Hilley, James A.

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OBJECTIVE

Telecommute (VPN) position in a dynamic Software Assurance organization, where my excellent technical skills and many years of professional experiences will add value to your operation.

Information Technology Skills ("bold" core experience)

- Operating Systems : **UNIX (HP UIX, Solaris 10), Open VMS, MS Windows XP, MS Windows 7, MS DOS**
- Software Assurance Tools : **Klocwork Insight** (C/C++ and JAVA) and **Understand, DOORS, MKS**
- Scripting Languages : **UNIX Shell, Python,** and **VMS DCL**
- Software Development Environments : **UNIX**, MS Visual Studios, NetBeans IDE, Eclipse IDE and Open VMS
- Software Programming Languages : **C, C++, JAVA**, **Fortran, Pascal, and Ada 83**
- GUI and Database Tools : Oracle (**Pro*C**), MS SQL, MySQL, PL/SQL
- Web Designing Tools : Photoshop, **MS Frontpage**, **MS Expression Web**, CSS, **HTML**, XML
- Proficient Programming Knowledge of : **Tuxedo (BEA/Oracle)**, SCADA (US/Siemens Data Factory Link), ASP.Net, JSP, AJAX, Spring, Hibernate
- Configuration Management : **Rational Clearcase and Clearquest, SpecturnSCM**, Visual Source Safe, SVN
- Office Software Skills : **MS Office** (Access, **Word**, **Excel, PowerPoint**, **Visio**, Project, **FrontPage**, **Expression Web, Outlook**)
- Architecture/UML Modeling : No Magic "Magic Draw" with SysML, Cameo Simulator Toolkit, and DoDAF plugin.
- Requirements Management : IBM Rational Doors.

PROFESSIONAL EXPERIENCE

MPL @ NASA IV&V Complex, Fairmont WV,
Senior Software Engineer Contractor **04/2012 – Present**

NASA IV&V Software Analyst, responsible for configuration, setup, and operation of Klocwork Insight static code analysis tool for C, C++, and Java code sets for team supporting NASA's Space Network Ground Segment Sustainment Project (SGSS), Multi-purpose Crew Vehicle (MPCV) (also known as Orion) and Joint Polar Satellite System (JPSS). To date have analyzed over 1.3 million lines of C, C++, and Java code. Provide follow-on detailed analysis by reviewing issues developed by Klocwork and analyzing the applicable code base to determine severity level of issue and whether it is a False Positive or True Positive issue. Provide manual code analysis and software assurance where the requirements, design, and code is reviewed and verified against life-cycle documents. (Tools: Klocwork Insight Review, Understand, IBM Rational DOORS, MKS, MS Excel, MS Word, etc.)

Geo Control Systems, Inc. @ NASA IV&V Complex, Fairmont WV,
Senior Software Engineer Contractor **02/2011 – 02/2012**
Key technical POC for Software Assurance Tool repository. Duties include market research for existing tools to support verification and validation of software. Also responsible for installing and configuring these tools on UNIX and Windows-based servers and provide one-on-one support to IV&V analysts – I help them configure their analysis runs using the Software Assurance Tools. (Tools: Klocwork Insight, MATLAB, MagicDraw, Codesonar, Flexelint, Together, Understand, etc.).

Unemployed: 06/2010 – 02/2011

Engineering Resources, Inc. @Honeywell Technology Solutions, NASA White Sands Complex,
Senior Software Engineer Contractor **10/2009 – 06/2010**
Sustaining software engineering support for the NASA TDRS ground system – complex network of HP Vax/Alpha(s) running OpenVMS.

- primary designer/developer of an automated Configuration Management Software delivery tool (OpenVMS DCL, ~2700LOC)

Environment and programming languages: Vax/Alpha OpenVMS, Ada, DCL, SpectrumSCM.

Computer Science Corporation @DoD Biometric Task Force,
Software Engineer Senior Professional, **08/2007 – 10/2009**
Software and System Engineering support for the DoD multi-model Biometric methodology research.

- Researched software solutions for biometric identification and facility access sensors and systems.
- Largely focused in maturing the DoD Biometric Task Force's Configuration Management and Quality Assurance process.
- technical team member focused on development analysis (proof of concept) for a remote fingerprint examination web portal for the Biometric Task Force (DoD), developed Use Case diagrams with No Magic MagicDraw, Conops, SRS, SDD and other DoDAF products in support of project deliverables.
- Developed a few minor tools, written primarily in Java and C# within the MS Visual Studios, Eclipse, and Java Bean development environments.

Environment is MS Windows platforms and interactions with commercial biometric sensor systems.

Lockheed Martin @Criminal Justice Information Services (CJIS),
Software Engineer Staff, **10/2002 – 08/2007**
Key software project team member with responsibilities for FBI/IAFIS Omnibus contract tasking in support of III/FBI maintenance, involving III function analysis, III application source code analysis, and III/COTS interfaces and integration.

- primary focus in the leadership role for the Adhoc name search application rehost to a new Sun server and the continual prototyping and development for a next-generation Adhoc application based on Oracle Text-based technology.
- Task order CSC software development engineer responsible for major enhancement to a system that manages a multi-million depository of fingerprint images -- primary focus was the enhancement and integration of a new storage medium, utilizing ESAN, from the obsolete medium using a Jukebox/MOCD approach.
    - management of the new storage medium is through Oracle BFILE access; the biggest challenge of the effort was to make sense of an application that was

unknown to me and then develop/design a solution that would separate the new functionality from the obsolete one so that when it is time to disconnect the Jukebox MOCDs it would not require a major integration effort, i.e., a fully branch-away approach.

- Key software project team member with responsibilities for FBI/IAFIS Omnibus contract tasking in support of III/FBI maintenance, involving III function analysis, III application source code analysis, and III/COTS interfaces and integration. Conducted prototyping efforts toward a next-generation replacement for the III Adhoc application using Oracle Text-based technology.

Environment and programming language HP UIX/C/C++ within a Rational ClearCase/ClearQuest project management methodology.

SAIC @Criminal Justice Information Services (CJIS),
Senior Software Engineer, 10/2001 – 09/2002

Software project team member with responsibilities for Omnibus contract tasking in support of III/FBI maintenance, involving III function analysis, III application source code analysis, and III/COTS interfaces and integration.

- Project team lead for the III application transfer from the SGI Challenger to the SGI Origin environment.
- Technical support team member during the III Name Search ECP.

Environment and programming language UNIX/C/C++ within a Rational ClearCase/ClearQuest project management methodology.

TAC Engineering Resources @ SAIC, FBI Justice Information Center (CJIS),
Senior Software Engineering Contractor, 06/1999 – 10/2000 & 05/2001 – 10/2001

Hourly consultant with new development and maintenance responsibilities for SAIC's III/FBI project -- program was a full-term DOD-STD-2167a development and follow-on support.

- Software platform consists of SGI equipment running UNIX and software developed in the C/C++ programming language.
- Other development and support elements included Clearcase/Clearquest for configuration control, Tuxedo (received BEA training) for process management, and Oracle for a 60-million plus record information database. My responsibilities envelope all of these elements to some degree.

Environment and programming language UNIX/C/C++ within a Rational ClearCase/ClearQuest project management methodology.

I-Tech Solutions, @Florida Power Corp,
Senior Software Engineer Contractor, 10/2000 – 5/2001

One-deep position, solely responsible for maintaining and enhancing large software application (~100,000 SLOC) written in C and Oracle Pro*C on networked Vax 3000 VMS platforms.

- Utilize SQLPlus to manage/test/update Oracle tables on both the Vax and NT platforms -- provided some system administration for same.
- provided Windows NT solutions to enhance the original VAX-base application
- provided inputs/updates to web-based information site for Florida Power's Load Management
- Provided support enhancements and updates to MS Visual Basic and Visual C++ application suites that augmented the VAX load management application.

Environment and programming languages: Vax 3000 VMS, C, Pro*C, Windows NT, Frontpage 2000.

Interactive Business Systems (IBS), @ SABRE,
Senior Software Engineer Contractor, 11/1998 – 5/1999

Hourly consultant with a technical lead responsibility for US Airways Crew planning software migration from US Airways control to SABRE.

- Conducted system analysis and design
- made and implemented software changes to support migration and Y2K remediation
- developed a Detailed Analysis and Design document
- supported testing through several migration phases

Environment and programming languages: IBM mainframe, FORTRAN, COBOL, CLISTs, JCL Skeletons, and Panels.

PAR Rome Research Corp. @ Northrop Grumman,
Senior Software Engineer Contractor, 04/1997 – 10/1998

Technical focal point for a team of six engineers, 3 software, 1 test and 2 system engineers, for the development and upgrade of a statistical tool used to evaluate radar performance on JSTARS.

- Directly responsible to the IPT lead for schedule and performance -- program scope consisted of over 150 software modules of FORTRAN code on a DEC VMS platform and included requirements analysis, software design, code and unit testing, and formal testing.
- Served as assistant IPT leader -- responsible for schedule development and performance for other JSTARS radar programs.

DBA Systems, Inc. (now Titan Corp.),
Software Technical Staff-1, 03/1996 – 03/1997

- Provided software test planning/development, and upgrade development for an FBI-sponsored fingerprint scanner and a UNIX-based classified DOD image exploitation system, hosted on a SUN Ultra SPARC platform under Solaris 2.X.
- Responsible for a significant functional enhancement for a secondary imagery production involving the integration of commercial-off-the-shelf image exploitation/mensuration engine (GTE DIEPS 5.1) onto a UNIX/Motif platform, setup to import standard NITF format image segments. This was a significant functional update to a DOD image exploitation system involving 'C', PostScript, Cshell Script, Motif, and FORTRAN on Sun/Pixar and VAX networked platforms; I was solely responsible for development site installation.

Harris Corporation – Government Communications Systems Division (GCSD),
Lead Software Engineer (SW-3), 11/1990 – 03/1996

- Responsible for the team focus for a DOD-STD-2167A software development effort involving 7 CSCIs and the use of both Alsys Ada, U.S. Data FactoryLink (Supervisory Control and Data Acquisition -- SCADA), object oriented development methodology, all on Intel 80486DX2-66 target platforms.
- Cost account leader for a Post Deployment Software Development environment in support of the US Army's Anti-jam (AJ) Control Modem (an embedded system based on the Z80 microprocessor.
- Provided planning support, requirements analysis, software design, and software development support for all CSCIs up to and including Formal Qualification Testing. Specific responsibilities included the development of the program Software Development Plan, the Software Test Plan, Software Requirements Specification, Software Interface Requirements Specification, and Software Product Specification.
- Conducted development on embedded applications for a video teleconference system; 80C186, In-circuit Emulator (ICE), using C programming language.

- Served as the CSCI lead on one of the 7 CSCIs, developed using U.S Data Factory Link, and was responsible for both the proposal and full development and lifecycle documentation up to CSCI-level testing.

Brevard Community College,
Adjunct Professor, **10/1990 – 03/1991**
Conducted software engineering classes in 'C' programming during 3 consecutive semesters; laboratory environment consisted of a Micro VAX running the VMS operating system

Air Force Technical Application Center, Patrick AFB,
Aerospace Systems Software Engineer, **01/1980 – 10/1990**

- Provided software engineering oversight support for numerous aerospace and large satellite ground system data analysis software developments in support of the Atomic Energy Detection System (USAEDS).
- Duties involved assisting government program managers with requirements analysis and software development process leading up to a request-for-proposal.
- Subsequently served on program selection committees, reviewed and commented on contractor compliance with DOD software standards and contract requirements, and attended all formal/informal reviews between the program office and the contractors.
- One of two software engineers that served as the focal point for aerospace software engineering issues/policies for HQ Air Force Technical Applications Center.
- From programmer to technical team leader, I served in numerous software development positions. The system I worked on spanned several computer hardware/operating system environments, i.e. Mini-computer under UNIX, IBM 4341/4381 under MVS.
- Utilized state-of-the-art TOP DOWN structured design, programming and documentation techniques throughout all programs.

SECURITY CLEARANCE (Currently Inactive) HISTORY

Recent : DOJ Secret, DoD Top Secret (DOJ SSBI – August 2007) -- expired (06/2012), last Secret access June 2010, NASA Whitesands, NM.

History : DoD Top Secret SCI (last access 1997, SSBI 1992, Intelligence Poly 1992)

EDUCATIONAL DETAILS

Course	College/University	Year	Aggregate
MS Computer Science	Florida Institute of Technology	1989	3.5
BS Computer Science/Mathematics	Rollins College	1985	3.17
AA Electronics Technology	Los Angeles Community College	1978	--