

Aaron Longfield

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Big Data Engineer and Cloud Architect

Seasoned engineer in big data with expertise building out large scale data movement and data warehouses. An extensive background in Linux systems engineering and administration, SQL and SQL engines, and cloud technologies brings understanding across all layers of the stack. Development skills in C#, Java, Python, and Scala ties everything together into full applications.

Technical Skills

Hadoop (HBase, Hive, Storm)	Linux (RHEL/Ubuntu), Windows	System and Cloud Security
Spark and Spark Streaming	VMware vSphere	Observability
Kafka	AWS	CI/CD Pipelines
NiFi	C#, Java, Python, and Scala	Crisis Management
MS SQL Server	Kubernetes	

Experience

Drift, Boston, MA

Staff Site Reliability Engineer (Nov 2019 - Present)

Continuing to enhance service reliability across all Drift deployments. Development of observability stack for all services and infrastructure.

- Development and rollout of Prometheus monitoring stack across AWS platform, ECS, and Kubernetes environments.
- Instrumentation of services to produce health metrics, tracing, and logging for the Drift service stack.

Bitsight Technologies, Boston, MA

Senior DevOps Engineer (Jan 2018 – Nov 2019)

Responsible for CI/CD, monitoring, and Kubernetes platform within Bitsight. Managed Hadoop environments for data processing pipeline.

- Hadoop data processing system, and worked toward full transition to Amazon EMR
- Introduced Prometheus metrics collection across data pipeline
- Kubernetes reliability and service migration
- CI/CD for development and production deployment of internal and external services.

Vistaprint / Cimpess, Waltham, MA

2012 – 2017

Lead DevOps Engineer, Business Intelligence (2016 – Dec 2017)

Provide operations and DevOps capabilities to the BI team, further enabling Marketing and Analytics to make rapid decisions in an evolving market.

- Development of ETL and warehouse schema to provide new data and analytic functionality to analysts.
- Expanded data environment into AWS and provided CI/CD capability, allowing the team to quickly deploy repeatable systems and ETL.
- Designed NiFi cluster, enabling data movement between SQL environments, Amazon S3, and various streaming data sources.
- Developed report generator to provide analytics data on demand to internal and external partners, freeing up analysts from the manual daily task.
- Created Hadoop based streaming data solution using HBase, Kafka, and Storm, to process site visit data in near real-time.
- DBA for Hadoop clusters and MS SQL Server environments.

Lead Operations Support Engineer, Corporate Solutions (2012 – 2016)

Responsible for the external client variant of the Vistaprint site used for multiple large customers retail store and online custom print presences. The site consists of millions of lines of C# code with active development by hundreds of engineers.

- Sustaining engineering support for production sites, debugging and refactoring code delivered from teams across Vistaprint.

- Worked with external partners to rapidly develop and deliver feature enhancements.
- Developed and maintained integrations with external manufacturers to launch new products on the site.
- Solution lead for Vistaprint Corporate Solutions sustaining engineering and production operations support group
- Ownership of data and tooling that provide pricing and partner SKU matching for white-label site
- Create reports and pull data to determine size of impact, and provide recommendations for remediation with customers and partners.

Fitchburg State University, Fitchburg, MA

2010 - 2012

Professional Tutor

- CRLA International Certified Tutor for FSU
- Offered learning assistance and direct tutoring to students in the undergraduate and graduate CS programs.
- Provided assessment and targeted learning programs to help students succeed.

LiveWire Mobile / NMS Communications, Littleton, MA

2008 - 2010

UNIX Systems Administrator (2008 – 2010)

Deployment and operations for 24x7 HA environment serving multiple large telecom operators across the world. Kept production running smoothly for a telecom offered music download service sold to their subscribers.

- Developed new reporting platform for reporting of subscriber activity, allowing new marketing insights into customer behavior.
- Dev support for applications on Perl and Java variations of the application. Required development in object oriented Perl, WebLogic, and Apache Tomcat.
- Designed workflow to more rapidly import new music feeds for record labels, transcoding of media, and delivery to end-user accessible catalog.
- Migrated full stack from physical to VMware ESXi, providing performance tuning and refactoring as needed. Allowed for significant reduction in operational costs.
- Provided platform hardening and UAT testing framework which enabled seamless production deployments.
- MySQL database administration, including query optimization, engine optimization, repair, and database design.

Release Engineer (2008)

Provided systems and support for the release pipeline of both telecom operator music download platform and in-network ringback-tone appliance.

- Designed build and install automation for all products to guarantee consistent deployment and easy on-site installation by engineers. Eliminated manual steps in the process that dramatically reduced number of repeated deployments and customer issues.
- Designed new application platform and configuration automation allowing for full platform consistency across all applications. This allowed dev, test, and production environments to be deployed from the same platform code.
- Provided platform investigation, documentation, and tech transfer during the acquisition of a music download company.
- Design and development of new Python based build and release platform, allowing for much finer control of build and more rapid development processes
- Sustaining engineering for Sprint Music Store and Bell Mobility music store

Town of Auburn, Auburn, MA

2004 - 2008

MIS Director

Responsible for all IT infrastructure for the Town, including desktop systems, servers, telecom equipment, and networking. Planned and created the annual technology budget and authorized expenditures. Presented projects and budget requests in public meetings with town officers.

- Led modernization effort providing more efficient workflows for town offices.
- Designed and introduced first implementation of a GIS platform for the town.
- Regular diagnostic and tuning of municipal cable network, and introduction of failover WAN connectivity to keep offices online in the event of cable network failures.
- Cost analysis leading to drastically decreased budget requirements for all town landline, cellular phone, and software licensing costs. Further cost saving by

introduction of VMware virtualization to reduce hardware footprint.

Independent Consultant, MA 2003 - 2004

Fleet Libris Information Solutions, Kingston, NY – *Infrastructure Specialist III* 2003

AdAlive.com, Waltham, MA – *Systems Engineer* 2001 - 2002

Emperative, Waltham, MA – *Systems Administrator* 2000 - 2001

Education

Fitchburg State University, Fitchburg, MA 2009 - 2012

B.S. Computer Science

Minors: Mathematics, Biology

Summa Cum Laude; CS Outstanding Senior Award

Worcester Polytechnic Institution, Worcester, MA 1997 - 2000

Electrical Engineering