**Tiffany Timbric, Enterprise Backend Coder /** Software Developer/Architect  
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## Overview

I write code, enterprise backend, usually web services, mostly Java/Kotlin/Scala, micro-services, JEE, Spring Boot, Spring Batch, cloud / AWS, Docker / Kubernetes, event driven design / Reactive eXtensions, relational database SQL, NoSQL, Cassandra, messaging / JMS, Hadoop, Google Protocol Buffers, OSGi, Cucumber / Gerkin, Wiremock, Mockito, JUnit, Bash scripting, Linux / Unix, and many other things like Puppet, Zookeeper, Jetty, Tomcat, J-Boss, etc.

I’ve having been coding commercial software since ~1990.

I worked at Sun Microsystems, Inc. in software development, then switched to their Sun Java Center consulting group to help their customer, mostly Wall Street, but also silicon valley. We instructed on system architecture, software architecture, software development methodology, and coded. Later I worked at PayPal, Tendril, JDA Software Group, and others as a lead developer.

## Personal Coding Examples

* Finite State Machine Library
  + <https://github.com/chadwickboggs/fsm>
* Crypto, a command-line tool supporting cryptosystem plugins
  + - <https://github.com/chadwickboggs/crypto>
  + NtruCryptosystem, a Crypto plugin supporting NTRU (two key) cryptography
    - <https://tbuktu.github.io/ntru>
  + XorCryptosystem, a Crypto plugin supporting XOR (single key) cryptography
    - [**https://en.wikipedia.org/wiki/XOR\_cipher**](https://en.wikipedia.org/wiki/XOR_cipher)

## Required Development Environment Tools

* MacBook Pro Laptop (Computer)
* JetBrains IntelliJ IDEA (IDE)

## Employment History

### **6/2022 – 1/2023 Senior Software Engineer, Global Healthcare Exchange (GHX)**

* Lead team authoring software connecting hospital ERP and medical equipment purchasing systems to GHX.
* Lead designs, reviewed all code changes, additions.
* Identified and corrected design flaws.
* Identified and corrected scalability bugs: connection pools, retries, AWS AZ failovers.
* Used AWS EC2, SQS, S3, and Lambdas, Java, Oracle (SQL).
* Implemented Web Services server-side and client-side, FTP, sFTP, HTTP(S), JSON serialization/deserialization, SQL.
* Deployed in 100’s of customer data centers, two week release cadence w/ prod deploy.

### **2020 – 5/2022 Software Developer, PayPal w/ TCS**

* Implemented direct deposit signup services in Spring Boot.
* Implemented account bank migrations, bank change, for all PayPal accounts in Spring Batch.
* SQL, Filesystem I/O, AWS SMS, Web Services server-side and client-side.
* Maintained and implemented feature enhancements to a batch merchant report generation system.

### 2019 Software Engineer, Arris / Com**mscope**

* Updated the video catalog and merchandising backend originally authored by Motorola for Bouygues Telecom, France.
* Java EE, WildFly, GlassFish, WebSphere, REST, Wiremock, Mockito, Postman, Wireshark.

### 2018 – 4/2018 Software Engineer, Comcast, Corp.

* Updated one Java system to Docker/Kubernetes, Java 11, Cucumber, Reactive Extensions, Git.

### 2016 – 2017 Software Engineer, Charter Communications.

* Maintained 100+ Java micro-services, added new micro-services all in Amazon Web Services server-side and client-side.
* Linux, Netflix OSS, Cassandra NoSQL, Reactive Extensions, Hystrix, Java 8, SQS, SNS, S3, EC2, Active MQ, Mongo, Git, Spring.

### 9/2014 – 2015 Software Engineer, Comcast, Corp.

* Designed and built event / Reactive eXtension (RxJDBC), RabbitMQ Message Oriented Middleware (MOM) front to an Oracle database as part of the Resiliency Project, Java, Git.

### 2014 – 5/2014 Software Engineer, Tendril, Inc.

* Back-end dev-ops programmer on SOA Finagle+Protobuf+Cloud Java/Scala micro-services.
* Atlassian, Cucumber BDD, PostgreSQL, Hadoop, Hibernate, Scala, Intelli-J IDEA, Git.

### 2010 – 2013 Senior Software Engineer, JDA Software Group, Inc. which merged with RedPrairie, Corp. formerly StorePerform, Inc.

* Project Lead for integration of iOS, Android mobile task system with legacy web-based system
* Tasks roughly are E-mail messages enhanced for distributing and tracking business actions.
* Customers included Fortune-500 companies. Scalability, performance were significant.
* Technologies: OSGi, Gradle, Git, and Sql Server, Git, Mercurial, Subversion, CVS.
* Extended and maintained legacy J2EE web-based task management system.

### 2008 – 2009 Independent Software Development Consultant

* Extended and maintained a JEE merchandise inventory system with MySQL DB, Java, Spring.
* Customers: AmDocs, Etilize, Bell South, eBay, Frontier Airlines, Skyway

### 2007 Chief Operation Officer, Evolution Hosting, Inc.

* ViaWest data center Linux servers for J2EE applications with Java management software, Java, Linux, VMware, Zen, Amazon Web Services.
* Large number of customers including Crocks, Wells Fargo, and Hunter Douglass, among others.

### 2004 – 2007 Independent Software Development Consultant & Sun Java Consultant

* Created NIO client with could reach 100 Mb/s scale message rates.
* Created new web sites, Java.
* Consulted at eBay, Frontier Airlines, Bell South, Skyway representing Sun Microsystems, Inc.

### 2002 – 2004 Senior Software Architect, Packexpo, Inc.

* Created a reporting systems for packaging advertising services.
* Maintained packaging advertising web site.
* Technologies: JBoss, Linux, MySQL, Intelli-J, BeanShell, JSP, Lzop'ed data stream for large DB backups over NFS mounts, Java, Groovy.

### 1999 – 2002 Java Consultant, Sun Java Center, Sun Microsystems, Inc.

* Represented Sun for RUP, UP, SunTone, OOA&D mentoring and J2EE coding, Java, SCCS, Teamware, RCS, Solaris, Java.
* Consulted at Citigroup, Vanguard Fiduciary Trust, Credit Suisse.
* Performed an Architecture Assessment recommending SOA and JEE which later was followed as advised.

### 1998 – 1999 Java Developer, Sun Educational Services, Sun Microsystems, Inc.

* Created web-based and Swing computer assisted training systems.
* Improved the performance of our custom pseudo-recursive-descent parser template engine by adding caching of parser results and by altering the parsing algorithm.

## Education, Certifications, Patents

* Sun Certified Java Developer
* Sun Certified Java Programmer
* Patent: [#6907423](http://www.patentgenius.com/patent/6907423.html) Search engine interface and method of controlling client searches
* B.S. Computer Science, University of Colorado at Boulder
* Attended the United States Military Academy at West Point