JEFFREY M. LUTZ

— Cloudera Hadoop Certified Professional & Datameer Developer Certified Professional —

— Clojure, Puppet, Vagrant & Veewee Automation Training —

BIG DATA ARCHITECT / MACHINE LEARNING DEVELOPER

Highly accomplished professional with a 20-year track record of innovation and success — Skilled in introducing and guiding the adoption of Big Data technologies to provide a cost-effective means to capture, integrate, analyze, and report critical data for enhanced decision making.

Expertise in all facets of the software development lifecycle — Proven success in leveraging Agile and RUP development methodologies to enhance the capture and alignment of technology investments with business goals.

Analytical problem solver with proven ability to quickly analyze issues, identify root causes, and apply solutions — Strength in assessing, recommending, and developing proof-of-concept designs, and implementing tools, models, frameworks, and best practices to improve performance, reduce costs, and increase visibility of critical data.

- - - - - EXPERIENCE & ACHIEVEMENTS - - - - -

AGILE ANSWERS, LLC   2003-Present

Big Data / Enterprise Architect Consultant

Consult with leadership, technical, and business teams to identify needs and issues, define the strategy, and drive the architectural design of value-driven solutions to enhance decision-making, reduce costs, and meet regulatory requirements. Completed Objective C/iOS training, Coursera Classes: Machine Learning, Introduction to Data Science, Data Science Programming in R. 10 years experience with Python / Jython and virtualenv (python 3) along with anaconda for machine learning work with scikit and tensor flow

Federal Agency (2015-Present)

Software Architect for porting mission critical JEE applications over to Weblogic Application Server.

- Resolved problems with concurrency of processing messages within J2EE applications and C++ application
- Designed an automated testable specification application that SME can use without technical staff support.
- Delivered the project under budget and two months ahead of schedule

Citigroup (2012-2015)

Recruited as the Subject Matter Expert (SME) to assist in establishing the Big Data & Analytics Department. Following success, kept on to analyze and develop proof of concept (POC) utilizing Big Data technologies to reduce costs.

- Pivotal role in building the Hadoop ecosystem that enabled the centralization and enhanced visibility of more than 1.3 petabytes of transactional data across the enterprise. Trained and mentored staff on Big Data technologies, and offsite developers on Datameer and Shark business intelligence platforms.
- Identified and recommended the migration of mail activity data from proprietary technology to Hadoop / Hive environment; forecasted to realize more than $1.34 million in savings within 3 years.
- Architected and presented an Impala-based proof-of-concept design for stock trading activity data that delivered more than $21 million in technology upgrade costs.
- Championed the integration of network router activity log data into Impala / Hive; reduced costs of auditing network activity and met new regulatory requirements.
- Created a scalable Flume NG design that enhanced the administration of file- and socket-based content.

Ohio Department of Mental Health (2011 to 2012)

Led the full lifecycle development of a new mission-critical, web-based, automated billing system, leveraging Cassandra for high availability multi-master cost-effective data store and Hadoop for batch processing.

Architected and presented initial proof-of-concept design, collaborated with users to capture requirements, and led team of 7 in delivering the open-source billing system that replaced costly mainframe application with a commodity based platform; greatly improved performance and significantly reduced costs.

Drove the adoption of Agile development methodology and Jquery and Knockout technology that enabled the rapid prototyping of solutions and the capture of more detailed business requirements.

Advocated value-proposition of Hadoop and Cassandra technologies. Developed proof-of-concept designs, demonstrating the effectiveness of technologies to reduce processing timeframe from 6+ hours to less than 30 minutes.

Introduced Clojure-based Pallet configuration management and provisioning tool that greatly reduced costs of provisioning Suse Linux platforms. Educated infrastructure team on new technology.

Introduced domain-driven design and test-driven development methodologies across the enterprise.

Honda of America (2005-2011)

Retained to enhance and scale newly developed ERP system to enable the successful rollout to 12 additional manufacturing sites. Based on success, retained to lead the full lifecycle design and development of new systems to automate manual processes, eliminate legacy systems, and reduce downtime of manufacturing operations.

Introduced, presented, and gained approval from leadership to utilize Big Data technologies to solve large-scale manufacturing problems. Developed proof of concepts leveraging Hadoop, Hive, and Mahout technologies to address failure of commercial software using relational database. Technical architect and evangelist for critical project that yielded a 23% reduction to maintenance-related downtime; for the first time, provided the means to assess productivity across the enterprise.

Led the complete redesign and development of J2EE-based ERP system that allowed 14 separate manufacturing sites across North America to search and access key data. Introduced Hadoop framework to enable the parallel processing and reporting of large volume of data across 2,000 data nodes across 14 plants.

Redesigned persistence layer for ERP system and developed SQLJ bound data packages to abstract data residing on DB2 database, which reduced CPU processing on the Mainframe and eliminated costly $774K Mainframe upgrade.

Recommended and built a configuration management platform and source code repository that provided a standardized means to track and control changes across portfolio of 52 applications. Solution provided a reliable means to rebuild an environment while reducing human errors and achieving Sarbanes-Oxley compliance.

Architected new manufacturing control system for new plant in Indiana leveraging Java, Spring, and Websphere 6.1 technologies. Led team of 15 in developing new distributed application to effectively control production lines.

Architected and contributed to developing a Java-based VIN stamping assembly line application to replace legacy system. Application integrated with PLC and RFID devices to automatically create VIN tags for vehicles.

Pivotal role in building a new Java stamp conveyor storage system to eliminate potential production downtime. Developed physical and logical models, created rules in AutoMod to optimize storage of parts, and currently developing application to control the conveyor systems.

Member of Incident Response Team charged with analyzing and resolving critical application issues. Identify root causes and collaborate with application, networking, database, and infrastructure teams to implement solutions.

Motorist Insurance (2004-2005)

Chosen to guide the full lifecycle design of web-based eQuote system aligned with newly developed Risk Assessment Model utilizing Service-Oriented Architecture (SOA).

Conducted a comprehensive assessment of existing applications to determine robustness for rapid user growth. Identified issues and redesigned persistence layer leveraging a Spring framework to improve overall scalability.

Architected, designed, and delivered the eQuote system to provide agents with the means to analyze and deliver accurate quotes to clients. Developed a liability exposure rules engine to automatically capture data from DB2 z/OS system in adherence to established response time goals. Implemented an object-caching approach that allowed the sharing of Java objects in a large memory pool.

Recommended and advocated the migration of 12 existing Java applications from Websphere under z/DB2 to Tomcat under Linux, which eliminated performance issues.

Demonstrated the effectiveness of Open Source technologies to infrastructure team as cost-effective solutions to effectively support interactive web applications.

OCLC (2003-2004)

Brought in to build a Technical Support Forum to enable small non-profit organizations to provide support to end users in response to a grant from the Bill and Melinda Gates Foundation.

Technical Lead for the development and delivery of content management system and portal leveraging Struts and JBOSS across clustered Linux environment.

NATIONAL CENTURY FINANCIAL ENTERPRISES   Dublin, Ohio – 2000 to 2003

Software Architect

Retained as a consultant to develop a web-based investment management system to replace limited AS/400 based application. Recruited as an employee to design and implement key functionality into system to lower the cost of transactions and increase business agility.

Developed an Intranet portal to enable investors to view and process transactions leveraging iPlanet application server and iPortal tools with TOPLink as the persistence layer. Implemented JMS to ensure optimal data integration and information access between portal and AS/400 data warehouse.

Designed and implemented a Client Management System leveraging J2EE architecture across BEA Application Server and BEA Portal Server to capture, approve, process, and post payments and investments across the enterprise environment.

NGDA INTERACTIVE   Columbus, Ohio – 1998 to 2000

Software Architect

Chosen to develop and implement a web-based eCommerce solution for large pharmaceutical company.

Contributed to building a full eBusiness solution to enable client to market and sell new dietary supplements online, leveraging Java technology.

EXECUTIVE JET   Columbus, Ohio – 1997 to 1998

Applications Architect / Consultant

Selected to design a flight routing optimization system for this private charter jet services company.

Developed and delivered a web-based solution leveraging Java and Corba technologies to enable the Customer Service Department to effectively schedule flights across fleet of jets.

DAIMLER BENZ AG   Stuttgart, Germany – 1996 to 1997

Electronics Architecture and Networks Engineer

Core member of team charged with developing a real-time processing system to validate newly developed Kalman Filter Engine Management Model.

Assisted in designing hardware and software to simulate new engine management approach, and in developing system to highlight success of model in a real-time environment.

- - - - - TRAINING & CREDENTIALS - - - - -

Bachelor of Science in Electrical Engineering – THE OHIO STATE UNIVERSITY, 1994

Technology Proficiency
14+ years of JAVA (J2SE, JEE: EJB, Servlets, & JSP, Spring/MVC) technology; 9+ years of Struts/Spring MVC framework
7 years of Persistence, 7 years of Hibernate, 3 years of Toplink, and 2 years of C++ technologies
11 years of application design / architecture with Test Driven Development
11 years of J2EE Tomcat, Weblogic, Websphere & iPlanet Application Servers
21+ years of system administration tools (admin, scripts, auto-config management (Puppet)