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# Abdelkareem Jaradat

#### Education

SEP 2017 – The University of Western Ontario (UWO) - Computer Science (Thesis), London, Canada. AUG 2019 MSc. in Computer Science from The University of Western Ontario (UWO) with GPA 95

SEP 2004 - Jordan University of Science and Technology (JUST) - Computer Engineering Major, JUN 2009 Irbid, Jordan.

> B.Sc. in Computer Engineering with honors from Jordan University of Science and Technology (JUST) with GPA 88.3 "Excellent", and class rank 4/76

2004 Irbid Secondary School for Boys, Irbid, Jordan.

General Certificate of Secondary Education (GCSE) with 93.7% average, Percentage Rank: 96.79%

### Awards & Honoring

- 2019 now Granted the Western Graduate Research Scholarship (WGRS) for completeing PhD degree in computer science at Western University (UWO)
  - 2019 Won first place prize in UWORCS2019 at the department of computer science, Western university.
- 2017 2019 Granted the Western Graduate Research Scholarship (WGRS) for completeing Masters degree in computer science at Western University UWO
- 2007, 2008 Listed twice on the President's list of honors
- 2004–2009 Listed on **Dean's list of honors** for eight times
- 2006, 2007, Ministry of Higher Education Scholarship for three consecutive years, Jordan University of
  - 2008 Science and Technology Awarded to the Engineering undergraduate with the highest overall GPA
- 2006, 2007, King Abdullah'II Fund for Development (KAFD), for three consecutive years, Jordan University of Science and Technology Awarded to the Engineering undergraduate with the highest overall GPA.
  - 2002 Won first place in the Jordanian conference for High Schools mathematics computerization

### Work Experience

- SEP 2017 Graduate Teaching and Research Assistant, Western University (UWO), London, ON, Canada. present Working on a research topic related to reducing energy consumption by changing consumers behaviours in different approaches like Gamification, Socialization and Visualization
- OCT 2015 Business Analyst, Saudi Ministry of defense/EJADA Systems, Riyadh, Saudi Arabia.
  - FEB 2017 Main responsibilities:
    - Requirement elicitation using combinations of techniques like brainstorming, document analysis, existed interface analysis, Interviews and prototyping.
    - Create and documented process descriptions, SRS documents and process flows as well as robust use cases.
    - Strategic development of business solutions.
    - Meet clients to gather their stories about what they want and evaluate, document functional business requirements.

- Produce visual workflows, UML diagrams, slide presentations and infographic content to help underlying layers to digest ideas and understand the needs clearly.
- Design live prototypes at the early stages of project with the latest web design libraries.
- Participating in analyzing, building and UI/UX enhancing for web applications based on state of the art technologies; Asp.net MVC/WEB API, jQuery/AJAX and bootstrap/css3.

# MAR 2015 – **Senior .Net Web Developer and UI/UX Expert**, Saudi Ministry of defense/EJADA Systems, OCT 2015 Riyadh, Saudi Arabia.

Main responsibilities:

- Analyzing, building and UI/UX enhancing for web applications based on state of the art technologies; Asp.net MVC/WEB API , jQuery/AJAX and bootstrap/css3.
- Develop/Design a simple and effective reporting methodology using only Html/css.
- Architect a generic ORM-like framework that lays on the data access layer.
- Develop code generation tools to fasten adopted code implementation process.
- Analyze new/existing database systems through producing SRS documents.
- Design live prototypes at the early stages of project with the latest web design libraries.
- Design art works, print materials, web banners, mockups and vector using Adobe apps.

FEB 2010 **Full stack developer**, *Jordan University of Science and Technology (JUST)*, Irbid, Jordan. –MAR 2015 Main responsibilities:

- Full-Stack business process in analyzing and building web application.
- Focusing on early stages of SDLC; meeting clients to gather business needs.
- Visualize business requirements into wireframes, mockups and demos with full functionalities.
- Building web application using Asp.net/C# & web graphics.
- 2009 –present Web Developer/Graphic Designer Freelancer, working on the whole SDLC for projects from Jordan, KSA, Australia, Germany and UAE.
  - JAN 2013 **Software Development Engineer**, Integrated Horizons for Training (IHT), Irbid, Jordan.
  - -JUN 2013 Responsible for training and supervising undergraduate IT student in completing their graduate projects in Asp.net, C#, VB.net, SQL server and MS Access.
  - AUG 2009 GUI & Software Development Engineer, CIAPPLE, Amman, Jordan.
  - -JAN 2010 Responsible for building computational intelligence web application for DB clustering.
  - Feb 2009 **Software Development Engineer**, Systems and Electronic Development Co (SEDCO), Amman, –AUG 2009 Jordan.

Responsible for building many windows applications under VB.Net and integrate them with an existing applications.

- XML Reader windows service & Flash 8 movie that reads News, weather and Prays Times from Webserver and distributed to display LCDs
- Building a Windows CE 6.0 image using Platform Builder 6 to use it to operate a 800 VESA Compact pc in many banks branches for queuing purposes.
- Packaging several installation files into one universal self-installer with customized GUI.
- Developing a file transfer/Chat Application using .NET Remoting & Windows Sockets to communicate between VESA Compact PCs and Administration PCs.
- Full customization and enhancements for an open source survey application built with PHP, Javascript, CSS and MS SQL Server 2005 deployed on a stand KIOSK for customers feedback.

OCT 2007 **Graphic Designer**, *Jordan University of Science and Technology (JUST) Students Appairs*, Irbid, –JUN 2008 Jordan.

Design official documents, advertisements, Brochures and flyers.

#### Qualifications & Skills

Core Skills

• Broad development knowledge for back-end, front-end and database, including C#, ASP.Net,

- MVC, WebAPI, SQL server and oracle databases, HTML5, CSS3, Bootstrap, Responsive Web, JavaScript and jQuery.
- Industry aware and technically up to speed with current software development tools, including Visual Studio 2015, and MS TFS.
- Strong analytical skills and level headed problem solver with very high communication skills like team management, persuasion and arguing, critical Thinking, Interpersonal skills, Analytical and Team Working.
- Strong and solid knowledge in both object orientated (OOP) and service oriented architecture (SOA) concepts and innovating / enhancing algorithms.
- Expert in design concepts for both web applications and print materials using Adobe products.

# Qualifications & Skills

# ${\sf Communication}$

Skills

- Team Management, Persuasion and Arguing, Problem Solving, Critical Thinking, Interpersonal skills, Analytical and puzzle solver.
- Motivated, Enthusiastic and a Team Worker.

#### Technical Skills

- Web Development and Design: Asp.net MVC5, Asp.net WebForms, Asp.net WebPages, Razor views, HTML5, WCF, SignalR, WebAPI, PHP.
- **Web Design:** UX/UI, CSS 3.0, Bootstrap 3.x, jQuery UI, Responsive Web Design, LESS, SASS, CSS Animation, animate.css, Web charts, FontAwesome, Fontello, HTMLkickstart,.
- **Programming:** C#.Net, VB.Net, Data structures, C++, C, Visual Basic, Crystal Reports, Action Script, Python, Android, SimScript.
- Scripting: JavaScript, jQuery, AngularJs, knockout, AJAX, DOM, XML, JSON, handlebars, Typescript, TypeAhead, Hogan, Zepto, holder.js, slimscroll.js, knockout, AngularJs, Jade.
- Database: DDL&DML Scripts, MSSQL Server, SQL Stored Procedures, ADO.NET, Entity Framework 6, Ling, Ling to SQL, MySQL, Oracle 10g, MS Access, PL/SQL, Data mining.
- **Graphic Design & Animations:** Adobe Photoshop CC, Adobe Illustrator CC, Adobe InDesign CC, Branding, Print Design, Adobe Flash CC, Inkscape, GDI+.
- Software Engineering: Project Planning, n-tier programming, Prototyping, Technical Writing, Requirements Analysis, Waterfall, Agile, Iterative.
- Software Tools and Packages: Visual Studio 2013, SQL Server Management Studio 2012, Adobe Suite CC, Microsoft Team Foundation Server TFS, Toad for Oracle, Sketchup, Matlab 7, MS Office Suite, Quartus II, Synapticad, Pspice, AutoCAD, SimScript Simulation Studio, Microsoft Visual C++ 6.0, Rational Rose, MS Visio, MS FrontPage, MS Platform Builder for Windows CE 6.0, LimeSurvey, Visual Source Safe, Powershell, Wordpress themes, Fiddler, XAMPP.
- Web Servers: IIS, Apache.
- Assembly language: MIPS R2000, MOTROLA 68000.
- Hardware Description: Verilog HDL.
- Operating Systems: MS Windows (10, Server 2012, Phone, Seven, Vista, XP, 9x, CEx), MS-DOS, Linux.
- Virtualization: IBM Cloud, VMware, Hyper-V.
- Sciences: Numerical analysis, Calculus, Computational intelligence, Physics, Chemistry.
- **Networking:** configuring and operating simple-routed LAN, CISCO routers configuration, Wireshark, Packet Tracer.
- Computer Maintenance: Excellent Experience in PCs Hardware/Software maintenance.

#### Certification

- DEC 2019 **IELTS G**, *British Council*, **Total: 8.0**. Reading:8.5 Writing:7.0 Listening:8.0 Speaking:7.5
- SEP 2016 **TOEFL IBT**, ETS, **Total: 101**.
  Reading:25 Writing:25 Listening:28 Speaking:23
  - 2015 Microsoft Certified Professional, Microsoft.
  - 2015 Microsoft Certified Solution Developer: Web Applications. , Microsoft.
  - 2015 Microsoft Specialist: Programming in HTML5 with JavaScript and CSS3 Specialist., Microsoft.
  - 2010 TRIZ Practitioner, ICG training and consulting.
    TRIZ and xTRIZ-based Systematic Innovation for Technology and Engineering basic level 3 full days

# **Professional Projects**

- 2017 Hajj-related systems, HRM, Employee Attendance, Saudi Ministry of defense/EJADA, KSA, Internal systems in Saudi Ministry of defense/EJADA serving thousands of users among nation area..
- 2015 **Academic Portal**, *JUST*, Jordan, A Z Customized Learning Management System built with state of the art web technologies serving 20,000+ JUST students..
- 2011 2014 **JUST Online Exams**, *JUST*, Jordan, Two separate web application, an Administration for the online exams admin and delivery form the students, serving more than 200,000 exam session each semester..
  - 2014 **JUST Exam Maker**, *JUST*, Jordan, A windows application dedicated for instructor to help them creating their own online exams with pools management, questions and answers randomization, encryption and scheduling online sessions..
- 2011 2015 Memorandums System, Vacations System, Students Grading System, Instructors Electronic Promotions, JUST Job Forms, Rehab Newspaper Website, *JUST*, Jordan, Internal systems for academic and administrative staff developed in JUST Computer Center..
  - 2013 AraWeb.TV, Araweb, UAE, A complete SDLC for a YouTube based web TV..
  - 2013 IrbidGov, CTS, Jordan, Photoshop Design and front end markup...
  - 2014 DohaHouses, Car.sa, Car.sa, Qatar, Photoshop Design and HTML markup...
  - 2011 AlMs Carpet Cleaning, Bond Cleaning Brisbane, TheBugBandit Pest Control, AlMs, Australia, Photoshop Design and markup..
  - 2013 **Projects Archiver**, Freelance, KSA, Online archiving system developed for students...
  - 2013 **Online Employment System**, *Freelance*, KSA, Online Recruitment website to be a connection between employers and candidates.
  - 2013 **Imam University IT Students Online Forums**, *Freelance*, KSA, Academic forums for IT faculty in Imam University..
  - 2012 Online n-Depth Crawler, Freelance, KSA, Basic Crawler and Google-like Search Engine..
  - 2012 **Photo Sharing Website**, *Freelance*, KSA, Basic Instagram-like photo management and sharing among friends, timeline, new photos feed..
  - 2012 ArabWiki, Freelance, KSA, Data Citation website...
  - 2013 **Applications Forms**, *Freelance*, KSA, Memorandums internal management system between university president, deans and department's heads..
  - 2012 **IdeaBox**, *Freelance*, KSA, Connector service between idea's owners, experienced consultants and investors...

- 2013 **Official Website**, *Freelance*, KSA, Imam University Information Study Department Official Website..
- 2012 **Integrated Students Services**, *Freelance*, KSA, Multiple services for master students and several related academic parts in university..
- 2013 **Online Car Parking Reservation System**, *Freelance*, KSA, Online service for remote parking slots reservation integrated with local windows app for monitoring..
- 2014 Handbags, Freelance, Australia, Basic eBay-like Ecommerce system for selling women handbags...
- 2014 Blogger Website, Freelance, Australia, Blogging CMS with core features...
- 2007 **Department of Plant Production website**, *JUST*, Jordan, Front end design and implementation..
- **Jordan Society for Scientific Research website**, *JSSR*, Jordan, Design and implementation for the official website of the Jordan Society for Scientific Research (JSSR)..

# Academic Projects

- 2018 A Glimpse on Consumer Behavior Change in Electric Power Consumption Using Socialization, Gamification and Visualization With Focus on Psychological Aspects, *Smart Systems*, Literature Review.
- 2018 A Comparison Between MV\* Design Patterns (MVC, MVP,MVVM) With An In-Depth N-Tier MVC Web Architecture, Software Engineering for Cyber-Physical Systems, Literature Review.
- 2017 Experimental Evaluation Of Maximum-Flow Algorithms Using Four Different Augmenting Paths Searching Techniques Based on Ford-Fulkerson Algorithm, Algorithms, Quantitative evaluation.
- 2017 **The Titanic passengers survival prediction**, *Data Science*, proposing different angles of visualization for the relations between features and by developing a predictive model using data science techniques such as Random Forests, Decision Trees and K-Nearest-Neighbors (K-NN) to predict whether each person survived or perished, based on the data available from that time.
- 2010 2013 ART Algorithm Al data clustering, PlayFair Encryption Algorithm, A\* Shortest Path Algorithms, Full implementation..
  - 2009 **Student Registration System**, *Web Development*, Design and implementation of student registration system using PHP, HTML, CSS, and MySQL..
  - 2009 **Project Management System**, *DB Design*, Design and implementation of a Project Management System using Oracle 10g, ER diagrams, forms and reports..
  - 2009 **Online Shopping System**, *Web Development*, Implementation of an online shopping system based on registered users who can add or remove items to his cart, managed by system administrator have full access to the system, using ASP.NET and MS SQL server.
  - 2009 **Hardware**, *Graduation Project*, Design and implementation of a pipelined high frequency single harmonic frequency detector based on bit reversal Fast Fourier Transform, IIR 4th order elliptic digital filter, pipelined digital arithmetic MSI components and interpolated DFT algorithm for frequency measurement correction ,the implementation using Matlab, C++, C#.NET and mainly Verilog HDL synthesized in Synapticad..
  - 2009 **AES encryption**, *Hardware*, Design and implementation of a pipelined AES encryption algorithm using Verilog HDL..
  - 2008 **IC Tester**, *Hardware*, Building an IC Tester, Frequency Divider by writing Firmware assembly programs downloaded on Motorola 68000-based kits using MS Hyper Terminal . .
  - 2008 **Hardwired Computer System Kit**, *Hardware*, Building a simple hardwired computer system kit using TTL components; 68008 Processor, RAM, EPROM, PTM, VMA and ACIA. .

- 2008 **Consumers and Producers**, *Multithreading*, Implementation of synchronization problem (Multithreaded consumers and producers) using semaphores in C under Linux..
- 2007 **RISC- Based Simulator, Assembler, and Linker/Loader**, *Simulation*, Design and development of Simulator, Assembler, and Linker/Loader software package for a RISC-like ISA. The design is following object oriented design principles using UML and Rational Rose. The implementation language is C#.
- 2007 **Arrival/Departure Scheduler**, *Simulation*, Design and development of simulator for Arrival/Departure (process scheduling) systems based on queuing theory, using C#.NET..
- 2007 **Web Server**, *Networking*, Developing a simple WWW client, web server, and a proxy server using C#.NET socket programming..
- 2007 **CDs library system**, *DB Design*, Development and implementation for a using OOP concepts, following UML diagrams, implemented using C#.NET with ADO.NET technology connected with MS Access DB.
- 2007 **Simulation**, *Airport Runways Simulation*, Simulating the effect of increasing/decreasing the number of runways in airports to the performance of landing and departing planes using Simscript simulator.
- 2007 **Biomedical Equipments Management System**, *Web Development*, Design and implementation of biomedical equipments management system with two versions using ADO.NET under C#.NET as a windows application and with ASP.NET web application connecting to MS Access DB ..
- 2007 **Hospital System**, *DB Design*, Design and implementation for patient/dependents history records used in a hospital system , implemented using C#.net with OOP/UML concepts with binary serialization..
- 2006 **Low-pass digital filter**, *Hardware*, Implementation of a low-pass elliptic 3rd order digital filter using Verilog HDL, Matlab and C++., .
- 2005 **Cars Renting System**, *DB Design*, Design of Cars Renting System from requirement elicitation and analysis to usecase modeling and writing design document. The implementation language being used was C#.net language and MS Access..

# Languages

English excellent command

Arabic Native Speaker

#### Non-Academic Activities

- 2009 Participant in the Technology Parade Festival in Princess Sumaya University with my graduation project., *Amman*, Jordan.
- Participant in the  $5^{th}$  Investing in Technology Forum in Jordan under the Patronage of his majesty King Abdullah II bin Al Hussein., *Amman*, Jordan.

#### Act as a Trainee

- 2014 **Configuring and Administering Hyper-V in Windows Server 2012**, *Amman*, Jordan, 3 Full day training course 55021..
- 2014 **Administering Microsoft SQL Server 2012 Databases**, *Amman*, Jordan, 5 Full day training course 10775.
- 2014 **Certified Software Tester ISTQB Foundation Level.**, *Amman*, Jordan, 5 Full day training course..
- 2014 Microsoft System Center VMM, Amman, Jordan, 3 Full day training course 55022...

- 2012 Windows Phone 7 Development, Amman, Jordan, 2 Full day training...
- 2011 Wimba Create for Moodle, Amman, Jordan, 2 Full day training course..
- 2011 Echo360 lecture capture solutions, Amman, Jordan, 3 Full day training course...
- 2011 IBM CloudBurst over VMware, Amman, Jordan, 14 Full day training course...
- 2011 Video/Audio Editing for eLearning purposes, Amman, Jordan, 5 Full day training course...

#### Act as a Trainer

- web development using Asp.net/C#, HTML5, CSS3, jQuery and database using SQL server 2012 to build fully functional wiki-like content management system., *Irbid*, Jordan, 6 Months day to day training for 12 undergraduate students.
- 2012 using Adobe Photoshop cs5 featuring dealing with layers, web mockups design, masking and photo manipulation, *Irbid*, Jordan, 5 full day training for 15 engineers/programmers..

# Memberships

- o IEEE.
- Western Alumni.
- Public Service Alliance of Canada PSAC
- Jordan Engineers Association JEA
- Saudi Council for Engineers SCE

#### Interests

Learning, Teaching, Math/Logic Puzzle Solving, and Home Cooking.

#### References

**Prof.Hanan Lutfiya**, *University of Western Ontario*, Dept of computer science chair, hanan@csd.uwo.ca, +1-519-850-2561, www.csd.uwo.ca/faculty/hanan/.

**Prof.Omar Al-Jarrah**, *Jordan University of Science and Technology*, Former President, aljarrah@just.edu.jo, www.just.edu.jo/ aljarrah.

**Dr.Amer Magableh**, *Jordan University of Science and Technology*, Computer and Information Center Former Director, ammagableh@just.edu.jo, http://www.just.edu.jo/ammagableh.

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