Ghaith Haddad

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OBJECTIVE A challenging position in Technology.

PROFESSIONAL & EDUCATIONAL EXPERIENCE

Sr. Manager, Technology Oct. 2013 - Nov. 2015
The Walt Disney Company, Orlando, FL
Park Operations Technology, IoT, Cloud Technologies

- Managed the Park Operations Technology Portfolio with 100+ Apps and multiple lines of business.
- Managed several Software Development and Sustainment teams.
- Drove the IoT initiative for Park Operations.
- Managed Portfolio Rationalization effort to optimize the Park Operations Applications.
- oversaw hiring and internships.

Manager, Software Development Oct. 2013 - Nov. 2015
Capital One, Wilmington, DE
Agile, Architecture & Design, Java, APIs.

- Lead Agile Sprint teams to deliver bank projects for Customer security & Small Business systems.
- Interacted with stakeholders and business owners to deliver the required product in an Agile environment and per intent.
- Built APIs to integrate with different technologies and platforms across the enterprise as well as third party services.
- Managed staffing for Agile teams.

Manager, Smart Grid Development Jun. 2010 - Sep. 2013
Petra Solar Inc., South Plainfield, NJ
Java, JavaEE, HBase, Hadoop, Python, C, Zigbee technologies, MS Project, Agile Development, ALM.

- Build a high caliber software development team, responsible for delivering software and firmware on the smart grid and energy efficiency applications, through taking direct responsibility of the development effort or through managing and supporting outsourced entities.
- Manage the team efficiently through consistently following best practices of application lifecycle management. Using agile-based methodology and team collaboration tools. Manage all project artifacts handled by the team (requirements analysis, design, task allocation and resource management, software releases, and product maintenance).
- Architect solutions targeting new products and features and supervise the design and implementation phase.
- Advise Sales and Marketing on issues related to current products or feasibility of ideas and new features requested by customers and the marketing team.
- Participate in MRD reviews and deliver advice, suggestions, and feasibility information when needed.
- Participate in writing proposals for funding from different government entities.
- Build up the company IP by filing patents for new ideas that emerged while developing new technologies for Petra.
- Answered to customers inquiries with regards to technical issues, provided answers and follow up on issues where appropriate.

- Participate in Standards committees meetings and represent Petra as an influential entity on the Standards being developed to support emerging technologies.

Lead Software Engineer Jul. 2008 - May 2010
Petra Solar Inc., South Plainfield, NJ
C, Java, .NET, MySQL, Tomcat, Python, Zigbee technologies.

- Lead communication and software design effort during Petra Solar startup.
- Designed and implemented a Zigbee based communication protocol between Smart Energy Modules (SEMs) and Data Communicators.
- Designed and implemented an IP based communication protocol between Data Communicators in the field and backend servers in order to save and track the history of energy generation and manipulate the configuration of devices in the field.
- Designed and implemented several software tools to track assembly, testing, shipment and RMA for SEMs to ramp up production during the company startup period.
- Lead the effort of outsourcing the implementation and testing of the final version of the networking software
- Lead the effort of the system level architecture of a Network Management System to control and configure customer networks based on Petra Solar devices.
- Lead the effort of forming a Software Engineering team in Petra Solar
- Lead the effort of integrating Petra Solar network with other existing networks and third party devices, by leveraging existing networks to act as a backbone for Petra Solar communication, or by leveraging Petra Solar Data Communicators to accept third party devices.

Graduate Research/Teaching Assistant Sep. 2007 - Sep. 2009
University of Central Florida, Orlando, FL
Programming Languages.

- Teaching assistant for the programming languages course.
- Research on JML (Java Modeling Language) and extensible Java Compilers.
- Supervisor - Dr. Gary Leavens.

Graduate Assistant - Research & Development Engineer Jul. 2006 - Aug. 2007
Institute for Simulation and Training (IST), University of Central Florida, Orlando, FL
ASP.NET,VB.NET, C#, MS Access, Windows Mobile 5.0.

- Developed Virtual Check Ride System, a testing system that automates the CDL practice test and the virtual walk-around inspection. The system provides details reporting about the weaknesses of the examinee and points of interest for the examiners. The system interfaces with a simulator and collects data resulted from simulated environments and compares it with previously collected data to measure the level of profession for drivers.
- Developed a work order system on Windows Mobile 5.0.

Research and Development Engineer - Product Team Leader 2002 - 2005
Systems and Electronic Development Co. (SEDCO), Amman, Jordan
Oracle, Visual Basic, Visual C++, Rational Tools, MS Project.

- Developed MediaWorx (Content Management Solution) to international clients. Now used by more than 30 different Arabic news agencies and newspapers.
- Developed FTR (Full Text Retrieval) Engine over MediaWorx (a fast, reliable and advanced search engine supporting Arabic language functionality).
- Deployed MediaWorx at multiple sites in UAE, KSA and Syria. This included installing, training, troubleshooting, and developing client-custom features.

- Promoted to team leader for Content Management Solutions team responsible for analysis, design and development for the communication engine for the new products.

Research and Development Engineer 2001 - 2002
General Center for Software Development (GCESoft), Amman, Jordan
Palm Operating System, C, MS-Access.

- Developed a Van Sales system on a Symbol® SPT1700 machine.
- Developed a software module for infrared communication with a portable printer for embedded solutions on handheld devices.
- Deployed the system on 3 different sites.

Part-time Lecturer 2000 - 2001
Multiple Computer Training Centers, Amman, Jordan
Visual Basic, Web development and design.

- Prepared materials and gave lectures on VB 6 and web development.

Software Developer 1999 - 2000
INFINITYdezign, Irbid, Jordan
Visual Basic, Web development and design.

- Developed DB connectivity and data retrieval for FLASH-based web design.

EDUCATION

Ph.D., Computer Engineering
University of Central Florida, Orlando, FL Dec 2012

Research in Java Modeling Language (JML), a behavioral specification language, and extensible Java compilers. Particularly in developing Timing Analysis for Safety-Critical Java Systems. Dissertation "Specification and Runtime Checking of Timing Constraints in Safety Critical Java".

M.Sc., Computer Engineering - Digital Systems
University of Central Florida, Orlando, FL May 2007

Classes include high performance computer architecture, high performance storage systems, advanced computer security, wireless & computer networks, FPGA design and full custom VLSI.

Bachelor of Science, Electrical and Computer Engineering
Jordan University of Science And Technology, Irbid, Jordan Jan 2001

GPA 84.2% (Excellent)
Ranked 4 among 121 students graduated in the same academic year, and 1^{st} among semester graduates. Honor-Student Enrollment.

General Secondary Certificate (Tawjihi)
Irbid Secondary School, Irbid, Jordan GPA 94.7% June 1996

Ranked in top 1%.

SOFTWARE PROFICIENCY

Programming languages: Java, J2EE, Python, C,C#, C++, Visual Basic 6 and .NET, Perl, Oz.
Database: HBase, MySQL, ORACLE, MongoDB, MS-Access, SQL Server.
Hardware Design: Verilog.
Embedded Programming: Microchip, Freescale, ST.
Internet programming: Javascript, HTML, Python, AJAX.
Operating systems: Windows, Linux, Palm OS.

Networks Programming: TCP/IP, 802.15.4 (Zigbee).
ALM/Agile tools: Version One, TeamForge, Jira, HPQC, ClearQuest.
Source Control: Git, SVN, ClearCase, CVS.
Object Oriented Design: UML, MS Visio, Rational Rose, RequisitePro.
Project Management: MS Project, TeamForge.

PUBLICATIONS

- Alatrash, H.; Mensah, A.; Mark, E.; Haddad, G.; Enslin, J.; , "Generator Emulation Controls for Photovoltaic Inverters," Smart Grid, IEEE Transactions on , vol.3, no.2, pp.996-1011, June 2012 doi: 10.1109/TSG.2012.2188916, URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6198747
- Ghaith Haddad and Gary T. Leavens. "Specifying subtypes in SCJ programs." To appear in Concurrency and Computation Practice and Experience, John Wiley & Sons, Ltd., online October 4, 2012 at http://dx.doi.org/10.1002/cpe.2930.
- Ghaith Haddad and Gary T. Leavens. "Specifying subtypes in SCJ programs." In Proceedings of the 9th International Workshop on Java Technologies for Real-Time and Embedded Systems(JTRES '11). ACM, New York, NY, USA, 40-46. DOI=10.1145/2043910.2043917 http://doi.acm.org/10.1145/2043910.2043917
- Ghaith Haddad, Faraz Hussain, and Gary T. Leavens. "The Design of SafeJML, a Specification Language for SCJ with Support for WCET Specification." In JTRES '10: Proceedings of the 8th International Workshop on Java Technologies for Real-Time and Embedded Systems, Prague, August 2010, pages 155-163. Also Dept. of Electrical Engineering and Computer Science, University of Central Florida, CS-TR-10-06, June 2010.
- Kalibera, T., Parizek, P., Haddad, G., Leavens, G. T., and Vitek, J. 2010. "Challenge benchmarks for verification of real-time programs." In Proceedings of the 4th ACM SIGPLAN Workshop on Programming Languages Meets Program Verification(Madrid, Spain, January 19 - 19, 2010). PLPV '10. ACM, New York, NY, 57-62. DOI= http://doi.acm.org/10.1145/1707790.1707800
- Ghaith Haddad and Gary T. Leavens. "Extensible Dynamic Analysis for JML: A Case Study with Loop Annotations." Dept. of Electrical Engineering and Computer Science, University of Central Florida, CS-TR-08-05, April 2008.
- Ghaith Haddad, Gustavo Gamboa and Issa Batarseh, "Interactive Electrical Circuit Tutoring Tool - eTutor." ASEE-SE 2008, April 2008
- G. Haddad, B. Horine, and L. Bölöni. "UCFTAC: A Control Based Supply Chain Management Trading Agent." In The 20th International FLAIRS Conference, May 2007
- G. Haddad and D. Turgut. "DSASim: A simulation framework for dynamic spectrum allocation." Proceedings of IEEE Wireless Communications and Networking Conference (WCNC), March 2007.

PATENTS

- Haddad, G. 2011. "Mesh Network Fragmented Upgrade Method." Publication Number WO2013006690, PCT Application Patent No. PCT/US2012/045532, filed July 5, 2012 and published May 8, 2014.
- Batarseh, I., Shoubaki, I., Harb, S., Haddad, G. 2012. "Sybmolic Switch/Linear Circuit Simulator(SymCir)." U.S. Patent 8,219,374, filed February 21, 2008, and issued July 10, 2012.
- Batarseh, I., Haddad, G., Oreifej, R., Al-Haddad, R. 2013 "Interactive Electronic Book Operating Systems and Methods." U.S. Patent 8,352,876, filed February 21, 2008, and issued January 8, 2012.

CONTINUING EDUCATION CLASSES

- Inclusive Leadership, Capital One, Nov 2015.
- Behavioral Interviewing, Capital One, Mar 2015.
- Creative Decision Making and Problem Solving, Capital One, Feb 2015.

- Scaled Agile Framework (SAFe), Capital One, Jan 2015.
- Agile: SAFe Product Manager/Product Owner, Capital One, Jan 2015.
- Essentials of Management, Petra Solar, Oct-Nov 2011.
- Managing within the Law, Petra Solar, June 3rd 2010.
- Low-Power Product Design Seminar, Freescale, April 15, 2009.
- Foundation of Modeling and Simulation, University of Central Florida, Division of Continuing Education, June 2006.
- Building High Performance Teams Training Seminar, AMIDEAST, April 2005.
- MS VB.NET, CompuBase, August 2002.
- CISCO Networking Academy Program, Jordan University of Science and Technology, Nov. 2000 - June 2001.
- ORACLE Developer, Mansi Technology Center, Dec. 2000.
- ORACLE DBA, Mansi Technology Center, April 2001.

PROJECTS OF INTEREST

Single Sign On (SSO) for Capital One Direct Bank Customers 2014

- Provide Direct Bank customers with a single sign on experience that supports other lines of business.
- Siggnificant customer impact (7M+).
- Led an Agile team to develop the UX.
- Front-end integrated with a handful of back-end systems through APIs.

PSE&G Pole-Mount distributed solar and two-way communication 2009-2012

- Largest Distributed Solar Energy project at the time ($200M).
- Lead a software development team and managed an outsourced team to develop two-way end to end communication and a backend solution with a front-end customer-facing full UX.

eBOS - the eBook Operating System 2007

- An electronic book that includes many helpful features for students.
- Developed in Java.
- Supervisor: Dr. Issa Batarseh, Director of Electrical Engineering & Computer Science - batarseh@mail.ucf.edu.
- U.S. Patent 8,352,876.

eTutor - Interactive Electrical Circuits Tutoring Tool 2007

- A symbolic analysis tool that interactively tutors students how to solve electrical circuits problems by analyzing their input and providing feedback on the errors committed by the student
- Developed in Java.
- Supervisor: Dr. Issa Batarseh, Director of Electrical Engineering & Computer Science - batarseh@mail.ucf.edu.

Symbolic Circuits Solver 2006

- A non-simulation package for extracting symbolic equations from Netlists and generating a closed-form solution for electrical circuits.
- Developed using Java.
- Supervisor: Dr. Issa Batarseh, Director of Electrical Engineering & Computer Science - batarseh@mail.ucf.edu.

Introduction to Electrical Circuits Website 2006

- Intended to help students gain basic concepts of circuit analysis and applications.
- Developed by a team of faculty and students at UCF, using HTML and VB.NET http://www.ecircuits.cecs.ucf.edu
- Supervisor: Dr. Issa Batarseh, Director of Electrical Engineering & Computer Science - batarseh@mail.ucf.edu. Project Manager: Dr. Jaber Abu Qahouq, jaberq@ieee.org

Marathon Results Manager 2002

- Developed for Dead Sea Ultra Marathon www.deadseamarathon.com and used since 2002.
- A comprehensive system, using SymbolTM SPT 1800 running Palm OS with embedded barcode reader. The system can collect data for Start, Stations, and arrival and generate results reports and certificates for the runners based on runner category and run type.
- Implemented in C (Palm OS) and MS Access.

Arabic Root Extractor 2001

- An intelligent Arabic root-extraction engine, implemented in C++, as part of an Arabic language analysis system. Consists of three phases: Arabic lexical analysis, word tokenizing, and root extraction.
- Graduation project. Rated as one of the best graduation projects presented.
- Supervisor, Dr. Taisir Eldos. Team members, Eng. Khalid Ajlouny.

Irbid Municipality Website 2000

- The official site for Irbid, Jordan. URL: www.irbid.gov.jo. Contains extensive information about Jordan, and Irbid, a historical overview for the municipality, and services provided by the municipality to the community.
- The website was designed by INFINITYdezign.
- Implemented the server-side scripts. A guest book, a search engine, a feedback form. All written in *Perl*.

Arabic Version Website, The Special Program for Food Security - SPFS - FAO 1997

- Designed using HTML. URL: www.fao.org/spfs
- Supervisor, Prof. Bassam Snobar.

PROFESSIONAL AFFILIATIONS

- IEEE UCF Student Chapter - Treasurer/VP for SECON2007/ SECON2008
- IEEE Orlando Section - Computer Society Chapter Chair (2007-2009)
- IEEE - since 1997.
- IEEE Computer Society.
- ACM - since 2007.

OTHER INTERESTS

- Institute for Simulation and Training Booth Assistance - IITSEC 2006
- International office assistance - IITSEC 2005.
- Worked on a charity's staff for the Dead Sea Ultra Marathon, as a results manager for all events that took place 2002-2005.
- Playing music and singing.