Eric Wadsworth

linkedin.com/in/wad4ever

Strengths and Goals

My favorite activity is solving tough problems by building excellent software solutions. I engineer high quality software, with an emphasis on code clarity, robustness, and scalability. I've been building backend services with Java for the past 19 consecutive years.

Highlighted Skills

Java, Spring, AWS, Cloud, Linux, REST, SQL, Agile, TDD, SOA, Big Data

Industries and Fields

Fintech, AI, social applications, data services, data warehousing, scientific imaging

Experience

2 years at **Marqeta** (Apr 2020 to June 2022) as a **Lead Software Engineer**.

Technical lead on an engineering team building payment card fulfillment software services in Java, using AWS, SQL, GitHub, Agile, SoA. Built multiple software services, libraries, and tools. Architected and designed a microservice-based system to replace legacy batch processes.

4 years at **Ancestry** (Mar 2016 to Apr 2020) as a **Senior Software Engineer** and Team Lead.

Led an engineering team lifting all of Ancestry to the AWS cloud. Architected, designed, and built multiple Java-based services and tools, around both infrastructure and customer orders. Involved with operations, communication, reporting, monitoring, infrastructure, deployment, and large-scale automation. Used AWS, Java, Spring, REST, MySQL, JUnit, Docker, Kubernetes, Git, GitHub, Linux, Jenkins, Maven, etc.

2 years at **Qualtrics** (Jan 2014 to Feb 2016) as a **Senior Software Engineer**.

Back-end Java development in a SOA (microservices) environment, for a SaaS company. Principal engineer on two large data migration projects, a data encryption feature, and the new back-end data persistence layer. Architected, designed, built, deployed and maintained a highly-available high-use tier-one guaranteed-consistency shard information service cluster

spanning six datacenters, depended upon by multiple other services, and ultimately the entire company, with 100.0% availability since launch. Built automated relocation service for moving complex datasets between shards and datacenters. Gave multiple presentations and training to the engineering department. Used Java, Spring, REST, MySQL, Postgres, jOOQ, Liquibase, JUnit, RabbitMQ, Docker, Git, Gitlab, Linux, Jenkins, Maven, AWS, etc.

2½ years at **Commission Junction** (Sep 2011 to Dec 2013) as a **Senior Data Warehouse Engineer**.

Architected and designed significant components of a hadoop-centric data warehouse. Wrote many complex, multi-step map-reduce operations to gather disparate data in various formats from multiple sources and aggregate it for reporting. Evaluated technologies such as Avro and Storm. Wrote reliable automated performance optimization system in Java (ran flawlessly for 18 months plus). Architected, designed, and implemented robust, self-recovering data marshaling system using flume, sqoop, bash, and Java-based map-reduce. Designed high-speed performance reporting back-end system using HBase. Wrote reliable, multi-threaded ETL processes in Java. Repaired and retrofitted portions of legacy Oracle-based data warehouse, resulting in a decrease in time for customers to obtain their reports from tens of minutes to tens of seconds. Designed and built robust, reliable data migration systems.

1½ years at **Tynt Multimedia** (May 2010 to Aug 2011) as a **Senior Software Engineer**.

Designed and built many applications to deal with vast amounts of data flowing through multiple Hadoop clusters, using Pig Latin and Java-based map-reduce. Wrote an HBase application layer upon which multiple HBase applications were constructed. Built libraries of hadoop-optimized tools, including a high-speed URL normalizer, a high-speed key phrase matcher, an IP address geo lookup tool, etc. Built a java-based map-reduce application to collect detailed monthly statistics on many hundreds of gigabytes of daily data. Rewrote a complex core component resulting in a 60X performance gain for processing incoming data.

5 years at **FamilySearch** (Jul 2005 to May 2010) as a **Software Engineer**.

Worked on a world-wide genealogical web application. Used Java, maven, ant, subversion, Jersey, GWT, IntelliJ IDEA, Oracle.

- Dataflow team: Designed and implemented a system that provided continuous ongoing updates from a large legacy information-processing application to a new system that was replacing it; responsible for the overall architecture of the asynchronous flow of data, including a sophisticated mechanism for handling data that was accepted by the legacy system but was not accepted by the new system.
- Domain team: Worked on a team designing, implementing and testing a major refactor of the domain layer and underlying persistence layer of the very large, complex application, resulting in enormous performance improvements.

- Z team: Worked on a vertical team designing, implementing and testing a new consumable service, with accompanying UI gadget and specification, providing user discussion functionality on application-specified objects.

2 years at **Joint Interoperability Test Command** (Jul 2003 to Jul 2005) as a **Software Engineer** and Team Lead.

Worked on the Transportation Global Edit Table, a three-tier Java-based J2EE enterprise tracking system for the accounting of transportation-related expenses for the various branches of the US Department of Defense. User-interface, software design, database design, implementation, deployment, testing, documentation. Worked extensively with Oracle databases, application servers, proxy servers, web servers, and Java clients. Worked on other projects (classified).

1 year at **DMetrix** (2002 to 2003) as a **Software Engineer**.

Designed and implemented sophisticated image viewing Windows application in C++, developing high-speed network-optimized sampling algorithms to allow for zooming and panning of multi-gigabyte JPEG images stored on a remote server. Designed and implemented PHP applications for internal use.

2½ years at **Conceptual Systems & Software** (1999 to 2001) as a **Software Engineer**, Simulation Engineer, and Operations Engineer.

Designed and built control software and APIs in C and C++. Built a system in two weeks that was scheduled to take six months, advancing the schedule for a multi-billion dollar DoD program. Developed virtual prototyping simulations for multiple projects. Wrote tools in Java, worked on networking, webservers, e-commerce software, backup systems. Automated tasks using Perl.

6 years at various other companies

- 1½ years at TBRS Technology (1997 to 1999) as a **CAD Engineer**, head of IT.
- 1½ years at the Performance Evaluation Laboratory of the Computer Science Department of BYU (1996 to 1997) as a **Programmer**, Research Assistant, and Teacher Assistant for the Computer Architecture course.
- 1 year at INFOBUSINESS (1995 to 1996) as a **Programmer**.
- 2 years at MultiLing International (1993 to 1995) as the MIS Director, **Network Administrator**, IBM Support Technician, and IBM Training Administrator.

Education

BS in **Computer Science**, minor in Psychology from BYU, Utah (1992-1997)