Jerard E. Lockwood Jr.

EDUCATION: Cornell University, Ithaca, New York
                    B.S. Operations Research & Industrial Engineering

PROFESSIONAL EXPERIENCE:

May 2014 to present: Consultant to Lockheed Martin, Gaithersburg, MD
Designed, developed, and enhanced web applications to support proposal efforts and existing programs. One webapp plots usage statistics gathered from production systems for management (D3.js, HTML5, jQuery, Underscore.js, Backbone.js, MySQL, Python); deployed to C2S. Another provides geospatial exploitation capabilities via web services (OpenLayers, MongoDB, Bootstrap, Backbone.js). Another controls EC2 instances in GovCloud (NodeJS, MongoDB). Also, assisted in face-lift of existing Lockheed Martin geospatial applications (CSS3, HTML5, Bootstrap). Setup Linux environment in GovCloud for development teams. *(TS/SCI clearance)*

Nov 2008 to May 2014: Consultant to Lockheed Martin, Chantilly, VA
Participated in all phases of software development and system engineering of a case management system (Sentinel) for the FBI (JavaScript, ExtJS, jQuery, Spring, J2EE, SQL). One of a select few engineers chosen by FBI leadership to redesign and rewrite the application after the failure of a long-running, waterfall-based effort. Introduced and implemented project management tools based on earned value. Wrote white paper that led to adoption of Web 2.0 architecture. Architect of object-oriented user interface in JavaScript; recognized as an expert in JavaScript and ExtJS. *(TS clearance)*

Feb 2012 to present: CTO (part-time), New Harbor, Washington, DC
Participating in all phases of product development as lead developer of a web application for the transportation industry (Ruby, Rails, jQuery, Backbone.js, Underscore.js, MySQL, Python).

Jan 2009 to Jun 2009: Consultant (part-time) to Gannon Technologies Group, Tysons Corner, VA
Participated in business development for a small engineering firm that developed a new biometric for handwriting. Wrote proposals in response to RFPs, wrote white papers for prospective clients, delivered product demonstrations, and helped revise product architecture. Participated with executives to define corporate strategy. (*TS/SCI clearance)*

May 2008 to Feb 2009: Consultant to Oracle, Reston, VA
Participated in all phases of software development of a web-based application (Dojo, JavaScript, Struts, BeeHive, J2EE). Quickly recognized as an expert in JavaScript and AJAX. (*TS/SCI clearance)*

June 2005 to May 2008: Consultant to Northrop Grumman, Chantilly, VA
Participated in all phases of design and software development of a web application that helps authors collaborate (J2EE, Spring, Hibernate, JavaScript, ExtJS, AJAX, SQL). Promoted to systems engineer; led various design and integration efforts in part by writing white papers. Promoted to team lead; led team of twelve in development of back-end software using Spring and Hibernate. Introduced and implemented tracking tools based on earned value. Led redesign of front end using object oriented JavaScript (ExtJS 2+). *(TS/SCI clearance with FS poly)*

May 2006 to Sep 2007: Consultant (part-time) to Ericsson Netqual, Reston, VA
Led small team in software development of a web application for RF engineers and analysts to manage mission data: hardware, customer data, performance data, etc. (J2EE, Java, Spring, Hibernate, AJAX, SQL, ExtJS).

Feb 2005 to Sep 2005: Consultant (part-time) to Ericsson Netqual, Reston, VA
Led small team that performed load testing for a web-based product developed by Ericsson NetQual (JMeter).

Apr 2004 to Aug 2005: Consultant to Verity Inc, Falls Church, VA
Designed, developed, and implemented various applications to implement web-based search portals for the Defense Intelligence Agency (Java, JSP, Perl, XSLT, SQL). Customized Verity K2 search engine and Verity search implementations. Performed load testing (JMeter). *(TS/SCI clearance with CI poly)*

Jan 2004 to Apr 2004: Consultant to ACR Systems, Jacksonville, FL
Designed, developed, and implemented a web-based application to generate common, yet custom, websites for ACR customers using parameters stored in a database (PHP, Java, JavaScript, SQL).

Aug 2002 to Feb 2004: Consultant to Naval Research Lab, Washington, DC
Designed and developed Java applications for various projects including one that captures and stores UDP messages (Java, Perl, Linux, SQL). Designed and developed Java applications to support systems integration and IV&V (Java, PHP, XSLT, Linux, JavaScript, SQL). Served as systems engineer while rewriting majority of requirements (RUP methodology); attended Rational Use Case training. *(TS/SCI clearance with CI poly)*

Jul 2000 to Jun 2002: Consultant to Celera Genomics, Rockville, MD
Designed and developed a web-based application which collects utilization data to allocate IT costs to cost centers (PHP, Perl, Java, SQLPlus, Unix) . Designed and implemented user interfaces in Oracle Discoverer, MS Excel, and web. Designed database schema, PL/SQL, triggers, and views in Oracle. Designed and implemented a variety of complex BMC Patrol knowledge modules (PEM) to monitor various software and hardware systems.

Jan 1997 to Sep 2000: Consultant to Lockheed Martin, Greenbelt, MD
Led team of six programmers as software architect of the enterprise management subsystem for NASA's Hubble Space Telescope ground system. Designed and coded (C++, Unix, Java, Prolog, Perl) an elaborate, data- driven rulebase for the Tivoli T/EC using Prolog. Integrated COTS products into monitoring scheme including Tivoli, BMC Patrol, HP Openview, and Telalert. Recognized as an expert in BMC Patrol and PEM.

May 1996 to Jul 1998: Consultant (part-time) to Tivoli Systems, Inc., Austin, TX
Designed and implemented a variety of software solutions using the Tivoli Enterprise Console (T/EC) for Tivoli clients. Implemented dependency analysis of events to determine the root cause of multi-server outages. Recognized as an expert in the Tivoli T/EC.

Dec 1995 to Dec 1996: Consultant to FNMA, Washington, DC
Software architect of a systems management project based on Unix and Tivoli. Designed and coded all rules for the T/EC. Designed and developed an elaborate, data-driven rulebase in Prolog to launch actions based upon events received and determine the root causes of problems (Perl, Unix).

Sept 1995 to Jun 1996: Consultant (part-time) to ACR Systems, Jacksonville, FL
Led development of an ODBC database driver for a proprietary database. All development (C^{++}) was performed using OO analysis and design. Solely responsible for database design and OO architecture (Rational Rose).

Nov 1994 to Dec 1995: Consultant to Rational Software Corp., Tysons Corner, VA
Participated in a variety of activities commonly performed by tech reps including class preparation and delivery, project planning, R1000 customization, and consultation to managers, architects, and developers (Ada, Unix).

Aug 1992 to Nov 1994: Consultant to Electronic Data Systems (EDS), Falls Church, VA
Led development of a client/server application used to manage hospital dining facilities. Participated in all aspects of development and design including requirements analysis, UI design, DB design, and OO architecture. Ada development was performed using object-oriented principles. Taught Rational/Ada Fundamentals classes.

Apr 1990 to Aug 1992: Director of Software Engineering, Daedalean Inc., Columbia, MD
Led team of eight through the integration of an 80386-based trainer for hardware maintenance of the B-1B aircraft (Ada). Integrated all major portions of the trainer. Promoted to technical lead. Participated in hardware/software integration of a trainer for the maintenance of the C-5B aircraft (Ada, assembler). Promoted to director of engineering. Led development of military simulators and trainers. Performed scheduling, staffing, budgeting, proposal writing, and pricing activities.

Jun 1989 to Feb 1990: Consultant to McDonald Consulting Services, Owego, NY
Created and presented comprehensive, two-day seminar for Emerson Electric Corporation that taught principles of software engineering and project management.

Jun 1982 to Jun 1989: Software Engineer, IBM Federal Systems Division, Owego, NY
Led development of embedded software for an automated factory - the first significant program in IBM Owego to use Ada. Led development of a real-time, RF emitter location system (assembler). *(TS clearance)*