FARIS KASSIS

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EMBEDDED SOFTWARE ENGINEER

An innovative engineer and computer scientist with a successful background in system, software, and test engineering, and extensive experience with complex systems that can contribute to organizational objectives and initiatives.

RELEVANT EXPERIENCE

- Possess a CURRENT DOD Secret clearance.
- Proficient at defining, developing, and testing embedded software and real time systems.
- Superior ability to communicate, plan, and lead teams with a diverse groups of people.
- Proficient at using systems and software engineering processes and automated tools such as Doors, Clearquest, and Clearcase; and very literate in the use of computers and applications software.
- Well versed with: Java, C/C++, Verilog HDL, PHP/MySQL, Software design, software development and testing, GUI development and applications, relational databases (SQL), Unix/Linux (Sh/Korn/Bash/C-Shell), MIL-STD 1553B, embedded systems, script languages, LEX, YACC, Computer networks, Assembly, Rapid Prototyping, Digital Logic Design & Synthesis, and Microcontrollers.
- Familiar with: Graphics, wireless and network technologies, AJAX, J2EE, Web Services and XML, Matlab, Simulink, Digital Signal Processing (DSP) devices, etc.

PROFESSIONAL EXPERIENCE

L3 COMMUNICATIONS, INTERSTATE ELECTRONICS CORP., Anaheim, CA **2009-Present**
Embedded Software Engineer
Supporting the GPS MUE Program. Authored, tested, and integrated numerous Computer Software Components (CSCs) for the M-Code GPS receiver.

- Developed, integrated and tested the error logging functionality in the BIT (Built-in-test) module.
- Integrated and tested the NMEA (The National Marine Electronics Association) interface allowing for communication between the receiver and any commercial GPS hosts.
- Designed scripts to automate integration testing of the ICD-GPS-153 and NMEA interfaces.
- Designed a script to generate the Software Design Description document in word using only source code and artifacts of an “Understand” database.
- Unit tested many modules with VectorCAST 5.0.
- Assisted in the development and testing of time management modules, Vehicle State Vector generation, area navigation, and measurement processing.
- Worked closely with GPS hardware technology and reviewed and understood the mathematical algorithms for the various GPS software applications.

INCONEN TEMPORARY SERVICES, Long Beach, CA **2005-2008**
Embedded Software Engineer, Contractor with the Boeing Company
Planned and defined test procedures and test cases, and developed avionics software and test drivers to verify and validate software requirements for the C17 air lifter. Analyzed requirements, identified and mitigated validation risks, and conducted integration and testing of the communications and navigation control unit of the plane.

- Managed development and testing efforts in parallel to ensure that all software requirements specs/ documentation were complete, consistent, accurate and up-to-date.
- Generated and executed Software Test Plans and Descriptions. Developed and configured a simulation environment to accommodate test scripts.
- Supported systems engineering and evaluated specifications for accuracy and testability.
- Managed activities of multiple teams affecting firmware on 3 different builds.

INCONEN TEMPORARY SERVICES (continued)
Embedded Software Engineer, Contractor with the Boeing Company (continued)

- Tapped specifically by management to "step-in" and bail a struggling "batch" group and successfully lead them through verification of 30,000+ mission computer test scripts.
- Consistently planned and executed tasks and projects transparently, and delivered on time, and within budget.
- Supported test benches upgrades to ensure validity of the test environment.
- Developed and managed an effective system for logging firmware and simulation bugs.
- Resolved interface and white space issues effectively and mitigated many risks.

MASHNEY LAW OFFICES, Anaheim, CA **1997-2000; 2002-2003**
Technical Consultant
Designed, implemented and maintained WEB sites, computer network, applications for billing, contacts list, data synchronization, and interoffice communications. Assisted on legal cases.

HOLMES & NARVER, Orange, CA **2001**
Intern
Developed online collaboration sites for different teams, supported Rapid Application Development, operated AutoCAD, an d designed a mobile-computing system allowing executives wireless access to company network.

TEACHING ASSISTANTSHIP

- June 2004 – August 2004: Chapman University (Orange, CA); Teaching Assistant: Assisted Dr. Chandra in teaching an Integrated Circuit Design (ICD) summer session
- January 2004 – May 2004: Harvey Mudd College (Claremont, CA); Teaching Assistant for Dr. Chandra: taught the lab for a Digital Electronics and Computer Engineering class

EDUCATION

Master of Science in Computer Software, Cal State Fullerton (in process of finalizing thesis); 3.9 GPA
Bachelor of Science, Electrical & Computer Engineering, Cal Poly, Pomona; 3.6 GPA

ADDITIONAL ACHIEVEMENTS

- Defined and successfully executed thousands of test and evaluation procedures.
- Built many specialized websites and networked systems.
- Defined, analyzed, and validated hundreds of performance and interface requirements.
- Performed countless requirements troubleshooting and resolution of systems issues.
- Successfully interfaced with suppliers, vendors, and customers.
- Designed and developed a Java compiler and a graphical Java Calculator.
- Lead my senior project team (6 people) to design and implement a wireless shelf-tagging system using PIC microcontrollers. http://sp2003.fariskassis.com (allow pop-ups in browser)
- Designed, built, and tested a Universal Asynchronous Receiver Transmitter (UART) and a Digital Clock using Verilog HDL and Xilinx's Spartan IIE FPGA.
- Used DSP Starter Kits extensively in lab settings to design and implement IIR/FIR and adaptive filters, sine wave and arbitrary waveform generators, as well as Digital Phase-Locked Loops and Fast Fourier Transforms (FFT)

CLEARANCE

DOD Clearance Level: Secret