Stephan Gerali, Ph.D.

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Objective

To obtain a challenging position that capitalizes on the skills I possess while providing me with the opportunity to enhance my skill set and gain additional experience. Interested in an environment that promotes continuing education, advanced learning, professional excellence, and the pursuit for better technology.

Experience

Littleton, CO	Lockheed Martin Corporation	Jul 2001 – Present

System Integration Analyst Staff
Lockheed Martin Corporation
Enterprise Services

System Integration Analyst Staff
Center for Leadership Excellence (CLE)   Jan 2007 – Present

- Helped create requirements for the CLE implementation for presenting all amenities of the CLE building, providing the ability to make reservations at the CLE, creating a centralized visitor system for automatically determining authorized individuals visiting the CLE and giving the capability to perform data analytics and generate reports based on visitor stays.
- Defined individual work packages for the technical development of CLE and allocated developers to individual work packages based on the schedule needs of the project and the skill set of the individual.
- Developed software architecture and component design documents using use cases, sequence diagrams, and class diagrams for the CLE implementation.
- Utilized the Adapter, Façade, Chain of Responsibility and Model-View-Controller design patterns during the design and implementation of the software architecture.
- Developed portal web site for showcasing CLE amenities and making reservations functionality using Windows SharePoint Services 3.0, Microsoft ASP .NET WebParts, Visual Studio Extensions for Windows SharePoint Services, ASP .NET AJAX Extensions, ASP .NET AJAX Control Toolkit and Telerik RadControls for ASP.NET.
- Constructed middleware functionality using Microsoft BizTalk 2006 R2 to bridge communications from the CLE web site to the Property Management System (Opera) and Learning Management System (LMPeople) for automatically determining authorized individuals visiting the CLE and sending that information to the Visitor Management System (EasyLobby) to inform security personnel of authorized personnel. Utilized the Microsoft BizTalk 2006 R2 HTTP adapter for communications with the Property Management System and the Microsoft BizTalk 2006 R2 ASP .NET Web Services adapter for communications with the Learning Management System and Visitor Management System.
- Created backend database functionality using Microsoft SQL Server 2005 and exposed all database functionality using stored procedures written in Transact-SQL.
- Built data analytics using Microsoft SQL Server 2005 Analysis Services and reporting functionality using Microsoft SQL Server 2005 Reporting Services to allow CLE personnel access to visitor stay information.

System Integration Analyst Staff

Finance & Business Operations (F&BO)   May 2008 – Dec 2008

- Helped create requirements for the F&BO implementation for providing event registration and career progression functionality.
- Defined individual work packages for the technical development of F&BO and allocated developers to individual work packages based on the schedule needs of the project and the skill set of the individual.
- Developed software architecture and component design documents using use cases, sequence diagrams, and class diagrams for the F&BO implementation.
- Utilized the Adapter, Façade, Chain of Responsibility and Model-View-Controller design patterns during the design and implementation of the software architecture.
- Developed portal web site using Windows SharePoint Services 3.0, Microsoft ASP .NET WebParts, Visual Studio Extensions for Windows SharePoint Services, ASP .NET AJAX Extensions, ASP .NET AJAX Control Toolkit and Telerik RadControls for ASP.NET.

System Integration Analyst Staff

University Relations Recruiter's Network (URRecNet)   May 2007 – May 2008

- Helped create requirements for the URRecNet implementation for managing all of Lockheed Martin's university recruiting activities.
- Defined individual work packages for the technical development of URRecNet and allocated developers to individual work packages based on the schedule needs of the project and the skill set of the individual.
- Developed software architecture and component design documents using use cases, sequence diagrams, and class diagrams for the URRecNet implementation.
- Utilized the Adapter, Façade, Chain of Responsibility and Model-View-Controller design patterns during the design and implementation of the software architecture.
- Developed portal web site using Microsoft ASP .NET WebParts, ASP .NET AJAX Extensions, ASP .NET AJAX Control Toolkit and Telerik RadControls for ASP.NET.
- Created backend database functionality using Microsoft SQL Server 2005 and exposed all database functionality using stored procedures written in Transact-SQL.
- Constructed web service communications with external systems using ASP .NET Web Services.
- Developed the Data Access Layer (DAL) to communicate with the database, the Business Logic Layer (BLL) to contain all business rules and Presentation Layer (PR) to allow corporate users to volunteer and participate in all University Recruiting events.

System Integration Analyst Staff

Performance Based Logistics (PBL)   May 2007 – Dec 2007

- Developed software architecture and component design documents using use cases, sequence diagrams, and class diagrams for the PBL implementation.
- Utilized the Adapter, Façade and Chain of Responsibility design patterns during the design and implementation of the software architecture.
- Developed an enterprise framework for PBL using Sun Java CAPS (formerly SeeBeyond) that would expose backend SAP EDI message functionality using a multitude of protocols (i.e. WS, WS-Security, HTTPS, SFTP).
- Utilized HP Systinet for registration and Actional SOAPstation for governance of web services.

System Integration Analyst Sr.

LMCareers   Mar 2006 – May 2007

- Developed schedule estimates for each individual work packages using object points.
- Defined individual work packages for the technical development of LMCareers and allocated developers to individual work packages based on the schedule needs of the project and the skill set of the individual.
- Developed software architecture and component design documents using use cases, sequence diagrams, and class diagrams for the LMCareers implementation.
- Utilized the Adapter, Façade and Chain of Responsibility design patterns during the design and implementation of the software architecture.

- Created prototypical components of the LMCareers architecture to validate the design and selection of COTS (Commercial Off The Shelf) components. The following prototypes were constructed:
  - Developed web services using webMethods Glue, ASP .NET Web Services, Windows Communication Foundation and Sun Java CAPS (formerly SeeBeyond) Web Services to provide prototypical LMCareers functionality.
  - Developed web sites using IBM Rational Application Developer and Microsoft Visual Studio 2005 to display prototypical LMCareers functionality.
- Developed an enterprise framework for LMCareers using Sun Java CAPS (formerly SeeBeyond) for connecting an external vendor (Kenexa) to corporate assets (LMPeople) using a multitude of protocols (i.e. WS, WS-Security, HTTPS, FTPS, SFTP) in the hiring, rehiring, and transferring of Lockheed Martin personnel.
- Developed unit test cases for the enterprise framework using JUnit, HtmlUnit, XmlUnit, and AJAX.
- Helped mentor and lead teammates in the implementation of LMCareers.

System Integration Analyst Sr.
Command Media Process Asset System (COMPASS)   Mar 2006 – May 2006
- Developed function point estimates, code estimates, and person hour estimates based on high level requirements for the COMPASS project.

Memberships
Lockheed Martin Enterprise Services
- Technology Leadership Program   Feb 2008 – Present

Software Engineer Sr.
Lockheed Martin Corporation
Integrated Systems & Solutions

Software Engineer Sr.
Single Integrated Space Picture (SISP)   Oct 2005 – Mar 2006
- Developed system, subsystem, and component level requirements for the SISP initiative.
- Helped develop use cases, activity diagrams, and sequence diagrams in support of further decomposing the derived requirements for SISP.
- Investigated how to utilize digital signatures for encrypting, decrypting, and signing of SOAP messages using Apache AXIS and Apache WSS4J.
- Developed an installation prototype of SISP using Macrovision InstallAnywhere.
- Investigated NCES (Network Centric Enterprise Services) to support discovery, security, and messaging capabilities for the software development on the COI Pilot.

Software Engineer Sr.
Strategic Threat Analysis Reporting System (STARS)   Jun 2004 – Oct 2005
- Performed Object-Oriented Analysis & Design using use cases, sequence diagrams, class diagrams, and package diagrams for the implementation of the software architecture.
- Utilized the Abstract Factory, Singleton, Adapter, Façade, Chain of Responsibility, Iterator, Strategy, and Visitor design patterns during the construction of the software architecture.
- Developed server-side software components using J2EE technologies (EJB, JMS, JDBC, and JNDI) to support the STARS mission and for communicating the results of server-side processing to the client workstation.
- Developed code using Apache XMLBeans to support the marshalling and unmarshalling of XML data throughout the STARS architecture.
- Developed the initial database design for STARS.
- Helped mentor and lead teammates in the implementation of STARS.
- Helped develop schedules, metrics, and cost estimates for STARS.

Software Engineer

Engineering Leadership Development Program (ELDP)   Jul 2001 – Jun 2004

- The mission of ELDP is to attract, develop, and retain future leaders who will contribute to the competitive edge of Lockheed Martin. The ELDP facilitates the transition between academia and industry, building on the formal education and leadership experience of the program members. The program combines leadership training, rotational assignments, and career development to enhance their skills.

Software Engineer

Rotation 3: Strategic Threat Analysis Reporting System (STARS)   Jun 2003 – June 2004

- Developed initial proof of concept of STARS to demonstrate to the customer the capabilities of the future STARS system.
- Developed graphical user interfaces using Java Swing to allow operators to interact with the STARS system and plot symbology to the ISCF (Integrated C4I System Framework) mapping application.
- Participated in the costing effort for the STARS program by providing BOEs (Basis Of Estimates) for the software development endeavor.

System Integration Engineer

Rotation 2: All Source Analysis System (ASAS)   Dec 2002 – Jun 2003

- Compiled and rebuilt different integration baselines as needed by the program.
- Helped eliminate unnecessary processes and automate integration tasks.
- Resolved software issues during integration build cycles and submitted bug reports to developers for resolution.

Software Engineer

Rotation 1: All Source Analysis System (ASAS)   Jul 2001 – Jun 2003

- Developed guard software in Java for collateral dissemination of Intel fusion data.
- Created Java Servlets/JSPs to provide web functionality to existing C++ routines using JNI (Java Native Interface).
- Made graphical user interfaces using Java Swing and Tcl/Tk to support easier configuration of the Solaris environment.
- Developed StarOffice macrocode to allow users to select data within a spreadsheet and have the data plotted to the ISCF (Integrated C4I System Framework) mapping application.
- Participated in the ASAS Process Improvement Group (APIG) to refine processes for future software development activities.

Proposals

Future Combat System – Battle Command Mission Execution (BCME)   Feb 2003 – Mar 2003

- Helped develop a Service-Oriented Architecture (SOA) to support this proposal effort.
- Performed Object-Oriented Analysis using use cases, sequence diagrams, class diagrams, and package diagrams for describing overall system architecture.
- Estimated SLOC (Source Lines Of Code) counts for each component service being delivered for the system architecture to help cost out the proposal effort.

Memberships

Lockheed Martin Integrated Systems & Solutions

- Software Engineering Centers of Excellence   Jun 2001 – Jun 2004
- Web Technologies Centers of Excellence   Oct 2001 – Jun 2004
- System Engineering Centers of Excellence   Aug 2003 – Jun 2004
- Service Oriented Architecture Communities of Practice   Nov 2005 – Mar 2006
- Software Engineering Communities of Practice   Nov 2005 – Mar 2006
- Leadership Communities of Practice   Nov 2005 – Mar 2006

Littleton, CO	Sole Proprietor	Apr 2005 – Present

Real Estate Investor
Sole Proprietor
- Developed a small business in purchasing, fixing up, and leasing of residential properties.

Denver, CO	Suhaka Consulting	Apr 2007 – Dec 2008

Software Engineer
Suhaka Consulting
- Built an ASP .NET web site for Ellora Energy for managing oil contracts.
- Utilized the Adapter, Façade and Model-View-Controller design patterns during the design and implementation of the software architecture.
- Created backend database functionality using Microsoft SQL Server 2005 and exposed all database functionality using stored procedures written in Transact-SQL.
- Developed the Data Access Layer (DAL) to communicate with the database, the Business Logic Layer (BLL) to contain all business rules and Presentation Layer (PR) to allow users to manage oil contracts.
- Constructed a time management system to handle input of employee hourly data using Windows SharePoint Services 3.0 and Microsoft ASP .NET WebParts.

Broomfield, CO	Sun Microsystems, Inc.	May 1999 – Jul 2001

Software Engineer
Sun Microsystems, Inc.
SunIT Technology Office
- Developed application software to create a BAN (Backup Area Network) technology for automatic backups across the network using Java, Jini, and Jiro.
- Developed wireless applications for Nokia cell phones to help mobile users access internal information.
- Developed web technologies (CGI, Java Servlets, Java Applets, and HTML) for accessing information within Sun Microsystems' intranet.
- Created and executed test plans in testing new hardware and software that was being released to the general public from Sun Microsystems.
- Architected and deployed SAN (Storage Area Network) technology into Sun Microsystems' infrastructure for a highly available storage solution.

Denver, CO	J.D. Edwards, Inc.	Aug 2000 – May 2001

Software Engineer
J.D. Edwards, Inc.
Enterprise Services

- Required for graduation from the University of Colorado at Boulder.
- Developed an Enterprise JavaBeans Server Framework that would allow J.D. Edward's application developers the ability to create business classes on multiple machines but allow users the ability to access that business logic through a centralized repository.

Boulder, CO	AdBelt, Inc.	Aug 1999 – Aug 2000

System Engineer
AdBelt, Inc.
- Attempted to start a business that would allow advertisements to be displayed on conveyor belts in grocery stores.
- Helped attain a patent for the company for the technology used in placing advertisements on conveyor belts.

Boulder, CO	Paragon Consultants, Inc.	Oct 1997 – Aug 2000

Software Engineer

Paragon Consultants, Inc.

- Developed multimedia-based learning applications for Windows.
- Developed multiple Internet-based training web sites using (Sybase, Power Dynamo, MySQL, CGI, and Perl).
- Developed a Microsoft Office testing application using Borland Delphi and Perl to have users perform tasks and verify the results of their performing such tasks.

Education

Ph.D. in Computer Science	May 2008

University of Colorado at Colorado Springs – College of
Engineering & Applied Science

GPA: 3.99

M.S. in Computer Science	Aug 2003

University of Colorado at Denver – College of Engineering &
Applied Science

GPA: 4.0

B.S. in Computer Science	Aug 2001

University of Colorado at Boulder – College of Engineering &
Applied Science

Deans List: Spring 2001, Summer 2001

Scholarships

Pepsi Leadership Scholarship	Jan 2000

University of Colorado at Boulder – College of Engineering &
Applied Science

Gill Leadership Scholarship	Aug 2000

University of Colorado at Boulder – College of Engineering &
Applied Science

Books

Using a Multi-Dimensional Model to Predict Software Quality	May 2008

University of Colorado at Colorado Springs – College of
Engineering & Applied Science

Symposiums

Building Custom SharePoint Solutions	Oct 2008

Lockheed Martin

Mission Critical Enterprise Solutions Symposium

Certifications

Sun Certified Programmer for the Java™ 2 Platform   Apr 2002
Sun Microsystems, Inc.

Certified Administrator of BEA WebLogic® Server 7.0   Jul 2003
BEA Systems, Inc.

Certified Lean/Six Sigma Green Belt   Aug 2003
Lockheed Martin Corporation

Certified in Secure Software Engineering   Jan 2005
University of Colorado at Colorado Springs

Computer Skills

Programming Languages	C, C++, C#, Java, Pascal, Assembly
Scripting Languages	JavaScript, AJAX, Power Dynamo, Perl, Tcl/Tk, MSDOS Shell Scripting, UNIX Shell Scripting, Visual Basic
Java Development	Swing, Applets, JNI, Jini, Jiro, JAXB
J2EE Development	EJB, JMS, JDBC, JNDI, JSP, Servlets
.NET Development	C# Windows Application, C# Console Application, ADO .NET, ASP .NET, ASP .NET WebParts, ASP .NET AJAX Extension, ASP .NET AJAX Control Toolkit, Telerik RadControls for ASP.NET, Windows SharePoint Services, Microsoft Office SharePoint Server, Microsoft BizTalk Server, Microsoft SQL Server Analysis Services, Microsoft SQL Server Reporting Services
Web Services	UDDI, WSDL, WSDD, SOAP, Apache AXIS, webMethods Glue, Sun Java CAPS (formerly SeeBeyond), Microsoft BizTalk Server, ASP .NET Web Services, Windows Communication Foundation, WS-Security, Microsoft Fiddler, HP Systinet, Actional SOAPstation
Markup Languages	HTML, WML, XML, XSD
Database Languages	DDL, SQL
CGI Development	Perl
Integrated Development Environments	Borland C/C++, Microsoft Visual C#, Microsoft Visual Web Developer, Borland JBuilder, Borland Delphi, Sun Microsystems Forte, Eclipse, BEA Workshop, Webgain Studio, Macromedia Dreamweaver, Altova XMLSPY, Rational Application Developer, Sun SeeBeyond Enterprise Designer, Visual Studio, Visual Studio Extension for Windows SharePoint Services, Visual Studio Extensions for Microsoft BizTalk Server.
Open Source Products	Apache Tomcat, Apache Ant, Apache Maven, Apache Axis, Apache WSS4J, Apache jUDDI, Apache XMLBeans, SourceForge UDDI4J, Eclipse, JUnit, HtmlUnit, XmlUnit, OWASP WebScarab
Server Development	BEA WebLogic, IBM WebSphere, Apache Tomcat, Microsoft Internet Information Services
Operating Systems	Microsoft Windows 3x, 9x, XP, Vista, NT, 2000, 2003, 2008, Macintosh X, Solaris 6, 7, 8, Trusted Solaris 2.5.1, Red Hat Linux 5.2, 6.1, 7.0, FreeBSD 3.4, Palm OS 3.1, 3.5
Database Products	Oracle, SQL Server, Sybase, MySQL, Microsoft Access, Toad, SQL Server Management Studio
Troubleshooting	Software, Hardware, PCs, Macs, Networks, Server Development, Web Development
Text Editors	Microsoft Office, Sun Microsystems StarOffice, Corel WordPerfect, Emacs, Pico, Vi
Development Tools	Rational ClearQuest, Hummingbird Exceed, Macrovision InstallShield, Macrovision InstallAnywhere, Internet Explorer, Netscape, Mozilla, Firefox, Opera, COE
Design Tools	Rational Rose, MagicDraw
Source Code Control	Rational ClearCase, Borland StarTeam, SCCS, RCS
Media Editing	Adobe PhotoShop, Microsoft Visio
Guard Systems	Radiant Mercury, SecureOffice Trusted Workstation, SecureOffice Trusted Gateway, SecureOffice Trusted Releaser, SecureOffice WebShield
Hospitality Systems	Opera, EasyLobby
Management Tools	Microsoft Project

Relevant University Coursework

Math	Calculus (I, II, III), Linear Algebra, Statistical Methods, Matrix Methods, Numerical Computation, Discrete Math
Science	Physics, Biology, Geology, Astronomy, Psychology
Computer Science	Data Structures, Algorithms, Software Engineering Methods, Computers as Components, Programming Languages, Digital Logic, Computer Science Theory, Operating Systems, Entrepreneurship in Computer Science, Software Engineering Project, Computer Organization, Information Society, Solaris Administration, Business Information Systems, Advanced Systems & Software, Database Systems, Java, Causality, Interference, & Decision Making, Artificial Intelligence, Cluster Computing, Parallel & Distributed Systems, Advanced Computer Architectures, Software Design, Software Implementation, LAN Systems, Software Program Management, Introduction to Computer & Network Security, Software Requirement Analysis & Specifications, Applied Cryptography for Secure Communication, Software Product Assurance, Computability, Automata & Formal Languages, Design & Analysis of Algorithms

Relevant Professional Coursework

Leadership	Leadership Development Conference (I, II, III), Lockheed Martin IS&S Symposium (I, II, III), Principles of Project Management, Career Management, Team Dynamics & Leadership, Essentials of Program Management, Smart Negotiation, Leadership Spectrum Profile, Business Financials, Program Management: Delivering Innovation, Diversity, Influencing Others, Program Management 100: Team Lead Training
Process	Greenbelt Training in Six Sigma, ISO 9001 Awareness Training, Program Process Standard, IS&S Engineering Methodology, LM21 Tools & Techniques, Testing Software Intensive Systems, Introduction to Agile Principles, Practices and Methodologies, Introduction to Scrum, Agile Estimating and Planning
Design	Architecture Based Design Workshop, Fundamentals of Object-Oriented Analysis & Design
Programming	Sun Solaris Internals, Sun System Principles & Performance Tuning, Design Patterns, Java 2 Fundamentals, JavaBeans, XML Fundamentals, Java Servlets, JavaScript, HTML Fundamentals, Object-Oriented Analysis & Design, Dreamweaver, BEA WebLogic Server 7.0: System Administration, BEA WebLogic Server 8.1: Developing EJBs, BEA WebLogic Workshop 8.1: Rapid Application Development, Sun SeeBeyond – Foundations of Java CAPS I, Mastering SharePoint, Windows Workflow Foundation, Introduction to Microsoft SQL Server 2005 Integration Services, Introduction to Microsoft SQL Server 2005 Analysis Services, Introduction to Microsoft SQL Server 2005 Reporting Services, Introduction to Performance Point 2007
Security	Developing Secure Java / J2EE Web Applications, Secure .NET with C# and VB.Net Application Development, Ounce, Security for Web Database Applications, Secure Web Services Development, Secure AJAX Development
Conferences	Security, IIS 7, .NET 3.5, LINQ, Office, Live Services, Windows 2008, SQL Server 2008
Guard Systems	Radiant Mercury, SecureOffice Trusted Workstation, SecureOffice Trusted Gateway, SecureOffice Trusted Releaser, SecureOffice WebShield

Clearances

TOP SECRET / SCI – ACTIVE   Mar 2008
Cleared for TOP SECRET information and granted access to
SENSITIVE COMPARTMENTED INFORMATION based on
SINGLE SCOPE BACKGROUND INVESTIGATION completed
on March 19, 2008.

References

References are available upon request.