

# Mike Funk

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## Objektwerks

**2013.1 – Present** | Objektwerks, Cape Haze, FL | Consultant | Scala Engineer ~ Design and build actor, rest, web and desktop apps. Built POCs with Http4s, Cats, Doobie and Circe. **Currently** building open source health charts app. [Scala 2.13, ScalaJS 1.1, ScalaFX 14-R19, Laminar, Swing, JFreeChart, Akka-Http 10, Akka 2.6, Quill 3.5, PostgreSQL 12, uPickle 1.1, Sbt, Git]

1. Baptist Health South Florida, Miami, FL | Consultant | Scala Engineer ~ Designed and built Spark Job with embedded Akka-Http rest server that processes diet data requests via a Spark cluster. SSL-enabled Akka-Http rest app. [Scala 2.11/2, Spark 2.4, Akka-Http 10, uPickle 1.0, Sbt, Git]
2. FormsLogic, Chicago, IL | Remote Consultant | Scala Engineer ~ Built new web service calls and enhanced pdf reports for a form-driven workflow app. [Scala 2.11, Play 2, Postgresql 9, Anorm, Jaspersoft Studio, Sbt, Git]
3. NYISO, Albany, NY | Remote Consultant | Scala Engineer ~ Built proprietary workflow-directed Spark batch jobs sourced, joined, transformed and sinked from and to multiple Delta Lake date partitioned parquet tables. [Scala 2.12, Spark 2.4, Delta Lake 0.5, Cats 2.1, AWS-S3, Sbt, Git]
4. Baptist Health South Florida, Miami, FL | Consultant | Scala Engineer ~ Designed and built Kafka-Spark-MapR streaming job; BlackBaud rest service; Cerner rest service; and multiple Spark-Hive ETL apps. [Scala 2.12, Spark 2.4, Hive 3, Akka-Http 10, ScalikeJdbc 3.4, uPickle 1.0, Sbt, Git, Azure]
5. Florida Blue, Jacksonville, FL | Consultant | Scala Engineer ~ Designed and built HBase-Rules-DB2 Spark pipeline on dataset of HBase row keys scanned pre-Spark session. HBase client, via distributed dataset foreach, gets Json by row key. Json is parsed into Scala and update rules applied to DB2 tables. [Scala 2.11, Spark 2.3, ScalikeJdbc, PlayJson, Sbt, Gradle, GitLab]
6. Starbucks, Seattle, WA | Consultant | Scala Engineer ~ Designed and built customer order history event-driven pipelines, defined by web service sources, event flows and web service sinks. Built custom Akka-Http directives and Scala-Xml bindings. [Scala 2.12, Azure EventHub, Circe 0.8, Cats 1.0, Cassandra 3.5, Sbt, Git]
7. Bottle Rocket, Addison, TX | Consultant | Scala Engineer ~ Designed and built MongoDB-Csv-Sftp-Smtp integration app for national fast-food chain. Closed multiple Jira tickets. [Scala 2.11, ReactiveMongo, Spray, Sbt, Git]
8. HERE, Chicago, IL | Consultant | Scala Engineer ~ Designed and built Akka cluster driven by RabbitMq and dynamic cluster-aware master-worker actor pairs that validate map data consumed from an AWS rest service. Built map data store change listener; RabbitMq connector; and Akka-Http and Akka-Streams queue routers. [Scala 2.11, PlayJSON, Sbt, Git]
9. Adjoy, Tampa, FL | Consultant | Scala Engineer ~ Designed and built Kafka-Spark-Cassandra prototypes. [Scala 2.11, Sbt, Git]
10. MetiStream, Washington, DC | Consultant | Scala Engineer ~ Designed and built Kafka-Spark-Cassandra ScalaFX simulator. [Scala 2.11, Sbt, Git]
11. Time Warner, Denver, CO | Consultant | Scala Engineer ~ Designed and built Kafka-Spark-Hdfs streaming prototype. [Scala 2.11, Sbt, Git]

## Javawerks

**1997.3 – 2012.12** | Javawerks, Clearwater, FL | Consultant | Java Engineer ~ Designed and built Java apps and components. [Java 5, J2EE, Spring, Hibernate, Swing, Ant, Maven, SVN, Scrum]

1. Mad Mobile, FL | Startup | Java Engineer ~ Built single page web app and NodeJs-websocket server, allowing for graphical selection of Html5 elements and construction of Css3 selectors, persisted in MongoDB as named queries, executable by remote mobile web clients for dynamic UI model-based rendering. Rebuilt with Java, JavaFX and Spring

Rest due to browser constraints and JS performance and memory leak issues. [Java 7, JPA, Hibernate, H2, jQuery, Jsdom, Socket.io, Maven, Git]

2. Catalina Marketing, FL | Consultant | Java Engineer ~ Co-architected distributed hierarchical customer ID analytics solution using Pentaho and JAX-WS web services, targeting multiple enterprise data sources and sinks. Built Hadoop prototype. [Java 6, Tomcat, Oracle, Spring, JPA, Hibernate, Axis2, Jibix, Maven, Jenkins, SVN]
3. Disney World, FL | Consultant | Java Engineer ~ Implemented enhancements to J2EE room availability and inventory apps. Built GWT inventory analysis client. [Java 5, JBoss, Oracle, Spring, JPA, Hibernate, RichFaces, Struts, Maven, Clearcase]
4. NDR, FL | Consultant | Java Engineer ~ Built Swing-Spring DI Historical Stock Screener client, composed of financial criteria, interactive models, charts and tables, Spring-Hibernate generic entity manager, JPA entities and Spring HttpInvoker services. Built daily Russell Index service with Spring Batch, Spring-Hibernate generic entity manager, JPA entities and JMX attributes. Built Scala prototype. [Java 6, Tomcat, SwingX, JFreeChart, POI, Ehcache, Maven, Nexus, Hudson, SVN]
5. IHG, GA | Consultant | Java Engineer ~ Built Spring-Hibernate generic entity manager, JPA/JAXB entities, MDPs, generic JAXB marshaller, pooled XSD validator/XSLT transformer, POX/JAX-WS/JMS services, JMX beans/aspects, JMS queue transferer and URI archiver. Built ServiceMix, OSGi/SpringDM and Spring Integration prototypes. [Java 6, Groovy, Resin, Oracle, MQ, ActiveMQ, CXF, Quartz, Maven, Hudson, SVN, Scrum]
6. Disney World, FL | Consultant | Java Engineer ~ Built Spring-JPA generic entity manager and JPA entities for J2EE reservation app. Built inventory adjustment components, JAX-WS services, MDPs, JMX beans, JIBIX bindings, AOP retry strategies and auditors. [Java 5, JBoss, Oracle, Hibernate, Drools, MQ, CXF, Quartz, RichFaces, Maven, Scrum]
7. Qualcomm, CA | Consultant | Java Engineer ~ Built Mule components, applications and POX web services for mobile billing integration with AT&T and Verizon. Built JMX beans, AOP retry strategies and auditors. [Java 6, JBoss, Oracle, Oracle-JMS, Spring, XStream, Maven, SVN, Scrum]
8. FPL, FL, Consultant, Java Engineer : Built Swing components and features for energy trading app. [Java 6, Tomcat, Oracle, SwingX, SVN]
9. CDC, GA | Consultant | Java Engineer ~ Built Gigaspaces master-worker space composed of Spring beans that build composite reports via executors, callables and futures. Built Terracotta prototype. [Java 5, Oracle, Maven, SVN]
10. KnowledgeStorm, GA | Consultant | Java Engineer ~ Built J2EE app for lifecycle-management of Nutch-Lucene indexes across JBoss cluster via Swing-Spring DI client. AOP injected custom Nutch features. Built Nutch sentence-fragment summarizer. Added compression/caching to Axis web service, yielding sub-second response times. [Java 5, Oracle, Hibernate, Maven, SVN, Scrum]
11. State Government, WA | Consultant | Java Engineer ~ Team-built J2EE criminal record web services. Built generic entity manager, entities and Swing-Hibernate query tool. [Java 5, JBoss, DB2, Axis, XStream, Maven, Perforce, CC, Scrum]
12. MarketGrader, FL | Startup | Java Engineer ~ Built J2EE stock report app, Swing client, Java2D Swing stock component and Quartz DailyCalendar. [Java 5, JBoss, MSSQL, DynamicPdf, S&P Xpressfeed, Ant, CVS, XP]
13. Fedex, FL | Consultant | Java Engineer ~ Built JAXM web service to interoperate with IBM CICS, MQ and DB2. [Java, WebLogic, XmlBeans, Ant, CVS]
14. PWC, FL | Consultant | Java Engineer ~ Built J2EE web app, allowing for development and lifecycle management of surveys, polls and tests. [Java, WebLogic, Oracle, Struts, Ant, CVS]
15. Nielsen Media, FL | Employee | Java Engineer ~ Built Swing TV programming applet, workflow components, auditing aspects and ILOG/JRules prototypes. [Java, Weblogic, Oracle, Ant, CVS, XP]
16. US Navy, VA | Consultant | Java Engineer ~ Built J2EE web app, allowing US Navy Seabees to manage global container logistics and integrate with US Navy accounting via POX web service. [Java, Jetty, MySQL, Struts, Castor, Ant, VSS]

17. OTG, FL | Startup | Java Engineer ~ Team-built EAI product, composed of Jini services that execute integration components via JavaSpace messaging, lifecycle-managed by Swing client and Jini services. [Java, Tomcat, Ant, CVS, XP]
18. BetweenMarkets, TX | Startup | Java Engineer ~ Team-built eMarketplace product, composed of Jini services that execute SOAP web services, lifecycle-managed by Swing client and Jini services. [Java, Tomcat, Ant, CVS, XP]
19. Ariba, FL | Startup | Java Engineer ~ Team-built Ariba UDDI implementation in cooperation with IBM and Microsoft. Implemented Tradex product enhancements. [Java, Weblogic, Oracle, Ant, CVS]
20. Identitech, FL | Consultant | Java Engineer ~ Built Swing property sheet component, common property editors and RMI document management apps. [Java, MySQL, CVS]
21. Kinetoscope, FL | Startup | Java Engineer ~ Team-built market analysis tool, composed of AWT client, RMI server and ObjectStore database. [Java]

**Open Source** ~ Currently working on Healthcharts.

1. Healthcharts ( <https://github.com/objektwerks/healthcharts> )
2. Homeschool ( <https://github.com/objektwerks/homeschool> )
3. Poolmate ( <https://github.com/objektwerks/poolmate> )
4. Quartz Scheduler DailyCalendar ( <https://tinyurl.com/y7frm74e> )

**Training** ~ Machine Learning A-Z: Hands-on Python & R in Data Science [Udemy : 2018]

**Skills** ~ Scala – 7, Java – 16, Swing – 10, Spring – 8, Hibernate – 8, JPA – 6, Web – 3, Akka – 2, Akka-Http – 2, Spark – 2

**Degree** ~ University of Maryland | BA | Asian Studies, International Business

**US Navy** ~ Intelligence | Alaska, Diego Garcia, Guam, Japan, Washington D.C.

**Laptop** ~ Macbook Pro Retina 15”, i7, 32GB, OSX 10.15. Require similar model for work, *with* Admin rights.

**Environment** ~ See [github.com/objektwerks/scala](https://github.com/objektwerks/scala) for details.