

HANK FLY, MSCS, CSDP

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DATA ANALYSIS, METRICS, SOFTWARE ENGINEERING

Professional software engineer; passionate about software development process improvements and producing rapid and sustained engineering results. Pursuing a position in data analysis, software engineering, or metrics work within any industry.

- * Expert in business and requirements analysis, as well as data analysis in support of project management, quality assurance, CM, and testing.
- * Possesses a wide breadth of software development experience in many roles which allows for total objectivity in assessing all IT projects and recommending successful data integration solutions to business challenges.
- * Exceptional documentation, presentation, staff development, training, and leadership skills. Authored numerous plans, documents, procedures, standards, policies, guidelines, overviews, assessments, white papers, presentations, reports, and templates.
- * Holds a Masters Degree in Computer Science, as a foundation for data analysis and presentation.

AREAS OF EXPERTISE

**Software Engineering • Risk Management • SQE • SCM • Integration & Test
Business Requirements Analysis * SW Requirements Analysis • Project Planning • Project Management**

- * **Certificates:** IEEE Certified Software Development Professional
- * **Business Analysis:** over ten years direct experience in developing analyzing reviewing business processes and requirements. Business requirements developed, reviewed and traced to software requirements for military applications (US Army & US Air Force), healthcare software, federal government systems (NASA, IRS), state government systems (WA – WAMMIS project), and shipping (DHL).
- * **Communications:** over ten years experience in preparing and delivering presentations to customers, developers, and other stakeholders on business requirements analysis, flow-down to system and software requirements, basis as project estimation and planning, flow-down to system and user testing activities. Five years experience in preparing and conducting classes on business requirements solicitation, documentation, risk management, and all aspects of software engineering.
- * **Documentation:** Expert in creating, modifying, and using document templates, guidelines, and standards for us in creating systems from business requirements. Expert in using UML, Structured Analysis, and other techniques in creating system requirements, and detailed software requirements.
- * **Prototypes/Simulations:** Over ten years experience in creating prototypes of user interfaces from, or in support of business requirements development. Experiences in simulating traffic flows, conducting performance and throughout analysis using Monte-Carlo techniques. Experienced in using modeling to produce project plans and analyze project risks. Five years experience in creating reliability models for planning testing to establish reliability resting from business requirements.
- * **Testing:** Over ten years experience in all aspects of unit, system, and integration testing; including formal test suites for customers of all ranks. Worked on embedded systems, client-server, multi-tier, WEB-centric, and distributed database testing. Created tests using manual methods, scripts, custom tools, and automated test tools.
- * **Work Mode:** self-directed individual contributor with over ten years managerial experience. Excellent in working with teams, and communicating status, results, risks, plans to higher levels of management and customers.

CAREER DEVELOPMENT

Adecco (consulting at Philips Medical) – Engineer

April 2009 to Present

Performing design analysis and documentation on an embedded medical device. Creating and analyzing requirements, reviewing code ('C', Perl, Python), preparing documents for test planning.

Analysts International (consulting at Boeing Corp.) - Engineer

Aug 08 to Apr 2009

Performing integration testing on a very large multi-system integration project. Performing many planning, requirements, analysis and test duties as well as some process improvement. Using ClearQuest, HP Quality Center, and some Quick Test Professional. WIndows XP clients to mixed servers (Windows 2005, UNIX) with databases and custom GUI. Using Macroscopic+ for documentation and process basics.

Coldwater Creek, Seattle (Lead Quality Engineer) - (consulting and direct hire)

Oct 2006 to Jan 2008

At Coldwater Creek, performed process improvement efforts while performing benchmarking and white-box testing on a Web-centric database system (Windows XP, 2005 Server, SQL Server, Oracle 9). Evaluated and refined requirements and customer perspectives for validation. Created classes on software engineering topics along with standards and guidelines for more formal processes.

DHL(Lead Instructional Designer) - (consulting and direct hire) Oct 2003 to Feb 2006
At DHL, Americas, worked on process improvements toward CMMI Levels 2 & 3. Worked with DHL in creating and implementing systems development process improvements (Windows 2k, 2k Server, SQL Server). This involved creating standards, templates, guidelines, and all training materials as well as performing classroom training.

Misys Healthcare Systems (Formerly Sunquest Information Systems), Tucson, AZ Nov 2000 to Apr 2003
Directed the software configuration management, quality assurance, builds, and integration of Misys client-server medical device products (Windows 2k, Windows XP, Windows 2k Server) for this software development firm with five locations and 1200 employees. Managed product integration implementing CM under the CA/Harvest V5.1.1 tool, based on business requirements of (and budgets) for hospital patient record database systems including new product lines in radiology and pharmaceutical records. Active in the SEPG in defining processes and methods for FDA, ISO 9001:2000, and CMM compliance including coordination of requirements, design, and testing.

Principal Software Engineer (Security Clearance), Raytheon Missile Systems, Tucson, AZ May 1999 to Nov 2000
Performed analysis of applications and requirements for a Navy-guided, projectile embedded system for this mammoth developer of advanced missiles with 8,000+ employees and 40 missile programs (Windows 98, Windows 2k, UNIX BSD – C Shell). Supervised team of four engineers, conducted system testing in a UNIX environment fed into MATLAB, prepared custom scripts for regression testing and analysis, and coordinated integration efforts with multiple groups. Worked closely with Navy customers on interpreting and testing user requirements, design and verification.

Senior Software Analyst - MCI/Worldcom, Colorado Springs, CO Sep 1995 to May 1999
Performed all integration and business requirements analysis for an advanced call handling and switching system for this multi-billion dollar telecommunications firm with 7,000+ employees which earned a US patent (#6,427,002 B2). Created an NGSN architecture and integration project plan for and trained engineer staff on the call routing subsystem tailored to clients (Windows 98, 95 Server). Created and documented functional requirements and subsequent integration and user testing.

SEPG Lead – Boeing Corp, Vienna, VA Prior
Assigned to an ARMY systems project as the lead for a Software Engineering Process Group (SEPG), tasked with getting the organization up to CMM levels 2 and 3 (Windows 95). Managed a team of six on the SEPG team, and directed the interpretation of the CMM to the project. Reviewed proposed and purchased tools on the project for CMM compliance and usage. Reviewed and interpreted Mil-Standards (2167A, 1521B) as related to CMM. Outsourced training for the staff (about 1200 on the project with about 120 software engineers) from local vendors.

Section Head / Software Integration Analyst – Software Engineering, Grumman Corporation, Reston, VA Prior
Supervised 16 engineers in support of software requirements analysis for Space Station Freedom—a contract to provide engineering oversight of the entire Space Station development effort—for this defense contractor with 1500+ employees (Windows, Sun SparcStation). Developed test plans, procedures, reports; performed requirements analysis, all SQA and SCM functions; and worked with developers on problem resolution. Worked closely with NASA in evaluating schedules, work progress, and risk analysis of all test plans, procedures, and reporting requirements.

Group Leader & Chief Programmer, SPC Liaison – Harris Corporation, Melbourne, FL & Reston, VA Prior
From 1981 to 1986, worked in a matrix organization as a Group Leader and Chief Programmer on 2 projects (Windows 3.1, Dec, DG). Wrote one small proposal (\$65 K, approved and implemented), and authored sections on two very large US Air Force projects (both awarded and implemented).
From 1987 to 1989 acted as Harris Corp liaison to the Software Productivity Consortium working on various process improvements and efficiency metrics for the 16 partner companies.

Computer Communications Officer, Sat Comm Technician – US Air Force Prior
Officer In Charge of a small section developing custom real-time operating systems for base Comm Centers at strategic bases in the US. Wrote approximately 10,000 lines of assembly code and supervised 3 NCOs, 3 civilians, and 2 vendors. Installed the system at three bases in the US. Satellite technician maintaining satellite ground stations (Staff Sergeant).

EDUCATION

Colorado Technical University, Colorado Springs, CO
MS Degree in Computer Science (1998)

Idaho State University, Pocatello, ID
BS Degree in physics