# Christopher C. Lamb

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### **Objective**

To apply my experience and education delivering solutions to critical national security issues

#### Education

- Master of Science in Computer Science, University of New Mexico, 2002
- Bachelor of Science in Mechanical Engineering with a minor in Mathematics at New Mexico State University, Las Cruces, NM
- Currently enrolled and working toward Ph.D. Computer Engineering, University of New Mexico

### Experience

Principal Member of Technical Staff

http://www.sandia.gov

Sandia National Laboratories, Albuquerque, NM April 2008 – Present

- *Principal Security Architect (2011 Present)*:
  - o Identity Management Architecture design and development for largescale, nationally critical cyber-security systems
  - Trust model development in support of authentication and authorization strategies for heterogeneous distributed systems
  - o Integrity and confidentiality model adoption
- *SOA Architect (2010 2011)*:
  - o Responsible for service security and architecture development
  - o Identification of key standards and adoption to supported software engineering environment
- *Security Engineer (2008 2010)*:
  - Oversight of security-focused cross disciplinary team
  - Security focused product development for government customers

Principal Investigator, Materials WISDM

http://www.sandia.gov

Sandia National Laboratories, Albuquerque, NM October 2005 – April, 2008

- Designed and lead development of distributed materials data system, integrated with Sierra supercomputing framework
- Variety of rich clients (Swing/J2SE, SWT)
- Extensive use of Spring-based dependency injection, configuration
- Very close adherence to platform look-and-feel guidelines across all supported platforms (Windows, Linux/UNIX, Mac OS)
- Managed annual budget of \$400-600K
- Industry collaboration (Goodyear, MSC, Granta)
- Member of the Materials Properties Retention committee in ASM
- Presenter at the Future Technologies Conference II

## Engineering Consultant VI

http://www.respec.com

RESPEC, Albuquerque, NM March 2004 – October 2005

- Lead Developer
- NNSA Defense Program Award of Excellence winner
- Developed agile development infrastructure using Anthill, JUnit, on Linux, Windows 2000, MacOS X, and Solaris
- Component design/development in Java using J2EE, JDO, Hibernate, Spring
- Web application development using JSF/JSTL/JSP and Struts
- Smart client development using J2SE, J2EE
- Selected presenter at Sandia Software Development Conference

### Vice President, Software Engineering

http://www.osogrande.com

Oso Grande Technologies, Albuquerque, NM March 2001 – March, 2004

- Lead Software Architect and Developer, Principal Consultant
- Component design/development in C# to .Net component guidelines; C++ to both
  .Net and COM architectures; Java to JavaBean & EJB standards
- Design/development of large, transactional J2EE, .Net, and hybrid applications using Java, C++, and C# in both smart and thin client environments
- Design/development of web services using C#, C++, Apache SOAP and Axis
- Mobile development in Windows CE C/C++, J2ME, Qualcomm BREW C/C++,
- Instituted MSF/XP-derived software development process integrating Visual Studio .Net & NUnit for C# & C++; Ant, Xdoclet, JUnit, & Eclipse for Java
- Developed company coding standards, testing, and build processes
- Developed & lead an international team (U.S. and Russian) of up to 10 Engineers

### Senior Software Engineer

http://www.earthscan.com

EarthScan Networks, Albuquerque, NM April 2000 – March 2001

- Object-oriented analysis, design, development of large e-commerce applications
- N-tier architecture design and development with COM+ objects in Visual Basic and Visual C++/ATL
- Designed and developed XML business-to-business infrastructure
- Developed next-generation image client using Java Swing
- Designed/developed XML/XSLT and ASP based content-hosting system using SOAP-based web services
- Designed/developed server-side real-time hyperspectral image processing architecture using COM+ compliant components, ATL, C++
- Web application development with ASP, VBScript, JavaScript, CSS, XHTML
- Developed and implemented company-wide coding and development standards
- Conducted company-wide classes in COM/DCOM/COM+ and XML/XSLT

## Software Engineer

## http://www.tallysys.com

Tally Systems Corporation, Albuquerque, NM April 1999 – April 2000

- Technical lead of a team of three engineers and one technical writer
- Design and implementation of an SEI Level 2 development process extensible to Level 3 covering all aspects of the development cycle
- Enterprise software design/development using Java, MFC, ATL
- N-tier distributed application design/development using DCOM/COM, Java RMI
- Object-oriented design/development with design patterns in C++ and Java

## Associate Member of the Technical Staff

Mission Research Corporation, Albuquerque, NM, April 1995 – April 1999

- MFC application design and development using Visual C++ and Java
- Graphical interface design and development in RSI IDL
- Real time man-in-the-loop simulation development in C
- Database design and development Microsoft Access
- Managed a Windows NT/95/3.11 network with UNIX clients, router, leased line
- WWW site development and management
- Held a DOD Top Secret clearance and DOE Q clearance

## Systems Administrator

Maxwell Laboratories, Albuquerque, NM, Feb. 1994 – April 1995

- Responsible for new systems installation/customization, both hardware and software, and critical data backup and archival; NFS and DNS administration
- Managed the resources of a network of 32 UNIX workstations, 70 PC's
- Operating systems administered: NT 3.51, Windows3.11, AIX, Solaris, SunOS
- Directly responsible for system and network security
- Researched fund allocation and system solutions

### Testing Coordinator

IBM, Austin, TX, May 1993 – August 1993

- Tested X-station software, concentrating on I/O devices and networking
- Heavy experience with TCP/IP packet sniffers
- Heavy experience installing and configuring IBM X-stations

#### Technical Environment Coordinator

IBM, Austin, TX, May 1992 - August 1992

- Configured customer environments in a laboratory setting to recreate problems
- Coordinated testing of customer problems in AIX Support's testing center
- Primary contact for high profile customers

### Technical Support Specialist

IBM, Austin, TX, May 1991 – December 1991

- Served as system administrator
- Provided technical support to IBM customers using the AIX operating system
- Trained incoming specialists in security aspects of the AIX operating system

## **Technologies**

Java Standard and Enterprise editions, Perl, Python, Ruby, C++, XHTML, XML/XSLT, SOAP, Ant, ASP.NET, C#, Microsoft IDL, COM+, MFC, ATL, Visual Basic, Visual C++, C, RSI IDL, JavaScript, CSS, CSS-P, HTML

### Interests

Enterprise Application Design and Development, Component Design and Development, Distributed Applications, Software Engineering, Artificial Intelligence, Intelligent Agents

### Honors

NNSA Defense Program Award of Excellence – 2005; Sandia National Laboratories Quarterly SAFE award recipient – Fall, 1997; NMSU Presidential Scholar; Crimson Scholar; National Merit Scholarship recipient; Dean's List, 1992 – 1994; National Dean's List, 1992 – 1994

## References

Available upon request