL)*, submitted. [Online]. Available: <https://arxiv.org/abs/1708.05935>
- F. Al-Saedi and A. Al-Bayaty, "Development of a Barcode Reader System," *International Journal of Computer Trends and Technology (IJCTT)*, vol. 30, no. 1, pp. 50-58, Dec. 2015, ISSN: 2231-2803.

Conference:

- A. Al-Bayaty, C. Martinez, "CLIP 4 Robotics: A Click-Based Programming Language," in *International Conference Proceedings on Human-Computer Interaction 2018*, Las Vegas, Nevada, Jul. 2018, Vol 852. Springer.
- A. Hussein, A. AlZubaidi, A. Al-Bayaty, and Q. Habash, "IoT Real-Time Biometric Authentication System Based on ECG DCT feature extraction," in *2018 Second Al-Sadiq International Conference on Multidisciplinary in IT and Communication Science and Applications*, Baghdad, Iraq, Jan. 2018.

Source-codes:

- A. Al-Bayaty (Jul. 2014). GRPL (Graphical-based Robotics Programming Language). *GitHub, Inc.* [Online]. Available: <https://github.com/albayaty/GRPL-Tool.git>
- Al-Bayaty (Jul. 2014). VGEP (Video Game Engine Project). *GitHub, Inc.* [Online]. Available: <https://github.com/albayaty/Video-Game-Engine.git>

SKILLS

<i>Operating Systems</i>	<ul style="list-style-type: none"> • Advanced experience in MS Windows Servers (deploying & networking). • Moderate experience in MS SCCM (System Center Configuration Manager) server. • Advanced experience in remote access software (Exceed X, TeamViewer, and RealVNC Connect). • Advanced knowledge in VMware and Citrix (XenApp/XenDesktop) platforms. • Practical level of experience in deploying and administering LAMP-based servers: WordPress, Apache, DNS, DHCP, FTP/SFTP, SMTP, SSH, AFP/NFS/SMB, and NAS.
<i>Networking Systems</i>	<ul style="list-style-type: none"> • Practical experience in Cisco (small/medium business routers/switches) and MikroTik (RouterOS/SwitchOS/AP) products. • Advanced experience in Synology DS+ (NAS) platforms. • Moderate experience in Juniper (firewall) and Big-IP F5 (load balancer) devices. • Advanced academic knowledge of the OSI model, TCP/IP, and security protocols.
<i>Telecom</i>	<ul style="list-style-type: none"> • ZTE systems (MSS, PDSN, and Zsmart billing). • Alcatel-Lucent product (ngHLR). • Asterisk-based VoIP platforms.
<i>Programming Languages</i>	<ul style="list-style-type: none"> • General: C/C++, Java, and MATLAB. • Scripting: Bash, Python, JavaScript, and jQuery. • Database: SQL (MariaDB) and SugarCRM/SuiteCRM. • Web Dev: WordPress CMS (PHP/HTML/CSS/JS). • Mobile: Basic knowledge in Android Studio and SDK tools.
<i>Embedded Systems</i>	<ul style="list-style-type: none"> • Programming: Low-level C and VHDL. • Boards: Arduino, PIC microcontrollers, FPGA, and Xilinx SoC. • Protocols: SPI and I²C.
<i>Robotics</i>	<ul style="list-style-type: none"> • LEGO Mindstorm NXT. • Fischertechnik educational kits. • Basic knowledge in NAO robots using Python scripting.

PROFESSIONAL EXPERIENCE

IRIS (Integrated Refugee & Immigrant Services) Organization	CT, USA (10/2015 – Present)
<i>IT Coordinator</i>	
<ul style="list-style-type: none"> • Implemented and deployed Web, DNS, DHCP, and Email servers using LAMP-based platforms. • Maintained Synology NAS—DiskStation and its securities and policies. • Assured the security of the overall system and its related servers from any vulnerabilities and threats using WAF and customized ACLs. • Configured whole networking entities properly to match any future office(s) expansion. • Designed and managed the Wi-Fi networks for IRIS staff, interns, and clients to be used separately to access specified resources and functionalities. • Installed wireless security cameras with remotely monitoring capability. • Integrated IRIS clients' files to the unified on-the-cloud web-based database. • Enhanced IRIS website using WordPress platform using PHP, HTML/CSS/JavaScript, and jQuery. 	

- Developed Android software, called AGIR (Assistant Guide for Immigrant & Refugee), for IRIS clients.
- Designed and implemented a web portal for IRIS co-sponsors to exchange private data securely.
- Deployed internal Email/SMTP server to be used by IRIS staff and other healthcare institutions to privately exchange emails, clients' health/clinical information, and other privacy-related documents according to the HIPAA software-compliance.
- Managed and administrated the on-the-cloud hosted VoIP server.
- Deployed IT Ticketing Server for posting and monitoring technical problems/inquiries from IRIS staff and interns.
- Currently, programming and configuring the all-in-one database for refugees and immigrants of different IRIS departments into one unified access platform using LAMP-based server.

Dynamic Measurement Consultants (DMC), LLC

Hamden, CT

Accelerometer Board Developer (Intern, 480 hrs)

(7/2012 – 9/2012)

- Used PIC24F microcontroller due to its robust controlling purposes for such project.
- Programmed the accelerometer board for a reliable and fast data acquisition rate.
- Verified the reliable data conversion using 12-bit ADC chipset.
- Verified the fast data transferring to the host using USB 2.0 interface.

ZTE Corporation

Baghdad, Iraq

Telecom Engineer

(2/2005 – 9/2010)

- Configured and administrated the Zsmart billing systems (AIX/Oracle servers) in the three provinces: Baghdad, Najaf, and Nasiriyah.
- Designed and managed the ZXR10 (ZTE switches and routers) infrastructure for the overall Zsmart billing systems in the three mentioned-above provinces.
- Designed the SDH/STM layouts for Access Networks (MSAN and MSAG) project, in Nasiriya.
- Chief of Engineers for CDMA2000 FuratPhone Telecom project, in Nasiriya.
- Training Manager for ZTE products (MSS, PDSN, and Zsmart billing system) at FuratPhone Telecom, in Nasiriya.
- Installed, configured, and maintained the MSS and PDSN systems for CDMA2000 Najaf City project.

PROFESSIONAL TRAINING

For more information, please check <https://albayaty.me/roadmap/> under the *Professional Training* section.

SOFTWARE ACHIEVEMENT

For more information, please check <https://albayaty.me/roadmap/> under the *Software Achievement* section.

References available upon request ...